

CITY OF CHICAGO PERMIT APPLICATION

Rules for Large Recycling Facilities



Metal Management Midwest, Inc. Paulina Facility

Prepared By:

TRINITY CONSULTANTS

1801 S. Meyers Road
Suite 350
Oakbrook Terrace, IL 60181
(630) 495-1470

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1. INTRODUCTION

Metal Management Midwest, Inc. (d/b/a Sims Metal) owns and operates a scrap metal processing facility located at 2500 S. Paulina Street in Chicago (Paulina Facility). Sims Metal is submitting this Application for a Large Recycling Facility Permit pursuant to Condition 3 of the City of Chicago Rules for Large Recycling Facilities (RLRF), effective June 5, 2020.

The Paulina Facility is located within 660 feet of a Sensitive Area¹ and operates a mechanical shredder with a capacity greater than twenty-five (25) tons per hour. Therefore, the Paulina Facility meets the definition of a Consequential Facility per the RLRF. Additionally, the Paulina Facility is an existing facility, not new or modified. Section 3 of the RLRF contain the various application requirements. This application addresses the applicable requirements for an existing facility by Section as they appear in the RLRF. Nonapplicable conditions for new or modified facilities are not included in this application.

¹ Sensitive Area means any property with a residential use, a park, a hospital, a clinic, a church, a day-care center, or a school.

2. GENERAL FACILITY INFORMATION

Section 2 addresses the general facility items required in Conditions 3.1, 3.3, 3.4, 3.5, 3.6, 3.7, and 3.8 of the RLRf.

2.1 Professional Engineer Certification

I certify that I have reviewed this application and can attest that it has been prepared under my supervision in accordance with the City of Chicago Rules for Large Recycling Facilities, effective June 5, 2020, and the requirements of Section 11-4-2520 and 2530 of the City of Chicago Municipal Code.

James Donaldson, PE
1801 S. Meyers Road, Suite 350
Oakbrook Terrace, Illinois 60181
License No. 062.062140



A handwritten signature in black ink, appearing to read "Jim Donaldson".

Date signed: 11/11/2021
License expires: 11/30/2021

2.2 Description of Operations

Metal Management Midwest, Inc. (d/b/a Sims Metal), is a full-service Scrap Metal Processing facility. The purpose of the facility is to process recyclable metal to meet size and other specifications for sale to steel mills, foundries and smelters for remelting into metal products. The facility only processes to size and other standard specifications (see Appendix A: ISRI Scrap Specification Circular); we do not melt or change the chemistry of the metal itself. Consumers of processed scrap metal are domestic steel mills, mini-mills, foundries, and smelters. A portion of some Nonferrous (NF) metals may also be exported to smelters to produce NF products.

The Paulina Facility consists of four (4) processing centers: Shredder, Material Recovery Plant (MRP), Ferrous, and Nonferrous. All material coming into any of these processing centers will be scanned by radiation detectors and inspected for "Prohibited Materials".

The Shredder Yard processes Light Iron and End-of-Life vehicles (ELV) to separate ferrous metals from this product stream. The metal shredder will produce a Steel Product as well as Debris-NF (DNF). The DNF is transferred to the MRP which will further separate a small amount of ferrous metal, which is returned to the Shredder Yard, as well as various NF Metals. The MRP will also produce Automobile Shredder Residue (ASR) which consists of non-metallic materials from the metal shredding/MRP processes and is sent to landfill for beneficial reuse as alternative daily cover. The Ferrous Yard accepts ferrous metals other than those received at the Shredder Yard, which generally fall under the categories of Heavy Melt Steel (HM); Plate and Structural Steel (P & S); Busheling; Cast Iron; Turnings, etc.² The Ferrous Yard will size this material so that it is suitable for purchase by steel mills/mini-mills for re-melting into steel products. Material in the Ferrous Yard is cut via mobile shears, a “guillotine” shear, and torch-cutting. The Nonferrous Facility within the Paulina Facility accepts NF metals and alloys. Processing of NF metal consists of baling by means of a baler and separation by means of hand-sorting.

In addition to these four (4) processing centers, CIM Trucking’s dispatch office and maintenance shop is also located at this Facility. CIM Trucking is owned by Sims Metal and is used to pick up material at customers’ sites, or Sims Metal’s feeder yards, and bring the material to the Paulina Facility for processing. CIM Trucking will also deliver finished product to consumers.

The obsolete scrap metal processed at the Paulina Facility is purchased from other recycling companies as well as industrial, commercial, and residential sources, demolition contractors, tow-truck drivers, and peddlers. Obsolete scrap metal is also brought to the Paulina Facility from smaller feeder yards owned by Sims Metal. The facility has the ability to accept and ship metal via trucks, rail car, and barge.

2.3 Applicant Summary

The details for the applicant are provided below:

Corporation Name: Metal Management Midwest, Inc.
Corporation Address: 2500 S. Paulina Street, Chicago, IL 60608
Corporation Contact: George Malamis, VP
Corporation Phone: 773-254-1200

2.4 Facility and Property Summary

The details for the facility and property summary are provided below:

Facility Name: Metal Management Midwest, Inc. – Paulina Facility
Facility Address: 2500 S. Paulina Street, Chicago, IL 60608
Facility Contact: Deborah Hays, EHS Business Partner
Facility Phone: 773-254-1200

List of Facility’s and Property’s Property Index Numbers (PINs):

- | | |
|-----------------|-----------------|
| ▶ 17-30-210-030 | ▶ 17-30-210-033 |
| ▶ 17-30-210-009 | ▶ 17-30-210-035 |
| ▶ 17-30-210-019 | ▶ 17-30-210-045 |
| ▶ 17-30-210-010 | ▶ 17-30-210-034 |

² See Appendix A, Institute of Scrap Recycling Industries, Inc. (ISRI) Scrap Specification Circular.

- ▶ 17-30-210-047
- ▶ 17-30-210-032
- ▶ 17-30-210-037
- ▶ 17-30-400-003

There are no other operations at the Paulina Facility outside the scope of the recycling permit. Additionally, there are no other businesses operated on the property.

2.5 Property Owner's Authorization

Condition 3.6 of the RLRf requires that the application include a notarized letter, signed by the owner, authorizing the operator to use the property as a Large Recycling Facility. The notarized letter is included in Appendix B.

2.6 Property Taxes

Condition 3.7 of the RLRf requires that the application include documentation evidencing the payment of real estate property taxes by providing copies of the most recent tax bill and check; or by providing a copy of the most recent tax bill that has been stamped paid by the Cook County Treasurer's office, or payment receipts issued by said office. Copies of the latest tax bills and payment checks are included in Appendix C.

2.7 Nature of a Special Use

Condition 3.8 of the RLRf requires the design report contain a copy of the variance in the nature of a special use (Special Use Variance) if applicable. The Paulina Facility does not possess a variance for a special use from the Zoning Board of Appeals (ZBA), so it is not included in the Design Report.

3. DESIGN REPORT

Section 3 addresses the various items required for the Design Report under Condition 3.9 of the RLRf.

3.1 General Layout of the Facility

Condition 3.9.5 of the RLRf requires the following to be identified in a general layout of the facility included in the Design Report:

- ▶ The main areas of the facility, at a legible scale, not less than one inch equals 100 feet. The scale shall be represented on each drawing in graphical format. The general facility layout is included in Appendix D.
- ▶ The internal and external layout including dimensions of all buildings and structures. The external layout of all buildings is included in the general facility layout in Appendix D. The internal layout of all buildings is included in Appendix E.
- ▶ The layout and location including dimensions for all fixed equipment included, but not limited to, all processing equipment and conveyors. This is included in the general facility layout in Appendix D.
- ▶ The footprints of all processing, handling, storage (authorized and unauthorized materials), and staging areas. This is included in the general facility layout in Appendix D.
- ▶ Traffic flow for vehicles used to transport recyclable materials through the facility. This is included in the general facility layout in Appendix D.
- ▶ If present, all pertinent features of the stormwater management system (e.g., onsite stormwater flow, inlets, stormwater pipelines, catch basins, and detention/retention ponds). This is included in the general facility layout in Appendix D.
- ▶ If present, all pertinent features of the wastewater management system (e.g., floor drains, sumps, oil filters/separates, sewer lines, and treatment facilities). This is included in the general facility layout in Appendix D.
- ▶ The locations of the primary water sources and water distribution system components for employee facilities, fire suppression, facility cleaning, and dust control. This is included in the general facility layout in Appendix D.
- ▶ The locations of all fire suppression equipment (e.g., sprinklers, hoses, and extinguishers), areas where torch-cutting, plasma-cutting, or welding occurs, and all flammable material storage areas. This is included in the Fire Prevention Plans in Appendix F.
- ▶ The locations of all facility or site control features and all screening and access control devices such as fences, gates, and signage. Fences and gates are included in the general facility layout in Appendix D. The site also utilizes "No Trespassing" signs.
- ▶ The locations and layout of all onsite and nearby offsite parking and queuing areas, including the number of parking spaces and maximum number of vehicles that can be queued at one time in the allowed queuing area. Locations of parking areas are included in the general facility layout in Appendix D. Details on the queuing of onsite vehicles can be found in the stacking plan in Appendix M.
- ▶ The locations and layout of all employee facilities. This is included in the building layout in Appendix E.
- ▶ The location of all first-aid equipment and other emergency supplies and equipment. First-aid equipment and emergency supplies are identified in the Emergency Action Plans included in Appendix G.

3.2 Pavements

Condition 3.9.6 of the RLRf requires the following information in the Design Report.

- ▶ Condition 3.9.6.1.: A plan scaled drawing depicting all pavements at the facility by pavement type. This information is included in the general layout plan in Appendix D.
- ▶ Condition 3.9.6.2.: A pavement maintenance plan describing how and at what frequency the operator will inspect, repair, and maintain all pavements at the facility to minimize ponding, dust, and mud. This is included in Appendix H.
- ▶ Condition 3.9.6.3.: For new pavements, a narrative description, or a cross-section drawing(s) describing or showing the thickness and material composition of the pavement system layers from subgrade to the surface slab or wearing course. The Paulina Facility does not have any new pavement to include in this application.

3.3 Site Security

Condition 3.9.9 of the RLRf requires the following information in the Design Report:

- ▶ Condition 3.9.9.1.: A description and specifications of the fences, gates, signs, and other barriers that prevent unauthorized access to the facility. Details on the fences and gates are included in the general facility layout in Appendix D. The site also utilizes "No Trespassing" signs.
- ▶ Condition 3.9.9.2.: A description of the security measures taken during both operating hours and closed hours. During open hours, the site requires visitors to check in at the main office. Cameras are located on the property to monitor equipment, but can also be used to monitor activity onsite. During closed hours, gates for the site are locked and a security guard is located onsite.

3.4 Structures and Fixed Equipment

Condition 3.9.10 of the RLRf requires the following information in the Design Report:

- ▶ Condition 3.9.10.1.: Calculations of the handling capacity of all structures and fixed equipment. Handling capacity of equipment is included in the Processing and Equipment Overview in Appendix I.
- ▶ Condition 3.9.10.2.: An operating and maintenance plan for all structures and fixed equipment. Operating and maintenance plans are included in Appendix J.
- ▶ Condition 3.9.10.3.: Detailed design drawings and manufacturers' specification sheets for all structures and fixed equipment. Existing facilities may submit the make and model of fixed equipment if the manufacturers' specification sheets are unavailable. Make and model information for fixed equipment is included in the Processing and Equipment Overview in Appendix I.

3.5 Tipping Floor and Storage Capacity

Condition 3.9.11 of the RLRf requires the following information in the Design Report:

- ▶ Condition 3.9.11.1.: Detailed calculations of the volume, in cubic yards, available for the unloading of inbound materials on the tipping floor. Volumes and/or areas for tipping floors are included in the general facility layout in Appendix D.
- ▶ Condition 3.9.11.2.: A drawing showing the size and location of the area dedicated to the screening of inbound loads, including the unloading and inspection of atypical loads and the inspection of random loads.
 - Unloading and screening of inbound loads are performed at different locations in the facility.
 - ◆ Unloading and screening for the Shredder Yard is performed at the tipping floor north of the metal shredder infeed identified in C3 of the general facility in Appendix D.
 - ◆ Unloading and screening for the NF warehouse is performed at the truck docks identified in C5 of the general facility layout in Appendix D.
 - ◆ Unloading and screening in the peddler yard is performed in the "Peddler Light Iron (Ferrous) Drop Off Pile" identified in C6 of the general facility layout in Appendix D.

- ◆ Unloading and screening for the nonferrous yard is performed at the various tipping floors for the different storage bins in C7 and C8 of the general facility layout in Appendix D.
- ▶ Detailed calculations of the volume in cubic yards available for the storage and staging of raw materials, processed materials, products, unauthorized materials, and residual waste on the tipping floor, loadout area, and in all staging and storage areas. As noted previously, tipping floor storage volumes are included in the general facility layout in Appendix D. Storage volumes for the various materials is included in Appendix K.
- ▶ Drawings showing the location and lateral and vertical extents of all raw material, processed material, post processed material, finished product, and residual waste piles at the facility. Location and lateral extents of all storage piles are included in the general facility layout in Appendix D. No storage pile will exceed 30 feet in height.

3.6 Traffic

Condition 3.9.13 of the RLRf requires the following information in the Design Report:

- ▶ Condition 3.9.13.1.: Calculations of the average and the maximum number of vehicles generated by the facility as well as an hourly breakdown of facility vehicle traffic. Per the RLRf, for existing facilities, this information may be determined using truck-scale records going back at least one year of the application date. Details on facility traffic is included in Appendix L.
- ▶ Condition 3.9.13.2.: A stacking plan showing the number of vehicles and the onsite and offsite locations of these vehicles during the maximum peak facility traffic hours. The facility stacking plan is included in Appendix M.
- ▶ Condition 3.9.13.3.: An idling reduction plan that demonstrates compliance with Section 9-80-095 of the Code that minimizes unnecessary idling of vehicles and equipment in order to avoid contributions to poor air quality and noise. The facility idling plan is included in Appendix N.

3.7 Perimeter Barrier

Condition 3.9.17 of the RLRf requires the following information in the Design Report:

- ▶ Condition 3.9.17.1.: A description of the facility's perimeter barrier, including, but not limited to:
 - Height – the barrier must be at least 8 feet high.
 - ◆ The general facility layout in Appendix D details the location of all perimeter barriers. Note that the facility is currently in the process of increasing the height of all perimeter barriers to 12 feet.
 - Material Composition – The barrier must be solid so as to completely obscure all materials stored or kept within the facility's boundaries.
 - ◆ The perimeter barrier is a chain link fence covered with a mesh cloth to screen visibility into the facility.
- ▶ Condition 3.9.17.7.: Site Access Locations – When possible, all gates and access openings shall be located away from adjacent or nearby non-manufacturing land uses. The facility is not located adjacent to any non-manufacturing land uses. The main access to the facility is located off of S Blue Island Avenue which is the nearest access point to Paulina Street.
- ▶ Condition 3.9.17.8.: Elevation Drawing – For new barriers, the application shall include an elevation drawing(s) showing the vertical dimensions and construction of the barrier, gates, and other important features. As noted above, the perimeter barrier will be a 12-foot-tall fence covered with mesh cloth to screen visibility into the facility.

3.8 Stormwater Pollution Prevention Plan

Condition 3.9.18 of the RLRF contains requirements regarding stormwater pollution prevention. Condition 3.9.18.4 allows for an applicant to submit a copy of the Stormwater Pollution Prevention Plan (SWPPP) that is used to demonstrate compliance with the facility's NPDES permit to satisfy the requirements of Condition 3.9.18. A copy of the Paulina Facility's SWPPP is included in Appendix O.

3.9 Noise Impact Assessment

Condition 3.9.19 of the RLRF contains requirements that "For applications requesting a waiver to operate outside of the operating hours in Section 4.2, the Design Report shall include a noise impact assessment that includes, but is not limited to: A demonstration that sound levels from the Facility will not exceed applicable standards set forth in Section 8-32-090 of the Chicago Noise Ordinance"

Condition 3.9.19.5 exempts certain facilities from the requirements of Condition 3.9.19. Specifically, "Existing Facilities that have not been found to have violated any applicable noise standard or Ordinance in the past three years may, at the Commissioner's discretion, be exempted from any of the requirements under this subsection."

The Paulina Facility has not been found to have violated any applicable noise standard or Ordinance in the past three years, including but not limited to not having received any applicable citations or communications from the city. As a result, **the Paulina Facility is requesting exemption** from the Noise Impact Assessment (Section 3.9.19 of the RLRF) and associated Noise Monitoring and reporting requirements (Section 4.6 of the RLRF) of the CDPH Rules for Large Recycling Facilities.

Further, Section 4.2 of the RLRF defines the Hours of Operations for application of Condition 3.9.19 as "The Facility operating hours shall be limited to the hours specified in Section 8.0 of the Recycling Facility Rules, as amended unless a written waiver is issued by the Commissioner." The Paulina facility has already received a waiver from the City of Chicago Department of Public Health³ to operate outside of the operating hours specified in Section 8.0 of the Recycling Facility Rules⁴. The Paulina Facility waiver allows for operations from "5:00a.m. to 10:00p.m. Monday through Friday, and from 5:00a.m. and 5 p.m. on Saturday and Sunday. In addition, the facility may operate up to twenty-four hours per day, as needed to prevent excessive stockpiles at the facility." This further justifies the exemption of the Paulina Facility from the requirements of the Noise Impact Assessment (Section 3.9.19 of the RLRF) and associated Noise Monitoring and reporting requirements (Section 4.6 of the RLRF).

Finally, a review of the City of Chicago's Noise Ordinance for control of "Mechanical Stationary Sources" (8-32-090) specifically exempts the requirements of the ordinance for "Manufacturing districts" (8.3.170 h) and "Planned manufacturing districts" (8.3.170 i). Although the "Planned manufacturing districts" defined within the ordinance do not explicitly exempt the Planned manufacturing district surrounding the Paulina Facility, the nature of the ordinance indicates that a waiver is justified in zoning regions defined similarly to those that surround the Paulina facility.

³ Refer to Appendix P for a copy of the hours of operation waiver.

⁴ City of Chicago, Department of Public Health, Article XX. Recycling Facility Permits: Rules and Regulations

3.10 Storage Tanks

Condition 3.9.20 of the RLR requires the Design Report demonstrate that all storage tanks used to store oil, chemicals, and flammable liquids have secondary containment and are approved by the State Fire Marshall's Office and the CDPH's Storage Tank Unit. A facility subject to Spill Prevention Control and Countermeasures (SPCC) regulations under 40 CFR 112 shall provide a copy of the facility's SPCC plan. A copy of the Paulina Facility's SPCC plan is included in Appendix Q. A copy of SPCC appendices can be provided upon request.

3.11 Air Quality Impact Assessment

Condition 3.9.21 of the RLR requires an air quality impact assessment be included in the Design Report. Specifically, the following items are required under the air quality impact assessment:

- ▶ Condition 3.9.21.1.: An emissions and air dispersion modeling study. The air dispersion modeling study is included in Appendix R.
- ▶ Condition 3.9.21.2.: A dust monitoring plan describing the placement, operation, and maintenance of the PM₁₀ monitors and weather station. The dust monitoring plan is included in Appendix S.
- ▶ Condition 3.9.21.3.: A calibration plan that ensures all PM₁₀ monitors and weather station will be calibrated prior to installation and annually (or at a frequency recommended by the manufacturer) thereafter. The calibration plan is included within the dust monitoring plan included in Appendix S.
- ▶ Condition 3.9.21.4.: A metals sampling plan to determine the concentrations of metallic hazardous air pollutants (HAPs) that were included in the air dispersion modeling study in Condition 3.9.21.1. The metals sampling plan is included within the dust monitoring plan included in Appendix S.

4. OPERATING PLAN

Section 4 addresses the various items required for the Operating Plan under Condition 3.10 of the RLRF.

4.1 Types of Recyclable Material

Condition 3.10.1 of the RLRF requires that the Operating Plan contain the following information:

- ▶ Condition 3.10.1.1.: A list of the general types of materials accepted and processed at the facility. A list of the general types of materials accepted and processed at the Facility is included in Appendix K (Storage Volumes). Materials not accepted are covered by the Inbound Material Control Program provided in Appendix T.
- ▶ Condition 3.10.1.2.: A description of the source types (industrial, commercial, residential, etc.) from which the different types of materials will be accepted, and the source-screening protocol, including radiation screening of metal scraps that will be followed to ensure unauthorized materials will not be brought to the facility. The Paulina Facility will receive recyclable metal material from the following sources: industrial, commercial, construction and demolition operations and residential household sources, recyclable metal peddlers, vehicle towing operations, recyclable metal separated at waste transfer stations, and pick-ups from recycling service providers.
- ▶ Condition 3.10.1.3.: A screening plan that provides for the screening of loads, including radiation screening of scrap metal, entering the facility that ensures loads containing unauthorized materials will not be allowed to unload at the facility. The plan shall also describe in detail the inspection procedures for unloaded materials. This is covered by the Inbound Material Control Program provided in Appendix T. Additionally, the Radiation Detection and Response Procedure is included in Appendix U.
- ▶ Condition 3.10.1.4.: A plan for the segregation and removal of all unauthorized material from the facility. This is covered by the Inbound Material Control Program provided in Appendix T.
- ▶ Condition 3.10.1.5.: An emergency response plan for the handling, storage, and disposal of hazardous or dangerous materials that require immediate attention or specialized handling and/or disposal. This is addressed by the Emergency Action Plans provided in Appendix G and Inbound Material Control Program provided in Appendix T. Additionally, the Radiation Detection and Response Procedure is included in Appendix U.

4.2 Quantity of Recyclable Material

Condition 3.10.2 of the RLRF requires that the Operating Plan contain the following information:

- ▶ Condition 3.10.2.1.: Documentation to demonstrate that the facility has a sufficient number of covered containers to store all newsprint, paper, corrugated paper, and cardboard that will be accepted. The Paulina Facility does not accept or handle any of the above-noted paper recyclables, so this condition is not applicable.
- ▶ Condition 3.10.2.2.: Detailed calculations estimating the peak daily quantities of material that can be accepted at the facility taking into consideration the process flow rates in Condition 3.10.3.1, the staging and storage volumes in Condition 3.9.11.3, truck stacking capacity in Condition 3.9.13.2, and other pertinent factors. The estimated material quantities shall be provided on a tons per day basis and include all assumptions used in the calculation. Daily average and max inbound volumes were estimated based on the previous 12 months of actual operating data. The volumes are provided in Appendix V.
- ▶ Condition 3.10.2.3.: Documentation to demonstrate that the facility has the ability to determine and record the amounts of material in tons entering and exiting the facility, material processed at the facility, and can readily generate a summary report on these quantities in a reasonable period of time when

requested by the commissioner. The estimated material quantities in Appendix V show that the facility can readily generate reports showing the quantity of materials received at the site.

4.3 Devices, Apparatus, and Processes

Condition 3.10.3 of the RLRf requires that the Operating Plan contain the following information:

- ▶ Condition 3.10.3.1.: A flow diagram indicating the material flow between each major process line or process step. The flow diagram shall depict the flow of material between each structure, fixed equipment, storage and staging piles, unloading areas, and loading areas on the diagram. The diagram shall also indicate processing rates for structures and fixed equipment, staffing requirements, storage and staging capacities, mean storage and staging times, and inflow/outflow rates, including operating hours. A flow diagram and associated narrative is provided in Appendix W detailing the material flow through the facility. Material flowrates through the fixed equipment, staffing requirements, and operating hours are provided in Appendix I. Storage and staging capacities are provided in Appendix K.
- ▶ Condition 3.10.3.2.: A health and safety plan that includes all job hazard assessments and a description of the OSHA-required safety devices or procedures employed for all processing equipment such as, but not limited to, electric lockout devices, guarding, emergency stopping devices, and explosion proof switches and controls. Refer to Appendix X for a summary of job hazard assessments that have been completed. Additionally, Sims maintains a lockout/tagout program for all equipment.
- ▶ Condition 3.10.3.3.: A description and results of any OSHA-required worker air and noise exposure sampling for facility activities such as, but not necessarily limited to, welding, torching, sanding, crushing, and grinding. As applicable, these documents shall be provided in compliance with the Health Insurance Portability and Accountability Act (HIPAA) requirements. Information related to the personal air and noise exposure sampling is included in Appendix Y.

4.4 Fire Prevention

Condition 3.10.4 of the RLRf requires that the Operating Plan contain a Fire Prevention and Response Plan that includes, at a minimum, the requirements in Condition 3.10.4.1 through 3.10.4.7. A copy of the Fire Prevention and Response Plan is included in Appendix F.

4.5 Emergency Communications

Condition 3.10.5 of the RLRf requires that the Operating Plan contain a description of the emergency communication system. The emergency communication system is detailed within the Emergency Action Plans included in Appendix G.

4.6 First Aid Equipment

Condition 3.10.6 of the RLRf requires that the Operating Plan contain a description of the first-aid equipment available at the facility. The description of first-aid equipment is included within the Emergency Action Plans included in Appendix G.

4.7 Rodent/Vector Control

Condition 3.10.7 of the RLRf requires that the Operating Plan include a plan for the effective prevention and control of rodents and other vectors and at a minimum includes the following:

- ▶ Condition 3.10.7.1.: A minimum of monthly inspections to be conducted by a vector control specialist of the entire facility for rodents, mosquitos, and other vectors. A record of the most current inspection and eleven previous inspections will be maintained at the facility.
- ▶ Condition 3.10.7.2.: A detailed description of all measures employed (e.g., bait stations and traps) to prevent infestation by rodents, mosquitos, and other vectors, including good housekeeping practices used to control rodents, mosquitos, and other vectors.

A copy of the vector control program is included in Appendix Z.

4.8 Vehicles

Condition 3.10.8 of the RLRf requires that the Operating Plan describe the vehicles to be used at the facility, including:

- ▶ Condition 3.10.8.1.: A list of all types of vehicles proposed to be maintained at the facility and maintenance activities to be performed.
- ▶ Condition 3.10.8.2.: The quantity of each type of vehicle maintained at the facility.
- ▶ Condition 3.10.8.3.: The intended use and operating plan for each vehicle.
- ▶ Condition 3.10.8.4.: The number of employees qualified to operate each vehicle.
- ▶ Condition 3.10.8.5.: The quantity of material in tons each vehicle is expected to be able to process or transport.

The list of vehicles present at the facility, the list of operators, and the processing rates for the vehicles is included in Appendix AA. The list of maintenance activities for the vehicles are included in the operating and maintenance plans provided in Appendix J.

4.9 Disposal Facilities

Condition 3.10.9 of the RLRf requires that the Operating Plan identify all disposal facilities to which liquid waste and residual waste from the facility will be hauled. The list of disposal/recycling facilities is included below:

Waste Type	Disposal Facility	Facility Address
ASR	Waste Management – Laraway Landfill	21233 W Laraway Rd Joliet, IL 60436
Used Oil/Oily Water Recycling	Duke’s Oil Service	783 Fairway Dr Bensenville, IL 60106
Parts Cleaner/Paint Recycling	Safety Kleen	2600 N. Central Expressway STE 400 Richardson, TX 75080
Use Oil/Used Gasoline Recycling	Lone Wolf	502 Rad Bud Lane Auburn, IL 62615

4.10 Daily Housekeeping and Cleaning

Condition 3.10.10 of the RLRf requires that the Operating Plan demonstrate that the daily housekeeping and cleaning procedures are sufficient to minimize dust, track-out, and the presence of rodents, mosquitos, and other vectors and odors.

- ▶ Condition 3.10.10.1.: A description of all daily cleaning activities, including the cleaning of pavements complying with subsection 4.14 of the RLRf.
- ▶ Condition 3.10.10.2.: A schedule indicating the initiation and completion of daily cleaning activities.
- ▶ Condition 3.10.10.3.: The make, model, and specification of the street sweeper required in Condition 4.14.2 of the RLRf and any sprayers, misters, and other dust suppression equipment employed at the facility.
- ▶ Condition 3.10.10.4.: A description of materials, supplies, and quantities necessary to complete the daily cleaning activities and to clean up leaks and spills.
- ▶ Condition 3.10.10.5.: A description of the staffing that will be dedicated to conducting the required daily cleaning activities.
- ▶ Condition 3.10.10.6.: A record-keeping plan to document daily cleaning activities.

The facility performs weekly plant inspections as detailed in the Weekly Plant Inspection checklist included in Appendix BB. A manufacturer brochure of the street sweeper is also included in Appendix BB.

4.11 Hours of Operation

Condition 3.10.11 of the RLRf requires that the Operating Plan specify the hours of operation of the facility, including processing, receipt, and maintenance activities. Operating hours shall be limited to the hours specified in Condition 4.2 of the RLRf unless a waiver is granted by the Commissioner.

The hours of operation are detailed in the Processing and Equipment Overview in Appendix I and the Operating Hours Waiver in Appendix P. Note that the Shredder Yard lists two (2) shifts. The shredder only operates during the first shift and the second shift is for maintenance activities.

4.12 Closure Plan

Condition 3.10.12 of the RLRf requires that the Operating Plan contain a closure plan. The closure plan must include, at a minimum, the following components:

- ▶ Condition 3.10.12.1.: The closure plan shall list activities that will occur upon closure, including a listing of materials necessary for closure and a schedule for completion.
- ▶ Condition 3.10.12.2.: The closure plan shall include a plan for removing all recyclable materials and waste material from the facility.
- ▶ Condition 3.10.12.3.: The closure plan shall include a plan for decommissioning and cleaning all equipment and structures at the facility.

A copy of the closure plan is included in Appendix CC.

APPENDIX A. ISRI SCRAP SPECIFICATION CIRCULAR

ISRI SPECS

ISRI SCRAP SPECIFICATIONS CIRCULAR



GUIDELINES FOR:

NONFERROUS SCRAP | FERROUS SCRAP | INBOUND CURBSIDE RECYCLABLES | GLASS CULLET
PAPER STOCK | PLASTIC SCRAP | TIRE SCRAP | ELECTRONICS SCRAP

SPONSORED BY:



MAGNETIC + SENSOR SORTING SOLUTIONS



NOTE ON ISRI SPECIFICATIONS SPONSORSHIP:

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Scrap Specifications Circular 2020

Guidelines for
Nonferrous Scrap
Ferrous Scrap
Glass Cullet
Paper Stock
Plastic Scrap
Electronics Scrap
Tire Scrap

EFFECTIVE 3/26/2020



Voice of the Recycling Industry™

Institute of
Scrap Recycling
Industries, Inc.

1250 H St. NW, Suite 400
Washington, DC 20005-5903
Tel. 202/662-8500
Fax 202/624-9256
isri.org

PREFACE

The standard specifications included in this Circular are intended to assist members in the buying and selling of their materials and products.

These specifications are derived from many sectors of the metals, paper stock, plastics, glass, and electronics industries and are constructed to represent the quality or composition of the materials bought and sold in the industry. The specifications are internationally accepted and are used throughout the world to trade the various commodities.

Parties to a transaction may specify particular variations or additions to these specifications as are suited for their specific transactions and for their individual convenience. Any deviation from the standard specifications, however, should be mutually agreed to and so stipulated in writing by the parties to the transactions.

ISRI maintains an Arbitration Service as a means of enabling members to settle differences between themselves or between one of them and a non-member.

In addition, the "Guidelines for Metals Transactions" contain supplementary information that will aid members in completing their business transactions. It is recommended that these Guidelines be reviewed and that members use them in conjunction with the actual specifications in the conduct of their business.

ISRI's *Scrap Specifications Circular* is posted in PDF format at least once per year on the ISRI web site. To ensure you have the most up-to-date version, visit isri.org/specs.

Issued by:



Institute of
Scrap Recycling
Industries, Inc.

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CIRCULAR 2020 BECAME EFFECTIVE March 26, 2020,
AND PREVAILS UNTIL SUPERSEDED.

Rules Governing the Procedures for the Addition, Amendment, or Withdrawal of Scrap Specifications

- 1.0 *Initiation of Request.* Any person may file a request to add, amend or withdraw a specification by submitting such request in writing to the ISRI President.
- 1.1 The President shall refer such request to the Chair of the appropriate Division Specifications Committee (the "Committee"), with copies to:
 - A. ISRI's Officers;
 - B. The Chair of any ISRI Division and/or Committee that might be affected by the specification.
- 2.0 *Committee Action.* Following presentation by all interested parties, the Committee shall review the request and:
 - A. Act upon it prior to the next meeting of the Board, as set forth in Section 2.1; or
 - B. Refer it to a subcommittee for review and recommendation for action by the full Committee at its next meeting.
- 2.1 The Committee shall summarize the positions advocated by the various parties interested in the request and recommend to the appropriate division and the Board of Directors what action should be taken.
- 3.0 *Notice.* A notice of the Committee recommendations shall be distributed to all ISRI members, a news release will be distributed to industry trade publications and a notice will be posted on the ISRI website at least twenty days before the request will be considered by the Board of Directors. Such notice shall state:
 - A. The date, time and place at which the request will be considered by the Board;
 - B. That the proceeding at which the request will be considered shall be open to the public;
 - C. That interested parties may participate in the proceeding by personal appearance or by submitting written comments;
 - D. A summary of the specification and the matter to be considered at the meeting.
- 4.0 *Board of Directors Action.* The Board of Directors, at its meeting at which the report and recommendation of the Committee has been made, may adopt, amend or reject the recommendation or table it pending further review and recommendation by the Committee.
- 4.1 Notice of the action taken by the Board shall be given to all interested parties who actively participated in the Committee proceeding and any other persons who have requested in writing notice of the Board's action. Notice of said action also shall be distributed to all ISRI members, a news release will be distributed to industry trade publications and a notice will be posted on the ISRI website on or before ten days following the Board's action.
- 5.0 *Appeal.* On or before thirty days after the date of the notice required in Section 6.1, any party may appeal the decision of the Board by written notice to the President. Said appeal shall state the reasons for the appeal and the requested action to be taken. Notice of said appeal shall be given in accordance with Section 1.0.
- 5.1 The appeal shall be heard by the Board at its next meeting following receipt of the appeal.
- 5.2 The appellant and all interested parties shall be given at least twenty days notice of the date, time and place of the hearing, and like notice shall be inserted in the ISRI newsletter at least twenty days prior to the hearing.
- 5.3 At the hearing, the appellant and any other interested party may appear either in person or by written presentation and state their reasons for the appeal.
- 5.4 The Board, following said hearing, shall review and act upon the appeal. Notice of the Board's action shall be given in accordance with Section 4.1.
- 6.0 *Records.* ISRI shall maintain for not less than five years following the date of termination of the proceedings, records of the original request, summaries of the deliberations and recommendations of the Committee, action of the Board, summaries of the appeal and final decision, if any, of the Board, together with the positions of interested parties, copies of notices sent to interested parties and inserted in the ISRI newsletter and national trade publications, written statements, and the reasons for recommendation and final action by the Committee and the Board.
- 6.1 Said records shall be available for review by the public upon reasonable notice.

Revisions Included in this Circular

The Institute of Scrap Recycling Industries (ISRI) Board of Directors approved the addition of two new specifications to the ISRI Scrap Specifications Circular at its Winter Meeting on February 21, 2020:

Inbound Residential Single Stream Specification:

Inbound Residential Single Stream is the material derived from a recycling method whereby residents of a community place allowed materials in a specifically designated receptacle to be left at a drop off point outside their residence. The purpose of the specification is to give Material Recovery Facilities (MRFs) and municipalities a common vernacular to negotiate the items that comprise the material stream derived from a single stream curbside collection program. The specifications describe not only the items that should be part of the system, but prohibitives and other materials that could be considered contaminants.

Inbound Residential Dual Stream Specification:

Inbound Residential Dual Stream is the material derived from a recycling method whereby residents of a community place allowed materials in specifically designated receptacles to be left at a drop off point outside their residence that use separate bins or carts for paper and containers and are collected in separate compartments on one or more trucks. The purpose of the specification is to give MRFs and municipalities a common vernacular to negotiate the items that comprise the material stream derived from a dual stream curbside collection program. The specifications describe not only the items that should be part of the system, but prohibitives and other materials that could be considered contaminants."

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Guidelines for Nonferrous Scrap: NF-2020

Note: When the individual scrap grades in this Circular, denoted by the various code words, are used, an agreement between parties is also bound by the terms of “Apple” as it appears below, unless the terms and conditions of a specific contract provide otherwise, in which case the specific contractual provisions shall govern.

CODE ITEM

Apple Nonferrous Terms

- a. Delivery of more or less of the specified quantity up to 3 percent is permissible.
- b. A ton shall be understood to be 2,000 pounds, unless otherwise specified.
- c. If any portion of the goods covered by a contract are unshipped or undelivered within the time specified in a contract, then that portion is subject to cancellation by the buyer and/or the buyer has the right to hold the seller responsible for substantiated damages.
If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo and/or conditions of force majeure and the terms of said contract shall not be changed.
- d. If for any portion of a contract the buyer fails in a timely manner to open a Letter of Credit and/or fails to provide proper conveyance and/or shipping instructions as specified in the contract, then that portion is subject to cancellation by the seller and/or the seller has the right to hold the buyer responsible for substantiated damages.
If, because of embargo and/or other conditions of force majeure, a delivery or shipment cannot be made by the time specified, the contract shall remain valid and shall be completed promptly upon lifting of the embargo and/or conditions of force majeure and the terms of said contract shall not be changed.
- e. If a significant weight or quality difference is apparent, the seller should be notified promptly and, if requested, another weight or quality determination should be taken. Seller and/or buyer should be given the opportunity to appoint an independent surveyor or a representative to verify weights and/or quality.
For purposes of this section, the meaning of the word “significant” shall be determined by agreement between buyer and seller, depending on the commodities and their values.
- f. If it is mutually determined that goods delivered do not conform to the description specified in the contract, then the shipment is subject to rejection or downgrade.
Disposition of, replacement of, and/or financial adjustment for rejected material shall be subject to mutual agreement between buyer and seller. Seller is responsible for freight costs.
Buyer is expected, however, to exert every effort to limit rejections only to that portion of the ship-

CODE ITEM

ment which is unsortable and to return the rejected portion promptly upon request, if government regulations permit.

RED METALS

HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.

Barley No. 1 COPPER WIRE

Shall consist of No. 1 bare, uncoated, unalloyed copper wire, commonly known as Bare Bright copper wire. Wire gauge subject to agreement between buyer and seller. Green copper wire and hydraulically compacted material to be subject to agreement between buyer and seller.

Berry No. 1 COPPER WIRE

Shall consist of clean, untinned, uncoated, unalloyed copper wire and cable, free of brittle burnt wire. Wire gauge subject to agreement between buyer and seller. Free of copper tubing. Hydraulically briquetted copper subject to agreement.

Birch No. 2 COPPER WIRE

Shall consist of miscellaneous, unalloyed copper wire having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper wire; brass and bronze wire; excessive oil content, iron, and non-metallics; copper wire from burning; insulation; hair wire; brittle burnt wire; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

Candy No. 1 HEAVY COPPER SOLIDS AND TUBING

Shall consist of clean, unalloyed, uncoated copper clippings, punchings, bus bars, commutator segments, and clean copper tubing. Hydraulically briquetted copper subject to agreement.

Berry/Candy Candy/Berry

A combination of copper wire and heavy copper as defined in Berry and Candy. See above.

Cliff No. 2 COPPER SOLIDS AND TUBING

Shall consist of miscellaneous, unalloyed copper scrap having a nominal 96% copper content (minimum 94%) as determined by electrolytic assay. Should be free of the following: Excessively leaded, tinned, soldered copper scrap; brasses and bronzes; excessive oil content, iron and non-metallics; copper tubing with other than copper connections or with sediment; copper wire from burning; insulation; hair wire; brittle burnt wire; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement.

CODE ITEM

Birch/Cliff

A combination of No. 2 copper wire and copper as defined in Birch and Cliff. See above.

Clove No. 1 COPPER WIRE NODULES

Shall consist of No. 1 bare, uncoated, unalloyed copper wire scrap nodules, chopped or shredded, free of tin, lead, zinc, aluminum, iron, other metallic impurities, insulation, and other foreign contamination. Minimum copper 99%. Gauge smaller than No. 16 B & S wire and hydraulically compacted material subject to agreement between buyer and seller.

Cobra No. 2 COPPER WIRE NODULES

Shall consist of No. 2 unalloyed copper wire scrap nodules, chopped or shredded, minimum 97% copper. Maximum metal impurities not to exceed 0.50% aluminum and 1% each of other metals or insulation. Hydraulically compacted material subject to agreement between buyer and seller.

Cocoa COPPER WIRE NODULES

Shall consist of unalloyed copper wire scrap nodules, chopped or shredded, minimum 99% copper. Shall be free of excessive insulation and other non-metallics. Maximum metal impurities as follows:

Aluminum	.05%	Antimony	.01%
Tin	.25%	Iron	.05%
Nickel	.05%		

Hydraulically compacted material subject to agreement between buyer and seller.

Dream LIGHT COPPER

Shall consist of miscellaneous, unalloyed copper scrap having a nominal 92% copper content (minimum 88%) as determined by electrolytic assay and shall consist of sheet copper, gutters, downspouts, kettles, boilers, and similar scrap. Should be free of the following: Burnt hair wire; copper clad; plating racks; grindings; copper wire from burning, containing insulation; radiators and fire extinguishers; refrigerator units; electrotypes shells; screening; excessively leaded, tinned, soldered scrap; brasses and bronzes; excessive oil, iron and non-metallics; and should be reasonably free of ash. Hydraulically briquetted copper subject to agreement. Any items excluded in this grade are also excluded in the higher grades above.

Drink REFINERY BRASS

Shall contain a minimum of 61.3% copper and maximum 5% iron and to consist of brass and bronze solids and turnings, and alloyed and contaminated copper scrap. Shall be free of insulated wire, grindings, electrotypes shells and non-metallics. Hydraulically briquetted material subject to agreement.

Droid INSULATED COPPER WIRE SCRAP

Shall consist of No. 2 copper wire (see Birch) with various types of insulation. To be sold on a sample or recovery basis, subject to agreement between buyer and seller. Existence of jelly wire subject to agreement between buyer and seller.

CODE ITEM

Drove COPPER-BEARING SCRAP

Shall consist of miscellaneous copper-containing skimmings, grindings, ashes, iron brass and copper, residues and slags. Shall be free of insulated wires; copper chlorides; unprepared tangled material; large motors; pyrophoric material; asbestos brake linings; furnace bottoms; high lead materials; graphite crucibles; and noxious and explosive materials. Fine powdered material by agreement. Hydraulically briquetted material subject to agreement.

Druid INSULATED COPPER WIRE SCRAP

Shall consist of No. 1 bare, uncoated, unalloyed copper wire (see Barley), not smaller than No. 16 B & S wire gauge (unless smaller wire gauge is mutually agreed upon), with various types of insulation. To be sold on sample or recovery basis, subject to agreement between buyer and seller.

Ebony COMPOSITION OR RED BRASS

Shall consist of red brass scrap, valves, machinery bearings and other machinery parts, including miscellaneous castings made of copper, tin, zinc, and/or lead. Shall be free of semi-red brass castings (78% to 81% copper); railroad car boxes and other similar high-lead alloys; cocks and faucets; closed water meters; gates; pot pieces; ingots and burned brass; aluminum, silicon, and manganese bronzes; iron and non-metallics. No piece to measure more than 12" over any one part or weigh over 100 lbs. Heavier pieces acceptable upon mutual agreement between buyer and seller.

Ebulent LEAD-FREE BISMUTH BRASS SOLIDS

Shall consist of scrap castings alloyed with copper, tin, bismuth, and zinc. Castings shall be free of leaded brass attachments and have less than 0.2% alloyed lead or as agreed between buyer and seller. Examples that meet this specification include, but are not limited to, CDA 89833/35/36/37/41/42 and 45.

Ecstatic LEAD-FREE BISMUTH BRASS TURNINGS

Shall consist of scrap borings and turnings alloyed with copper, tin, bismuth, and zinc. Turnings shall be unmixed and have less than 0.2% alloyed lead or as agreed between buyer and seller. Examples that meet this specification include, but are not limited to, CDA 89833/35/36/37/41/42 and 45.

Eland HIGH GRADE-LOW LEAD BRONZE/BRASS SOLIDS

It is recommended these materials be sold by analysis.

Elder GENUINE BABBITT-LINED BRASS BUSHINGS

Shall consist of red brass bushings and bearings from automobiles and other machinery, shall contain not less than 12% high tin-base babbitt, and shall be free of iron-backed bearings.

Elias HIGH LEAD BRONZE SOLIDS AND BORINGS

It is recommended that these materials be sold on sample or analysis.

Enerv RED BRASS COMPOSITION TURNINGS

Shall consist of turnings from red brass composition material and should be sold subject to sample or analysis.

CODE	ITEM	CODE	ITEM
Engel	MACHINERY OR HARD BRASS SOLIDS Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6% nor more than 11%, and total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%; the antimony content not to exceed 0.50%. Shall be free of lined and unlined standard red car boxes.	Lady	BRASS SHELL CASES WITH PRIMERS Shall consist of clean fired 70/30 brass shell cases containing the brass primers, and containing no other foreign material. For material to be exported from the United States, all shells must be sufficiently mutilated to prevent reuse and reloading.
Erin	MACHINERY OR HARD BRASS BORINGS Shall have a copper content of not less than 75%, a tin content of not less than 6%, and a lead content of not less than 6% nor more than 11%, and the total impurities, exclusive of zinc, antimony, and nickel of not more than 0.75%; the antimony content not to exceed 0.50%.	Lake	BRASS SMALL ARMS AND RIFLE SHELLS, CLEAN FIRED Shall consist of clean fired 70/30 brass shells free of bullets, iron and any other foreign material. For material to be exported from the United States, all shells must be sufficiently mutilated to prevent reuse and reloading.
Fence	UNLINED STANDARD RED CAR BOXES (CLEAN JOURNALS) Shall consist of standard unlined and/or sweated railroad boxes and unlined and/or sweated car journal bearings, free of yellow boxes and iron-backed boxes.	Lamb	BRASS SMALL ARMS AND RIFLE SHELLS, CLEAN MUFFLED (POPPED) Shall consist of clean muffled (popped) 70/30 brass shells free of bullets, iron and any other foreign material. For material to be exported from the United States, all shells must be sufficiently mutilated to prevent reuse and reloading.
Ferry	LINED STANDARD RED CAR BOXES (LINED JOURNALS) Shall consist of standard babbitt-lined railroad boxes and/or babbitt-lined car journal bearings, free of yellow boxes and iron-backed boxes.	Lark	YELLOW BRASS PRIMER Shall consist of clean yellow brass primers, burnt or unburnt. Shall be free of iron, excessive dirt, corrosion and any other foreign material.
Grape	COCKS AND FAUCETS Shall consist of mixed clean red and yellow brass, including chrome or nickel-plated, free of gas cocks, beer faucets, and aluminum and zinc base die cast material, and to contain a minimum of 35% semi-red.	Maize	MIXED NEW NICKEL SILVER CLIPPINGS Shall consist of one or more nickel silver alloys and the range of nickel content to be specified, free of chrome or any other plating material. Lead nickel silver clippings should be packed and sold separately. Not to contain more than 10% of clean punchings under 1/4 inch.
Honey	YELLOW BRASS SCRAP Shall consist of mixed yellow brass solids, including brass castings, rolled brass, rod brass, tubing and miscellaneous yellow brasses, including plated brass. Must be free of manganese-bronze, aluminum-bronze, unsweated radiators or radiator parts, iron, and excessively dirty and corroded materials. Must also be free of any type of munitions including, but not limited to, bullet casings.	Major	NEW NICKEL SILVER CLIPPINGS AND SOLIDS Shall consist of new, clean nickel silver clippings, plate, rod and forgings, and other rolled shapes, free of chrome or any other plating material. Must be sold on nickel content specifications such as 10%-12%-15%-18%-20%. Lead nickel silver clippings should be packed and sold separately. A description as to its physical characteristics should be made in offering all nickel silver material.
Ivory	YELLOW BRASS CASTINGS Shall consist of yellow brass castings in crucible shape, no piece to measure more than 12 inches over any one part; and shall be free of brass forgings, silicon bronze, aluminum bronze and manganese bronze, and not to contain more than 15% nickel plated material.	Malar	NEW SEGREGATED NICKEL SILVER CLIPPINGS Shall consist of one specified nickel silver alloy. Not to contain more than 10% of clean punchings under 1/4 inch.
Label	NEW BRASS CLIPPINGS Shall consist of the cuttings of new unleaded yellow brass sheet or plate, to be clean and free from foreign substances and not to contain more than 10% of clean brass punchings under 1/4 inch. To be free of Muntz metal and naval brass.	Malic	OLD NICKEL SILVER Shall consist of old nickel silver sheet, pipe, rod, tubes, wire, screen, soldered or unsoldered. Must not be trimmed seams alone, and must also be free of foreign substances, iron rimmed material and other metals.
Lace	BRASS SHELL CASES WITHOUT PRIMERS Shall consist of clean fired 70/30 brass shell cases free of primers and any other foreign material. For material to be exported from the United States, all shells must be sufficiently mutilated to prevent reuse and reloading.	Melon	BRASS PIPE Shall consist of brass pipe free of plated and soldered materials or pipes with cast brass connections. To be sound, clean pipes free of sediment and condenser tubes.
		Naggy	NICKEL SILVER CASTINGS To be packed and sold separately.

CODE ITEM**Niece NICKEL SILVER TURNINGS**

To be sold by sample or analysis.

Nascent LEADED BRASS SCRAP TURNINGS

Shall consist of scrap borings and turnings alloyed with copper, zinc, and lead. Turnings shall be unmixed and have less than 0.01% alloyed bismuth and silicon each and other impurities as agreed between buyer and seller.

Niche LEADED BRASS SCRAP ROD ENDS AND FORGINGS

Shall consist of scrap rod ends and forgings alloyed with copper, zinc, and lead. Solids shall have less than 0.01% alloyed bismuth and silicon each and other impurities as agreed between buyer and seller.

Night YELLOW BRASS ROD TURNINGS

Shall consist strictly of rod turnings, free of aluminum, manganese, composition, Tobin and Muntz metal turnings; not to contain over 3% free iron, oil or other moisture; to be free of grindings and babbitts; to contain not more than 0.30% tin and not more than 0.15% alloyed iron.

Noble NEW YELLOW BRASS ROD ENDS

Shall consist of new, clean rod ends from free turning brass rods or forging rods, not to contain more than 0.30% tin and not more than 0.15% alloyed iron. To be free of Muntz metal and naval brass or any other alloys. To be in pieces not larger than 12" and free of foreign matter.

Nomad YELLOW BRASS TURNINGS

Shall consist of yellow brass turnings, free of aluminum, manganese and composition turnings, not to contain over 3% of free iron, oil or other moisture; to be free of grindings and babbitts. To avoid dispute, to be sold subject to sample or analysis.

Ocean MIXED UNSWEATED AUTO RADIATORS

Shall consist of mixed automobile radiators, to be free of aluminum radiators, and iron-finned radiators. All radiators to be subject to deduction of actual iron. The tonnage specification should cover the gross weight of the radiators, unless otherwise specified.

Pales BRASS CONDENSER TUBES

Shall consist of clean condenser tubing which may be plated or unplated, free of excessive corroded material as mutually agreed. Upon mutual agreement between buyer and seller, may be in the form of whole bundles including iron and/or brass heads as well as iron and/or brass baffles.

Pallu ALUMINUM BRASS CONDENSER TUBES

Shall consist of clean sound condenser tubing which may be plated or unplated, free of nickel alloy and corroded material.

Palms MUNTZ METAL TUBES

Shall consist of clean sound Muntz metal tubing which may be plated or unplated, free of nickel alloy, aluminum alloy, and corroded material.

CODE ITEM**Parch MANGANESE BRONZE SOLIDS**

Shall have a copper content of not less than 55%, a lead content of not more than 1%, and shall be free of aluminum bronze and silicon bronze.

ALUMINUM**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.****Tablet CLEAN ALUMINUM LITHOGRAPHIC SHEETS**

To consist of 1000 and/or 3000 series alloys, to be free of paper, plastic, excessively inked sheets, and any other contaminants. Minimum size of 3" (8 cm) in any direction.

Tabloid NEW, CLEAN ALUMINUM LITHOGRAPHIC SHEETS

To consist of 1000 and/or 3000 series alloys, uncoated, unpainted, to be free of paper, plastic, ink, and any other contaminants. Minimum size of 3" (8 cm) in any direction.

Taboo MIXED LOW COPPER ALUMINUM CLIPPINGS AND SOLIDS

Shall consist of new, clean, uncoated and unpainted low copper aluminum scrap of two or more alloys with a minimum thickness of 0.015 inches (.38 mm) and to be free of 2000 and 7000 series, hair wire, wire screen, punchings less 1/2 inch (1.25 cm) diameter, dirt, and other non-metallic items. Grease and oil not to total more than 1%. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.

Taint/ Tabor CLEAN MIXED OLD ALLOY SHEET ALUMINUM

Shall consist of clean old alloy aluminum sheet of two or more alloys, free of foil, venetian blinds, castings, hair wire, screen wire, food or beverage containers, radiator shells, airplane sheet, bottle caps, plastic, dirt, and other non-metallic items. Oil and grease not to total more than 1%. Up to 10% Tale permitted.

Take NEW ALUMINUM CAN STOCK

Shall consist of new low copper aluminum can stock and clippings, clean, lithographed or not lithographed, and coated with clear lacquer but free of lids with sealers, iron, dirt and other foreign contamination. Oil not to exceed 1%.

Talc POST-CONSUMER ALUMINUM CAN SCRAP

Shall consist of old aluminum food and/or beverage cans. The material is to be free of other scrap metals, foil, tin cans, plastic bottles, paper, glass, and other non-metallic items. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.

CODE ITEM

Talcred SHREDDED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP
Shall have a density of 12 to 17 pounds per cubic foot (193 to 273 kg/m³). Material should contain maximum 5% fines less than 4 mesh (U.S. standard screen size) (6.35 mm). Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastics, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Variations to this specification should be agreed upon prior to shipment between the seller and buyer.

Taldack DENSIFIED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP

Shall have a biscuit density of 35 to 50 pounds per cubic foot (562 to 802 kg/m³). Each biscuit not to exceed 60 pounds (27.2 kg). Nominal biscuit size range from 10" to 13" x 10 1/4" (25.4 x 33 x 26 cm) to 20" x 6 1/4" x 9" (50.8 x 15.9 x 22.9 cm). Shall have banding slots in both directions to facilitate bundle banding. All biscuits comprising a bundle must be of uniform size. Size: Bundle range dimensions acceptable are 41" to 44" x 51" (104 to 112 cm) to 54" x 54" (137 x 137 cm) to 56" (142 cm) high. The only acceptable tying method shall be as follows: Using minimum 5/8" (1.6 cm) wide by .020" (.05 cm) thick steel straps, the bundles are to be banded with one vertical band per row and a minimum of two firth (horizontal) bands per bundle. Use of skids and/or support sheets of any material is not acceptable. Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastic, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Items not covered in the specifications, including moisture, and any variations to this specification should be agreed upon prior to shipment between the seller and buyer.

Taldon BALED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP

Shall have a minimum density of 14 pounds per cubic foot (225 kg/m³), and a maximum density of 17 pounds per cubic foot (273 kg/m³) for unflattened UBC and 22 pounds per cubic foot (353 kg/m³) for flattened UBC. Size: Minimum 30 cubic feet (.85 m³), with bale range dimensions of 24" to 40" (61 to 132 cm) by 30" to 52" (76 to 132 cm) by 40" to 84" (102 to 213 cm). The only acceptable tying method shall be as follows: four to six 5/8" (1.6 cm) x .020" (5 mm) steel bands, or six to ten #13 gauge steel wires (aluminum bands or wires are acceptable in equivalent strength and number). Use of skids and/or support sheets of any material is not acceptable. Must be magnetically separated material and free of steel, lead, bottle caps, plastic cans and other plastic, glass, wood, dirt, grease, trash, and other foreign substances. Any free lead is basis for rejection. Any and all aluminum items, other than used beverage cans, are not acceptable. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.

CODE ITEM

Taldork BRIQUETUED ALUMINUM USED BEVERAGE CAN (UBC) SCRAP

Shall have a briquette density of 50 pounds per cubic foot (800 kg/m³) minimum. Nominal briquette size shall range from 12" to 24" (30.5 x 61 cm) x 12" to 24" (30.5 x 61 cm) in uniform profile with a variable length of 8" (20.3 cm) minimum and 48" (122 cm) maximum. Briquettes shall be bundled or stacked on skids and secured with a minimum of one vertical band per row and a minimum of one girth band per horizontal layer. Briquettes not to overhang pallet. Total package height shall be 48 (122 cm) maximum. Banding shall be at least 5/8" (1.6 cm) wide by .020" (5 mm) thick steel strapping or equivalent strength. The weight of any bundle shall not exceed 4,000 pounds (1.814 mt). Material must be magnetically separated and free of steel, plastic, glass, dirt and all other foreign substances. Any and all aluminum items other than UBC are unacceptable. Any free lead is basis for rejection. Items not covered in the specification, including moisture, and any variations to this specification should be agreed upon prior to shipment between the buyer and seller.

Tale PAINTED SIDING

Shall consist of clean, low copper aluminum siding scrap, painted one or two sides, free of plastic coating, iron, dirt, corrosion, fiber, foam, or fiberglass backing or other non-metallic items.

Talk ALUMINUM COPPER RADIATORS

Shall consist of clean aluminum and copper radiators, and/or aluminum fins on copper tubing, free of brass tubing, iron and other foreign contamination.

Tall E.C. ALUMINUM NODULES

Shall consist of clean E.C. aluminum, chopped or shredded, free of screening, hair-wire, iron, copper, insulation and other non-metallic items. Must be free of minus 20 mesh material. Must contain 99.45% aluminum content.

Tally ALL ALUMINUM RADIATORS FROM AUTOMOBILES

Shall consist of clean aluminum radiators and/or condensers. Should be free of all other types of radiators. All contaminants including iron, plastic, and foam not to exceed 1% of weight. Any deviation to this specification, including oxidation and aluminum content, to be negotiated between buyer and seller.

Talon NEW PURE ALUMINUM WIRE AND CABLE

Shall consist of new, clean, unalloyed aluminum wire or cable free from hair wire, ACSR, wire screen, iron, insulation and other non-metallic items.

Tann NEW MIXED ALUMINUM WIRE AND CABLE

Shall consist of new, clean, unalloyed aluminum wire or cable which may contain up to 10% 6000 series wire and cable free from hair wire, wire screen, iron, insulation and other non-metallic items.

Tarry A CLEAN ALUMINUM PISTONS

Shall consist of clean aluminum pistons to be free from struts, bushings, shafts, iron rings and non-metallic items. Oil and grease not to exceed 2%.

CODE ITEM

Tarry B CLEAN ALUMINUM PISTONS WITH STRUTS

Shall consist of clean whole aluminum pistons with struts. Material is to be free from bushings, shafts, iron and non-metallic items. Oil and grease not to exceed 2%.

Tarry C IRONY ALUMINUM PISTONS

Shall consist of aluminum pistons with non-aluminum attachments to be sold on a recovery basis or by special arrangement between buyer and seller.

Tassel OLD MIXED ALUMINUM WIRE AND CABLE

Shall consist of old, unalloyed aluminum wire and cable which may contain up to 10% 6000 series wire and cable with not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and other non-metallic items.

Taste OLD PURE ALUMINUM WIRE AND CABLE

Shall consist of old, unalloyed aluminum wire and cable containing not over 1% free oxide or dirt and free from hair wire, wire screen, iron, insulation and other non-metallic items.

Tata NEW PRODUCTION ALUMINUM EXTRUSIONS

Shall consist of one alloy (typically 6063). Material may contain "butt ends" from the extrusion process but must be free of any foreign contamination. Anodized material is acceptable. Painted material or alloys other than 6063 must be agreed upon by buyer and seller.

Toto ALUMINUM EXTRUSIONS "10/10"

Material to consist of new production and old/used 6063 extrusions that may contain up to (but not exceed) 10 percent painted extrusions and 10 percent 6061 alloy extrusions. Must not contain other alloys of aluminum. Material should be free of zinc corners, iron attachments, felt, plastic, paper, cardboard, thermo break, and dirt and other contaminants.

Tutu ALUMINUM EXTRUSION DEALER GRADE

Shall consist of old extruded aluminum of one alloy, typically alloy 6063, 6061, or 7075. Material must be free of iron, thermo break, saw chips, zinc corners, dirt, paper, cardboard, and other foreign contamination. Percentages of paint or other alloys to be agreed upon by buyer and seller.

Teens SEGREGATED ALUMINUM BORINGS AND TURNINGS

Shall consist of aluminum borings and turnings of one specified alloy. Material should be free of oxidation, dirt, free iron, stainless steel, magnesium, oil, flammable liquids, moisture and other non-metallic items. Fines should not exceed 3% through a 20 mesh (U.S. standard) screen.

CODE ITEM

Telic MIXED ALUMINUM BORINGS AND TURNINGS

Shall consist of clean, uncorroded aluminum borings and turnings of two or more alloys and subject to deductions for fines in excess of 3% through a 20 mesh screen and dirt, free iron, oil, moisture and all other non-metallic items. Material containing iron in excess of 10% and/or free magnesium or stainless steel or containing highly flammable cutting compounds will not constitute good delivery. To avoid dispute, material should be sold on basis of definite maximum zinc, tin and magnesium content.

Tense MIXED ALUMINUM CASTINGS

Shall consist of all clean aluminum castings which may contain auto and airplane castings but no ingots, and to be free of iron, brass, dirt and other non-metallic items. Oil and grease not to total more than 2%.

Tepid AIRCRAFT SHEET ALUMINUM

Should be sold on recovery basis or by special arrangements with purchaser.

Terse NEW ALUMINUM FOIL

Shall consist of clean, new, pure, uncoated 1000 and/or 3000 and/or 8000 series alloy aluminum foil, free from anodized foil, radar foil and chaff, paper, plastics, or any other non-metallic items. Hydraulically briquetted material and other alloys by agreement between buyer and seller.

Tesla POST CONSUMER ALUMINUM FOIL

Shall consist of baled old household aluminum foil and formed foil containers of uncoated 1000, 3000 and 8000 series aluminum alloy. Material may be anodized and contain a maximum of 5% organic residue. Material must be free from radar chaff foil, chemically etched foil, laminated foils, iron, paper, plastic and other non-metallic contaminants.

Tetra NEW COATED ALUMINUM FOIL

Shall consist of new aluminum foil coated or laminated with ink, lacquers, paper, or plastic. Material shall be clean, dry, free of loose plastic, PVC and other non-metallic items. This foil is sold on a metal content basis or by sample as agreed between buyer and seller.

Thigh ALUMINUM GRINDINGS

Should be sold on recovery basis or by special arrangements with purchaser.

Thirl ALUMINUM DROSSES, SPATTERS, SPILLINGS, SKIMMINGS AND SWEEPINGS

Should be sold on recovery basis or by special arrangements with purchaser.

Thorn ALUMINUM BREAKAGE

Shall consist of aluminum with miscellaneous contaminants like iron, dirt, plastic and other types of contaminants. Material can either be sold based on aluminum recovery or content as agreed upon by buyer and seller. Must contain a minimum of 33% aluminum unless otherwise agreed upon by buyer and seller.

CODE ITEM

Throb	SWEATED ALUMINUM Shall consist of aluminum scrap which has been sweated or melted into a form or shape such as an ingot, sow or slab for convenience in shipping; to be free from corrosion, dross or any non-aluminum inclusions. Should be sold subject to sample or analysis.
Tooth	SEGREGATED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS Shall consist of new, clean, uncoated and unpainted aluminum scrap of one specified aluminum alloy with a minimum thickness of .015" (.38 mm) and to be free of hair wire, wire screen, dirt and other non-metallic items. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" (1.27 cm) in size.
Tough	MIXED NEW ALUMINUM ALLOY CLIPPINGS AND SOLIDS Shall consist of new, clean, uncoated and unpainted aluminum scrap of two or more alloys with a minimum thickness of .015" (.38 mm) and to be free of hair wire, wire screen, dirt and other non-metallic items. Oil and grease not to total more than 1%. Also free from punchings less than 1/2" (1.27 cm) in size.
Tread	SEGREGATED NEW ALUMINUM CASTINGS, FORGINGS AND EXTRUSIONS Shall consist of new, clean, uncoated aluminum castings, forgings, and extrusions of one specified alloy only and to be free from sawings, stainless steel, zinc, iron, dirt, oil, grease and other non-metallic items.
Troma	Aluminum Auto or Truck Wheels Shall consist of clean, single-piece, unplated aluminum wheels of a single specified alloy, free of all inserts, steel, wheel weights, valve stems, tires, grease and oil and other non-metallic items. Variations to this specification should be agreed upon prior to shipment between the buyer and seller.
Trump	ALUMINUM AUTO CASTINGS Shall consist of all clean automobile aluminum castings of sufficient size to be readily identified and to be free from iron, dirt, brass, bushings, and non-metallic items. Oil and grease not to total more than 2%.
Trill	ACSR Aluminum Conductor Steel Reinforced (ACSR) wire is a combination of steel and aluminum wire, of various configurations, with the expected aluminum recovery agreed upon by the buyer and the seller. Material to be free of other wires and cables unless mutually agreed upon.
Twang	IAW Insulated aluminum wire, which may or may not contain other wires or metal shielding, with the expected aluminum recovery agreed upon by the buyer and the seller. The material to be free of other wires and cables unless mutually agreed upon.

CODE ITEM

Twirl	FRAGMENTIZER AIRCRAFT ALUMINUM SCRAP (2000 and 7000 series) The material as received must be dry and not to contain more than 2% free zinc, 1% maximum free magnesium, and 1.5% maximum free iron and stainless with a maximum of 2% analytical iron. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material. Any variations to be sold by special arrangement between buyer and seller.
Twist	ALUMINUM AIRPLANE CASTINGS Shall consist of clean aluminum castings from airplanes and to be free from iron, dirt, brass, bushings, and non-metallic items. Oil and grease not to total more than 2%.
Twitch	FLOATED FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Derived from wet or dry media separation device, the material must be dry and not contain more than 1% maximum free zinc, 1% maximum free magnesium, and 1% maximum of analytical iron. Not to contain more than a total 2% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed or pressurized items. Any variation to be sold by special arrangement between buyer and seller.
Tweak	FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Derived from either mechanical or hand separation, the material must be dry and not contain more than 4% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum of analytical iron. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed or pressurized items. Any variation to be sold by special arrangement between buyer and seller.
Twire	BURNT FRAGMENTIZER ALUMINUM SCRAP (from Automobile Shredders) Incinerated or burned material must be dry and not contain more than X% (% to be agreed upon by buyer and seller) ash from incineration, 4% maximum free zinc, 1% maximum free magnesium, and 1.5% maximum of analytical iron. Not to contain more than a total 5% maximum of non-metallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material, air bag canisters, or any sealed pressurized items. Any variation to be sold by special arrangement between buyer and seller.

CODE ITEM

Zorba SHREDDED NONFERROUS SCRAP (predominantly aluminum)
 Shall be made up of a combination of the nonferrous metals: aluminum, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each metal within the nonferrous concentrate shall be subject to agreement between buyer and seller. Material generated by eddy current, air separation, flotation, screening, other segregation technique(s), or a combination thereof. Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross, or ash. Material to be bought/sold under this guideline shall be identified as "Zorba" with a number to follow indicating the estimated percentage nonferrous metal content of the material (e.g., "Zorba 90" means the material contains approximately 90% nonferrous metal content). May also be screened to permit description by specific size ranges. (Refer also to Zorba under Mixed Metals.)

ZINC**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.****Saves OLD ZINC DIE CAST SCRAP**

Shall consist of miscellaneous old zinc base die castings, with or without iron and other foreign attachments. Must be free of borings, turnings, dross pieces, chunks, melted pieces and skimmings. All unmeltables, dirt, foreign attachments, and volatile substances (such as rubber, cork, plastic, grease, etc.) are deductible. Material containing in excess of 30% iron will not constitute good delivery.

Scabs NEW ZINC DIE CAST SCRAP

Shall consist of new or unused, clean, zinc base die castings. Castings to be unplated, unpainted, and free from corrosion.

Scout ZINC DIE CAST AUTOMOTIVE GRILLES

Shall consist of clean, old or used zinc base die cast automotive grilles, free from soldered material. All foreign attachments and extraneous materials are deductible.

Scope NEW PLATED ZINC DIE CAST SCRAP

Shall consist of new or unused clean, plated zinc base die castings, free from corrosion.

Score OLD SCRAP ZINC

Shall consist of clean dry scrap zinc, such as sheets, jar lids, clean unalloyed castings and anti-corrosion plates. Borings and turnings are not acceptable. Material must not be excessively corroded or oxidized. All foreign attachments and extraneous materials are deductible.

CODE ITEM**Screen NEW ZINC CLIPPINGS**

Shall consist of any new pure zinc sheets or stampings free from corrosion. To contain no foreign material or attachments. Printers zinc, such as engravers zinc, lithograph sheets and addressograph plates subject to special arrangements. Printers zinc to be free of routings.

Scribe CRUSHED CLEAN SORTED FRAGMENTIZERS DIE CAST SCRAP, AS PRODUCED FROM AUTOMOBILE FRAGMENTIZERS

To be clean, free of dirt, oil, glass, rubber, and trash. To contain a maximum of 5% unmeltables such as free iron, copper, aluminum and other metals.

Scroll UNSORTED ZINC DIE CAST SCRAP

Produced from automobile fragmentizers. Material to contain about 55% zinc-bearing scrap. Other nonferrous metals such as aluminum, stainless steel, red metal, etc., to be about 40%. Insulated copper wire about 1%. Trash, dirt, glass, rubber, oil, iron, not to exceed 5%. Any variations to be sold by special arrangement between buyer and seller.

Scrub HOT DIP GALVANIZERS SLAB ZINC DROSS (Batch Process)

Shall consist only of galvanizers unsweated zinc dross in slab form from hot dip galvanizing (Batch Process) with a minimum zinc content of 92% and shall be free of skimmings and tramp iron. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment. Slabs shall not weigh over 100 pounds each. Heavier pieces acceptable upon mutual agreement between buyer and seller. Material from continuous galvanizing operation is not acceptable. Blocks are acceptable upon mutual agreement.

Scull ZINC DIE CAST SLABS OR PIGS

Shall consist of melted zinc base die cast materials, in smooth clean solid slabs or pigs. Material to be free from drosses and to contain a minimum zinc content of 90%. To contain a maximum of 0.1% nickel and maximum of 1% lead. Blocks are acceptable upon mutual agreement.

Seal CONTINUOUS LINE GALVANIZING SLAB ZINC TOP DROSS

Shall consist of unsweated zinc dross removed from the top of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 90%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.

Seam CONTINUOUS LINE GALVANIZING SLAB ZINC BOTTOM DROSS

Shall consist of unsweated zinc dross removed from the bottom of a continuous line galvanizing bath, in slab form not weighing in excess of 100 pounds each, with a minimum zinc content of 92%. Heavier pieces acceptable upon mutual agreement between buyer and seller. Shall be free of skimmings. Broken pieces under 2" in diameter shall not exceed 10% of the weight of each shipment.

CODE ITEM

Shelf PRIME ZINC DIE CAST DROSS

Shall consist of metal skimmed from the top of pot of molten zinc die cast metal. Must be unsweated, unfluxed, shiny, smooth, metallic and free from corrosion or oxidation. Should be poured in molds or in small mounds weighing not over 75 pounds each.

MAGNESIUM**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.****Wafer MAGNESIUM CLIPS**

Shall consist of clean magnesium clips in crucible size, free of copper, aluminum, and zinc flashings and excessive oil and grease. To be free of all foreign attachments.

Walnut MAGNESIUM SCRAP

Shall consist of magnesium castings, magnesium engine blocks and transmission casings, bomber and car wheels, extrusions, and sheet. Material to be free from brass and copper inserts and all foreign attachments. To be free of anodes, hollow castings and explosives. Percentages of and penalties for dirt, oil, grease, and iron to be subject to agreement between buyer and seller. Excessively large pieces to be negotiated between buyer and seller.

Wine MAGNESIUM ENGRAVER PLATES

To be free of copper, aluminum, zinc, and electrolyte plates. To be clean and free of all foreign attachments. Magnesium plates shipped loose by agreement between buyer and seller.

Wood MAGNESIUM DOCKBOARDS

Shall consist of clean magnesium dockboard cut or broken to size agreed upon by buyer and seller. To be free of all foreign attachments.

World MAGNESIUM TURNINGS

It is recommended that these materials be sold by special arrangement between buyer and seller.

LEAD**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.****Racks SCRAP LEAD—SOFT**

Shall consist of clean soft scrap lead, free of other materials such as drosses, battery plates, lead covered cable, hard lead, collapsible tubes, foil, type metals, aluminum, zinc, iron and brass fittings, dirty chemical lead and radioactive materials. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

CODE ITEM

Radio MIXED HARD/SOFT SCRAP LEAD

Shall consist of clean lead solids and lead shots, free of other materials, such as drosses, battery plates, lead covered cable, collapsible tubes, type metals, aluminum, zinc, iron and brass fittings, dirty chemical lead and radioactive materials. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Rains SCRAP DRAINED/DRY WHOLE INTACT LEAD

To be free of any liquid. Cases to be either plastic or rubber and be complete including caps. Non-lead (nicad, ni-fe, carbonaire, etc.) not acceptable. Industrial, steel cased, aircraft (aluminum cased) and partial, cracked or broken batteries and batteries without caps subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Rakes BATTERY LUGS

To be free of scrap lead, wheel weights, battery plates, rubber and/or plastic case material and other foreign material. A minimum of 97% metallic content is required. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

Relay LEAD COVERED COPPER CABLE

Free of armored covered cable and foreign material subject to negotiation between buyer and seller.

Rents LEAD DROSS

Should be clean and reasonably free of other materials such as iron, dirt, harmful chemicals or other metals. To be free of radioactive materials, aluminum and zinc. May be bought on an assay basis or as agreed to by buyer and seller. Other metals present such as antimony, tin, etc., to be accounted for as agreed between buyer and seller. Material to be readily dumped from drums. An extra charge may be assessed if material has to be mechanically removed. Review packaging specification and regulatory status pertaining to shipping with buyer prior to sale.

Rink SCRAP WET WHOLE INTACT LEAD BATTERIES

Consisting of SLI (starting, lighting & ignition), automotive, truck, 8-D and commercial golf cart and marine-type batteries. Cases to be either plastic or rubber and to be complete. Non-lead (i.e., ni-cad, ni-fe, carbonaire, etc.) not acceptable. Other types i.e. aircraft (aluminum) gel-cel, lawnmower, etc., and partial, cracked or broken batteries or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

CODE ITEM

- Rono SCRAP INDUSTRIAL INTACT LEAD CELLS**
Consisting of plates enclosed by some form of complete plastic case. Partial, cracked or broken cells, cells without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
- Roper SCRAP WHOLE INTACT INDUSTRIAL LEAD BATTERIES**
Consisting of bus, diesel, locomotive, telephone and/or steel cased batteries. Submarine batteries subject to negotiation. Partial, cracked, broken batteries or batteries without caps and the amount of liquid content and any variations to the specification subject to special agreement. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.
- Ropes LEAD WHEEL WEIGHTS**
To consist of lead tire balances with or without iron clips. Not to include scrap lead, lugs or plates unless specifically agreed to. To be free of foreign material. Review packaging specifications and regulatory status pertaining to shipping with buyer prior to sale.

NICKEL/STAINLESS/Hi TEMP**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.**

- Aroma NEW NICKEL SCRAP**
Shall consist of clean new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Nickel minimum 99%; Cobalt maximum 0.25%; Copper maximum 0.50%. Free of castings, as well as any foreign attachments or other contamination.
- Burly OLD NICKEL SCRAP**
Shall consist of old and/or new sheet, plate, bar, tube, and any other wrought nickel scrap solids. Material to contain a minimum of 98% nickel; Copper maximum 0.50%. This grade to be free of castings, soldered, brazed, sweated, or painted material, other metallic coating, foreign attachments, or any other contamination.
- Dandy NEW CUPRO NICKEL CLIPS AND SOLIDS**
Shall consist of clean, new, segregated (normally accepted analysis grades) either 70/30, 80/20, or 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Must be free of foreign attachments or any other contamination.
- Daunt CUPRO NICKEL SOLIDS**
Shall consist of old, and/or new, segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel tube, pipe, sheet, plate, or other wrought solid forms. Maximum 2% sediment allowable. Any other forms of cupro nickel solids such as castings, gates, risers, spills, etc., packaged separately, may or may not be included, only upon agreement between buyer and seller. Must be free of foreign attachments and all other contamination.

CODE ITEM

- Other particulars concerning physical description, analysis and packaging to be agreed upon between buyer and seller.
- Decoy CURPO NICKEL SPINNINGS, TURNINGS, BORINGS**
Shall consist of clean, segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel spinnings, turnings, or borings. Particulars concerning physical description, analysis, and packaging, to be agreed upon between buyer and seller.
- Delta SOLDERED CUPRO NICKEL SOLIDS**
Shall consist of segregated (normally accepted analysis grades) either 70/30, 80/20, 90/10 cupro nickel solids, soldered, brazed, or sweated material. Must be free of trimmed seams and edges and all other contamination.
- Depth MISCELLANEOUS NICKEL-COPPER AND NICKEL-COPPER IRON**
Shall consist of miscellaneous scrap in which the basic elements, by weight, are nickel and copper, such as copper nickel peelings, plating racks, and hangers, and all nickel and copper in attached or combined form. In all cases, miscellaneous nickel copper scrap should be sold by description and analysis.
- Hitch NEW R-MONEL CLIPPINGS AND SOLIDS**
Shall consist of clean, new, R-Monel sheet, plate, bar, rod, tube, pipe, or any other wrought scrap. Must be free of any foreign attachments or all other contamination.
- House NEW MIXED MONEL SOLIDS AND CLIPPINGS**
Shall consist of new, clean R and K-Monel solids and clippings. Free of cast material, foreign attachments and all other contamination.
- Ideal OLD MONEL SHEET AND SOLIDS**
Shall consist of clean R and K-Monel solids such as sheet, plate, pipe, rods, forgings, screen and wire cloth. Must be free of soldered, brazed, welded, or sweated material, cast material, foreign attachments, and all other contamination.
- Indian K-MONEL SOLIDS**
Shall consist of clean K-Monel solids.
- Junto SOLDERED MONEL SHEET AND SOLIDS**
Shall consist of soldered and/or brazed miscellaneous grades of Monel alloys in either wrought or cast form. Must be free of trimmed seams and edges, non-metallic filling, foreign attachments, and all other contamination. Particulars concerning physical description, assay, and packaging to be agreed upon between buyer and seller.
- Lemon MONEL CASTINGS**
Shall consist of various types of clean Monel castings, assaying minimum 60% nickel. Must be free of foreign attachments or any other contamination.
- Lemur MONEL TURNINGS**
Shall consist of mixed Monel turnings and borings containing a minimum of 60% nickel content, on a dry basis.

Pekoe 200 SERIES STAINLESS STEEL SCRAP SOLIDS

Shall consist of all types of clean AISI Series Stainless Steel Scrap Solids, which contain a maximum of .5% copper, free of foreign attachments and other contamination.

Sabot STAINLESS STEEL SCRAP

Shall consist of clean 18-8 type stainless steel clips and solids containing a minimum 7% nickel, 16% chrome, and have a maximum of .50% molybdenum, .50% copper, .045% phosphorous, and .03% sulfur, and otherwise free of harmful contaminants. Particulars concerning physical description, grading, additional analysis, and preparation to be agreed upon between buyer and seller.

Ultra STAINLESS STEEL TURNINGS

Shall consist of clean 18-8 type stainless steel turnings containing a minimum 7% nickel and 16% chrome, and to be free of nonferrous metals, non-metallics, excessive iron, oil and other contaminants. Particulars concerning physical description, assay, and packaging to be agreed upon between buyer and seller.

Vaunt EDISON BATTERIES

Nickel-iron batteries to be sold free of crates, copper terminal connectors, and excess liquid. Must be free of nickel cadmium batteries.

Zurik SHREDDED NONFERROUS SENSOR SORTED SCRAP (predominantly stainless steel)

Shall be made up of a combination of the nonferrous metals: stainless steel, insulated copper wire, aluminum, copper, lead, magnesium, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each metal within the nonferrous concentrate shall be subject to agreement between buyer and seller. Material generated by computer sensing equipment (e.g., induction sensor sorting or X-ray) technique(s). Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross, or ash. Material to be bought/sold under this guideline shall be identified as "Zurik" with a number to follow indicating the estimated percentage nonferrous content of the material (e.g., "Zurik 90" means the material contains approximately 90% nonferrous metal content). May also be screened to permit description by specific size ranges. (Refer also to Zurik under Mixed Metals.)

MIXED METALS**HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.****Darth BALLASTS (FLUORESCENT)**

Shall consist of whole and complete fluorescent light ballasts containing copper inside. Must not contain polychlorinated biphenyls (PCBs). Electronic ballasts subject to agreement between buyer and seller.

Vader SEALED UNITS

Shall consist of whole steel-cased compressors originating from condensers from air conditioner units, freezers, refrigerators or the like, containing a motor inside. Free of hazardous materials, including chlorofluorocarbons (CFCs) or other refrigerants and polychlorinated biphenyls (PCBs). No loose iron or extra iron attachments such as framework permitted.

Elmo MIXED ELECTRIC MOTORS

Shall consist of whole electric motors and/or dismantled electric motor parts that are primarily copper-wound. May contain some aluminum-wound material, subject to agreement between buyer and seller. No excessive steel attachments such as gear reducers, iron bases, and pumps, or loose free iron allowed. Specification not to include sealed units or cast iron compressors.

Small Elmo ELECTRIC MOTORS

Shall be sized to approximately basketball size or smaller and shall consist of whole electric motors and/or dismantled electric motor parts that are primarily copper-wound. May contain some aluminum-wound material, subject to agreement between buyer and seller. No excessive steel attachments such as gear reducers, iron bases, and pumps, or loose free iron allowed. Specification not to include sealed units or cast iron compressors.

Sheema SHREDDED ELECTRIC MOTORS (also called "shredder pickings" or "meatballs")

Shall consist of mixed copper and aluminum bearing material from ferrous shredding, comprised of motors without cases. May contain insulated copper harness wire, subject to agreement between buyer and seller. Trace percentages of other contaminants and fines may be present. No free iron or sealed units.

Shelmo SHREDDED ELECTRIC MOTORS (also called "shredder pickings" or "meatballs")

Shall consist of mixed copper-bearing material from ferrous shredding, comprised of motors without cases. May contain up to 5 percent aluminum-wound material and may contain insulated copper harness wire, subject to agreement between buyer and seller. Trace percentages of other contaminants and fines may be present. No free iron or sealed units.

Zebra (High Density)

Shall consist of high-density nonferrous metals produced by media separation technology containing brass, copper, zinc, nonmagnetic stainless steel, and copper wire. Material to be dry and free from excess oxidation. The percentage and types of metals other than these, as well as the percentage and types of nonmetallic contamination, are to be agreed upon between the buyer and seller.

Zeppelin (Light Density)

Shall consist of light-density nonferrous metals produced by media separation technology and contain thin-gauge aluminum and magnesium. Material to be dry and free from excess oxidation. The percentage and types of metals other than aluminum and

magnesium, as well as the percentage and types of nonmetallic contamination, are to be agreed upon between the buyer and seller.

Zeyda SHREDDED INSULATED COPPER WIRE

Shall consist predominantly of recovered ICW (Insulated Copper Wire) that has been derived by either mechanical or physical separation. This material is likely to have other metals, in small percentages (should be less than 5%) that were not successfully separated. The percentage of each metal within the overall product shall be subject to agreement between buyer and seller. Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross, or ash. Material to be bought/sold under this guideline shall be identified as "Zeyda" with two numbers to follow, indicating the estimated percentage recoverable copper wire and the second indicating the maximum amount of other metals or contaminants expected. (e.g., "Zeyda 45/3" means the material contains approximately 45% copper and up to 3% other material). May also be screened to permit description by specific size ranges.

Zorba SHREDDED NONFERROUS SCRAP (predominantly aluminum)

Shall be made up of a combination of the nonferrous metals: aluminum, copper, lead, magnesium, stainless steel, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each metal within the nonferrous concentrate shall be subject to agreement between buyer and seller. Material generated by eddy current, air separation, flotation, screening, other segregation technique(s), or a combination thereof. Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross, or ash. Material to be bought/sold under this guideline shall be identified as "Zorba" with a number to follow indicating the estimated percentage nonferrous metal content of the material (e.g., "Zorba 90" means the material contains approximately 90% nonferrous metal content). May also be screened to permit description by specific size ranges. (Refer also to Zorba under Aluminum.)

Zurik SHREDDED NONFERROUS SENSOR SORTED SCRAP (predominantly stainless steel)

Shall be made up of a combination of the nonferrous metals: stainless steel, insulated copper wire, aluminum, copper, lead, magnesium, nickel, tin, and zinc, in elemental or alloyed (solid) form. The percentage of each metal within the nonferrous concentrate shall be subject to agreement between buyer and seller. Material generated by computer sensing equipment (e.g., induction sensor sorting or X-ray) technique(s). Shall have passed one or more magnets to reduce or eliminate free iron and/or large iron attachments. Shall be free of radioactive material, dross, or ash. Material to be bought/sold under this guideline shall be identified as "Zurik" with a number to follow indicating the estimated percentage nonferrous content of the material (e.g.,

"Zurik 90" means the material contains approximately 90% nonferrous metal content). May also be screened to permit description by specific size ranges. (Refer also to Zurik under Nickel/Stainless/Hi Temp.)

OTHER

HEAVIER PIECES OF ANY SIZE, LENGTH, AND WEIGHT ACCEPTABLE UPON MUTUAL AGREEMENT BETWEEN BUYER AND SELLER.

Ranch BLOCK TIN

Block tin must assay minimum of 98% tin, and to be free of liquids, solder, and brass connections, pewter, pumps, pot pieces, and dirt.

Ranks PEWTER

Shall consist of tableware and soda-fountain boxes but should contain a minimum of 84% tin. Siphon tops to be accounted for separately. Material must be free of brass, zinc, and other foreign metals.

Raves HIGH TIN BASE BABBIT

Shall contain a minimum of 78% tin and be free of brassy or zincy metals.

Roses MIXED COMMON BABBIT

Shall consist of lead base bearing metal containing not less than 8% tin, free from Allens metal, ornamental, antimonial and type metal. Must be free from all zinc and excessive copper in the alloy.

Identification Checklist for Precious Metals

This Identification Check List for Precious Metals sets up a general basis for identifying types and grades of precious metals scrap by the scrap processor who will be familiar both to the precious metals refiner and to the plants generating precious metals scrap.

By checking this identification list, the scrap processor gives the refiner a fairly accurate conception of the material the processor has on hand and offers a basis for the refiner to quote an estimated price for the material.

Due to the high values and the constantly changing character of precious metal scrap, it is often the practice in the industry to require a sample to be submitted before giving refining schedules.

I. Scrap Sources

REFINED SILVER METAL – 99.9 MIN. PERCENT

Silver-bearing materials:

Anodes

Assemblies—Electrical

Batteries

Silver/Copper Plated

Silver/Cadmium

Silver/Zinc Silver/Magnesium

Blanking Scrap—Punchings

Brazing Alloys

Brushes—Electric Motors

Bullion
Chemical Salts
Clad Bi-Metal Parts
Coin Silver
Contacts
Dental Amalgam
Films
Industrial X-Ray
Medical X-Ray
Lithographic
Photographic Negatives
Filters–Plating
Flake–From Hypo Solution
Recovery Systems
Hooks–Plating–Nodules
Jewelry Sweeps
Paints–Paste
Paper–Reproduction
Plated Parts–Electrical–
Electronic
Plated Serving Pieces
Plated Utensils
Plated Wire
Powders–Granulated
Punchouts
Relays–Electrical
Resins
Silver Lined Bearings–Diesel
Locomotives and Aircraft
Sludges–Plating and Precipitates
Solutions–Plating
Sterling Silver
Tin Lead Alloys–Contaminated
Turnings
Wave Guides
Wiping Rags

**REFINED GOLD METAL –
99.5 MIN. PERCENT
REFINED GOLD SPONGE –
99.5 MIN. PERCENT**

Gold-bearing materials:

Brazing Alloys
Clad Metal Parts
Contacts
Dental Alloys
Dental Scrap
Dental Sweeps and Grindings
Diodes
Filled Scrap
Filters–Plating
Flakes
Flashings
Foil
Hooks–Plating–Nodules
Jewelry Scrap

Jewelry Sweeps and
Grindings
Paints and Paste
Peelings
Placer Gold
Plated Parts–Electrical
Plated Wire
Powders
Printed Circuit Boards
Printed Circuit Boards with
Components
Punchouts
Resins–Plating
Salts–Chemical
Sludges–Plating
Solutions
Sponge
Tin Lead Alloys–
Contaminated
Transistors
Wiping Rags
Wire

**REFINED PALLADIUM
METAL–99.9 MIN.
PERCENT REFINED
PALLADIUM SPONGE–
99.9 MIN.**

Palladium-bearing materials:

Catalysts
Chemical Salts
Clad Materials
Contact Points
Dental Alloys
Dental Scraps
Dental Sweeps
Jewelry Scrap (Sweeps)
Paste
Plated Parts
Powders
Relays–Electrical
Sludges
Solutions
Wire

**REFINED PLATINUM
METAL–99.9 MIN.
PERCENT REFINED
PLATINUM SPONGE–
99.9 MIN. PERCENT**

Platinum-bearing materials:

Catalysts
Chemicals
Clad Materials
Contacts
Dental Alloys

Dental Scrap
Dental Sweeps, Grindings
Jewelry Scrap
Jewelry Sweeps
Laboratory Ware
Magneto Points
Powders and Paste
Solutions–Plating
Spark Plugs–Aircraft
Thermocouple Wire

Scrap containing combinations of precious metals (gold, silver, platinum and palladium):
Assemblies–Components
Bullion
Carbon
Catalysts
Chemicals
Chips
Drillings
Electronic Scrap
High Temperature Resistant
Alloys
Paints
Paste
Powders
Relays–Electrical
Resins
Ribbons
Rings
Salts
Solutions
Sweeps
Telephone Switching Scrap
Thick Film
Wire

II. SCRAP CATEGORIES

A. Solution

1. Acid
2. Basic
3. Matrix if known

B. Resin

C. Sludges

D. Burnable Material

1. Carbon
2. Filters
3. Film
4. Papers
5. Unprepared Sweeps
6. Others

E. Sweeps (Prepared)

F. Printed Circuit Board

1. Punch Outs
2. Non Assembled
3. Assembled

G. Glass to Metal Tubes, etc.

1. Solid Precious Metal Parts
2. Alloyed Metal Parts
3. Plated Metal Parts
4. Ceramics
5. Thick Film
6. Other...

H. Metal Scrap

I. Non-Magnetic

1. Impure Gold
2. Impure Silver
3. Copper Base
4. Aluminum Base
5. Brass Base
6. Bronze Base
7. Molybdenum Base
8. Beryllium Base
9. Lead Base
10. Tin Base
11. Other....

II. Magnetic

1. Kovar Base
2. Stainless Steel Base
3. Iron Base
4. Nickel Base
5. Other....

I. Catalyst

1. Carbon
2. Alumina
3. Rare Earth
4. Silica
5. Other

Guidelines for Ferrous Scrap: FS-2020

General Information

a. Cleanness. All grades shall be free of dirt, nonferrous metals, or foreign material of any kind, and excessive rust and corrosion. However, the terms "free of dirt, nonferrous metals, or foreign material of any kind" are not intended to preclude the accidental inclusion of negligible amounts where it can be shown that this amount is unavoidable in the customary preparation and handling of the particular grade involved.

b. Off-grade material. The inclusion in a shipment of a particular grade of iron and steel scrap of a negligible amount of metallic material which exceeds to a minor extent the applicable size limitations, or which fails to a minor extent to meet the applicable requirements as to quality or kind of material, shall not change the classification of the shipment, provided it can be shown that the inclusion of such off-grade material is unavoidable in the customary preparation and handling of the grade involved.

c. Residual alloys. Wherever the term "free of alloys" is used in the classifications given herein, it shall mean that any alloys contained in the steel are residual and have not been added for the purpose of making an alloy steel. Steel scraps shall be considered free of alloys when the residual alloying elements do not exceed the following percentages:

Nickel	.45%	Molybdenum	.10%
Chromium	.20%	Manganese	1.65%

The combined residuals other than manganese shall not exceed a total of 0.60 percent.

d. Deviations. Any deviations from the general classifications of iron and steel scrap may be consummated by mutual agreement between buyer and seller.

- 200 No. 1 heavy melting steel.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 24 inches (charging box size) prepared in a manner to insure compact charging.
- 201 No. 1 heavy melting steel 3 feet x 18 inches.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 36 x 18 inches (charging box size) prepared in a manner to insure compact charging.
- 202 No. 1 heavy melting steel 5 feet x 18 inches.**
Wrought iron and/or steel scrap 1/4 inch and over in thickness. Individual pieces not over 60 x 18 inches (charging box size) prepared in a manner to insure compact charging.
- 203 No. 2 heavy melting steel.***
Wrought iron and steel scrap, black and galvanized, 1/8 inch and over in thickness, charging box size to include material not suitable as No. 1 heavy melting steel. Prepared in a manner to insure compact charging.
- 204 No. 2 heavy melting steel.***
Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include all automobile scrap properly prepared.
- 205 No. 2 heavy melting steel 3 feet x 18 inches.**
Wrought iron and steel scrap, black and galvanized, maximum size 36 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.
- 206 No. 2 heavy melting steel 5 feet x 18 inches.**
Wrought iron and steel scrap, black and galvanized, maximum size 60 x 18 inches. May include automobile scrap, properly prepared; however, to be free of sheet iron or thin gauged material.
- 207 No. 1 busheling.**
Clean steel scrap, maximum size 2 feet by 5 feet, including new factory busheling (for example, sheet clippings, stampings, etc.). May not include old auto body and fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.
- 207A New black sheet clippings.**
For direct charging, maximum size 8 feet by 18 inches, free of old automobile body and fender stock, metal coated, lined, vitreous enameled and electrical sheet containing over 0.5 percent silicon. Must lay reasonably flat in car.
- 208 No. 1 bundles.**
New black steel sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, tightly secured. May include chemically detinned material. May not include old auto body or fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing over 0.5 percent silicon.
- 209 No. 2 bundles.**
Old black and galvanized steel sheet scrap, hydraulically compressed to charging box size and weighing not less than 75 pounds per cubic foot. May not include tin or lead-coated material or vitreous enameled material.
- 210 Shredded scrap.**
Homogeneous iron and steel scrap, magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 50 pounds per cubic foot.
- 211 Shredded scrap.**
Homogeneous iron and steel scrap magnetically separated, originating from automobiles, unprepared No. 1 and No. 2 steel, miscellaneous baling and sheet scrap. Average density 70 pounds per cubic foot.

CODE	ITEM	CODE	ITEM
212	Shredded clippings. Shredded 1000 series carbon steel clippings or sheets. Material should have an average density of 60 pounds per cubic foot.	222	Shoveling turnings and iron borings. Same as shoveling turnings, but including iron borings.
213	Steel can bundles. Steel can scrap compressed to charging box size and weighing not less than 75 pounds per cubic foot. Cans may be baled without removal of paper labels, but free of other non-metallics. May include up to 5 gallon tin coated containers.	223	Iron borings. Clean cast iron or malleable iron borings and drillings, free of steel turnings, scale, lumps or excessive oil.
214	No. 3 bundles. Old sheet steel, compressed to charging box size and weighing not less than 75 pounds per cubic foot. May include all coated ferrous scrap not suitable for inclusion in No. 2 bundles.	224	Auto slabs. Clean automobile slabs, cut 3 feet x 18 inches and under.
215	Incinerator bundles. Tin can scrap, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Processed through a recognized garbage incinerator.	225	Auto slabs. Clean automobile slabs, cut 2 feet x 18 inches and under.
216	Terne plate bundles. New terne plate sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot. (Hand bundles are tightly secured for handling with a magnet.) May include Stanley balls or mandrel wound bundles or skeleton reels, tightly secured.	226	Briquetted iron borings. Analysis and density to consumer's specifications.
217	Bundled No. 1 steel. Wrought iron and/or steel scrap 1/8 inch or over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Free of all metal-coated material.	227	Briquetted steel turnings. Analysis and density to consumer's specifications.
218	Bundled No. 2 steel. Wrought iron or steel scrap, black or galvanized, 1/8 inch and over in thickness, compressed to charging box size and weighing not less than 75 pounds per cubic foot. Auto body and fender stock, burnt or hand stripped, may constitute a maximum of 60 percent by weight. (This percent based on makeup of auto body, chassis, driveshafts, and bumpers.) Free of all coated material, except as found on automobiles.	228	Mill scale. Dark colored, ranging from blue to black, ferromagnetic iron oxide forming on the surface of steel articles during heating and working.
219	Machine shop turnings. Clean steel or wrought iron turnings, free of iron borings, nonferrous metals in a free state, scale, or excessive oil. May not include badly rusted or corroded stock.	<i>*The identical designations given for these two classifications are in accordance with established industry practices in specifying the materials desired.</i>	
220	Machine shop turnings and iron borings. Same as machine shop turnings but including iron borings.	Electric Furnace Casting and Foundry Grades	
221	Shoveling turnings. Clean short steel or wrought iron turnings, drillings, or screw cuttings. May include any such material whether resulting from crushing, raking, or other processes. Free of springy, bushy, tangled or matted material, lumps, iron borings, nonferrous metals in a free state, grindings, or excessive oil.	229	Billet, bloom and forge crops. Billet, bloom, axle, slab, heavy plate and heavy forge crops, containing not over 0.05 percent phosphorus or sulphur and not over 0.5 percent silicon, free from alloys. Dimensions not less than 2 inches in thickness, not over 18 inches in width, and not over 36 inches in length.
		230	Bar crops and plate scrap. Bar crops, plate scrap, forgings, bits, jars, and tool joints, containing not over 0.05 percent phosphorus or sulphur, not over 0.5 percent silicon, free from alloys. Dimensions not less than 1/2 inch in thickness, not over 18 inches in width, and not over 36 inches in length.
		231	Plate and structural steel, 5 feet and under. Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch thickness, not over 5 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.
		232	Plate and structural steel, 5 feet and under. Cut structural and plate scrap, 5 feet and under. Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch thickness, not over 5 feet in length and 24 inches in width. Phosphorus or sulphur not over 0.05 percent.
		233	Cast steel. Steel castings not over 48 inches long or 18 inches wide, and 1/4 inch and over in thickness, containing

CODE ITEM

not over 0.05 percent phosphorus or sulphur, free from alloys and attachments. May include heads, gates, and risers.

234 Punchings and plate scrap.

Punchings or stampings, plate scrap, and bar crops containing not over 0.05 percent phosphorous or sulphur and not over 0.5 percent silicon, free from alloys. All materials cut 12 inches and under, and with the exception of punchings or stampings, at least 1/8 inch in thickness. Punchings or stampings under 6 inches in diameter may be any gauge.

235 Electric furnace bundles.

New black steel sheet scrap hydraulically compressed into bundles of size and weight as specified by consumer.

236 Cut structural and plate scrap, 3 feet and under.

Clean open hearth steel plates, structural shapes, crop ends, shearings, or broken steel tires. Dimensions not less than 1/4 inch in thickness, not over 3 feet in length and 18 inches in width. Phosphorus or sulphur not over 0.05 percent.

237 Cut structural and plate scrap, 2 feet and under.

Same as cut structural and plate scrap, 3 feet and under, except for length.

238 Cut structural and plate scrap, 1 foot and under.

Same as cut structural and plate scrap, 3 feet and under, except for length.

239 Silicon busheling.

Clean silicon bearing steel scrap, not exceeding 12 inches in any dimension, including new factory busheling (for example, sheet clippings, stampings, etc.), having a silicon content of 0.05 percent to 5.0 percent.

240 Silicon Clippings.

Clean steel scrap, including new factory busheling (for example, sheet clippings, stampings, etc.), may not include old auto body and fender stock. Free of metal coated, limed, vitreous enameled, and electrical sheet containing minimum 1 percent silicon.

241 Chargeable ingots and ingot butts.

Chargeable ingots and ingot butts for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus or sulphur and not over 0.05 percent silicon free of alloys.

242 Foundry steel, 2 feet and under.

Steel scrap 1/8 inch and over in thickness, not over 2 feet in length or 18 inches in width. Individual pieces free from attachments. May not include nonferrous metals, cast or malleable iron, cable, vitreous enameled, or metal coated material.

243 Foundry steel, 1 foot and under.

Same specifications as 2-foot material, except for length.

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243A Low residual, black foundry busheling.

1000 series black carbon steel scrap, 1/8 inch and over in thickness, not more than 12 inch x 24 inch, manganese content not more than 0.50 percent. Other parameters subject to agreement between supplier and consumer.

243B Low residual, ductile quality shredded clips.

Shredded black 1000 series carbon steel scrap, 1/8 inch and over in thickness, minimum average density of 75 PCF, manganese content not more than 0.50 percent. Other parameters subject to agreement between supplier and consumer.

244 Springs and crankshafts.

Clean automotive springs and crankshafts, either new or used.

245 Alloy free turnings.

Clean shoveling steel turnings free from lumps, tangled or matted material, iron borings, or excessive oil containing not more than 0.05 percent phosphorus or sulphur, and free of alloys.

246 Alloy free short shoveling steel turnings.

Clean shoveling steel turnings, free of lumps, tangled or matted material, iron borings, or excessive oil, containing not more than 0.05 percent phosphorus or sulphur, and free of alloys.

247 Alloy free machine shop turnings.

Clean steel turnings, free of iron borings or excessive oil, containing not more than 0.05 percent phosphorus or sulphur, and free of alloys. May not include badly rusted or corroded stock.

248 Hard steel cut 30 inches and under.

Automotive steel consisting of rear ends, crankshafts, driveshafts, front axles, springs, and gears prepared 30 inches and under. May not include miscellaneous small shoveling steel or any pieces too bulky for gray iron foundry use.

249 Chargeable slab crops.

Chargeable slab crops for material to be suitable and acceptable to the consumer containing not over 0.05 percent phosphorus and 0.05 percent sulphur and not over 0.05 percent silicon and free of alloys.

250 Silicon bundles.

Silicon sheet scrap, clippings or skeleton scrap, compressed or hand bundled, to charging box size, and weighing not less than 75 pounds per cubic foot, having a silicon content of 0.50 percent to 5.0 percent.

251 Heavy turnings.

Short, heavy steel turnings, containing not over 0.05 percent phosphorus or sulphur and free of alloys. May include rail chips. May not include machine shop or other light turnings and must weigh not less than 75 pounds per cubic foot in the original state of production.

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Specially Processed Grades to Meet Consumer Requirements

Grades of scrap prepared especially to meet with steel mill or foundry requirements, individual specifications to be agreed on between consumer and supplier.

Cast Iron Grades

- 252 Cupola cast.**
Clean cast iron scrap such as columns, pipes, plates, and castings of a miscellaneous nature, including automobile blocks and cast iron parts of agricultural and other machinery. Free from stove plate, burnt iron, brake shoes or foreign material. Cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight.
- 253 Charging box cast.**
Clean cast iron scrap in sizes not over 60 inches in length or 30 inches in width, suitable for charging into an open hearth furnace without further preparation. Free from burnt iron, brake shoes, or stove plate.
- 254 Heavy breakable cast.**
Cast iron scrap over charging box size or weighing more than 500 pounds. May include cylinders and driving wheel centers. May include steel which does not exceed 10 percent of the casting by weight.
- 255 Hammer block or bases.**
Cast iron hammer blocks or bases.
- 256 Burnt iron.**
Burnt cast iron scrap, such as stove parts, grate bars, and miscellaneous burnt iron. May include sash weights or window weights.
- 257 Mixed cast.**
May include all grades of cast iron except burnt iron. Dimensions not over 24 inches x 30 inches and no piece over 150 pounds in weight.
- 258 Stove plate, clean cast iron stove.**
Free from malleable and steel parts, window weights, plow points, or burnt cast iron.
- 259 Clean auto cast.**
Clean auto blocks; free of all steel parts except camshafts, valves, valve springs, and studs. Free of non-ferrous and non-metallic parts.
- 260 Unstripped motor blocks.**
Automobile or truck motors from which steel and nonferrous fittings may or may not have been removed. Free from driveshafts and all parts of frames.
- 261 Drop broken machinery cast.**
Clean heavy cast iron machinery scrap that has been broken under a drop. All pieces must be of cupola size, not over 24 inches x 30 inches, and no piece over 150 pounds in weight.
- 262 Clean auto cast, broken, not degreased.**
Clean auto blocks, free of all steel parts except camshafts, valves, valve springs and studs. Free of non-

CODE ITEM

- ferrous and non-metallic parts, and must be broken to cupola size, 150 pounds or less.
- 263 Clean auto cast, degreased.**
Free of all steel parts except camshafts, valves, valve springs, and studs. Free of nonferrous and non-metallic parts, and must be broken into cupola size, 150 pounds or less.
- 264 Malleable.**
Malleable parts of automobiles, railroad cars, locomotives, or miscellaneous malleable iron castings. Free from cast iron and steel parts and other foreign material.
- 265 Broken ingot molds and stools.**
Broken ingot molds and stools, cast iron, maximum size 2 feet x 3 feet x 5 feet.
- 266 Unbroken ingot molds and stools.**
Unbroken ingot molds and stools, cast iron.

Special Boring Grades

- 267 No. 1 chemical borings.**
New clean cast or malleable iron borings and drillings containing not more than 1 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.
- 268 Briquetted cast iron borings, hot process.**
Cast iron borings, heated, briquetted, to a density of approximately 85 percent, oil and water content under 1 percent.
- 269 Briquetted cast iron borings, cold process.**
Cast iron boring briquettes, free of steel and non-ferrous material, hydraulically compressed into a cohesive solid, reasonably free of oil, and having a density of not less than 60 percent.
- 270 Malleable borings.**
Clean malleable iron borings and drillings, free of steel turnings, scale, lumps and excessive oil.
- 271 No. 2 chemical borings.**
New clean cast or malleable iron borings and drillings, containing not more than 1.5 percent oil, free from steel turnings, or chips, lumps, scale, corroded or rusty material.

Steel From Scrap Tires

General Guidelines

Items not covered in the specifications, and any variations in the specification, are subject to special arrangement between buyer and seller. Percentages listed below are by weight.

Preparation

Consumer and supplier to agree upon preparation for transport, such as the following:

Loose—Whole.

Loose—Chopped. If wire is chopped or shredded, parties may wish to specify the means of processing and/or characteristics of the final product (density, length of pieces, etc.).

CODE ITEM

Baled. Bales of wire should maintain their form during loading, shipment, unloading, storage, and handling typical of that done at a consuming facility, unless otherwise specified.

Baled-High Density. Hydraulically compressed, no dimension larger than 24", density of at least 75 pounds per square foot.

Baled-HRB/Low Density. Density of less than 75 pounds per square foot. Each bale secured with sufficient number of bale ties drawn tight to insure a satisfactory delivery.

Other Means of Preparation. Individual specifications to be agreed upon between consumer and supplier.

- 272 Pulled bead wire (Truck)-Grade 1.**
Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.
- 273 Pulled bead wire (Truck)-Grade 2.**
Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.
- 274 Pulled bead wire (Truck)-Grade 3.**
Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.
- 275 Pulled bead wire (Passenger)-Grade 1.**
Not chopped; made up of loops of wire. Less than five percent (<5%) rubber/fiber.
- 276 Pulled bead wire (Passenger)-Grade 2.**
Not chopped; made up of loops of wire. Five to ten percent (5-10%) rubber/fiber.
- 277 Pulled bead wire (Passenger)-Grade 3.**
Not chopped; made up of loops of wire. Greater than ten percent (>10%) rubber/fiber.
- 278 Processed tire wire (Ferrous)-Grade 1.**
Chopped. Less than two percent (<2%) rubber/fiber.
- 279 Processed tire wire (Ferrous)-Grade 2.**
Chopped. Less than five percent (<5%) rubber/fiber.
- 280 Processed tire wire (Ferrous)-Grade 3.**
Chopped. Five to ten percent (5-10%) rubber/fiber.
- 281 Processed tire wire (Ferrous)-Grade 4.**
Chopped. Ten to twenty percent (10-20%) rubber/fiber.
- 282 Processed tire wire (Ferrous)-Grade 5.**
Chopped. Greater than twenty percent (>20%) rubber/fiber.

Railroad Ferrous Scrap*

Specifications of Association of American Railroads promulgated by its Purchases and Materials Management Division (Revised 1973)

- (2) Axles, Steel.**
Solid car and/or locomotive friction bearing, 8 inch diameter and under (free of axles with key-way between wheel seats, no axles of shorter lengths than distance between wheel seats to be included).

CODE ITEM

- (2A) Axles, Steel.**
Solid car and/or locomotive friction bearing over 8 inch diameter (free of axles with key-way between wheel seats, no axles of shorter length than distance between wheel seats to be included).
- (3) Axles, Steel.**
Roller bearing 8 inch diameter and under (no axles of shorter lengths than distance between wheel seats to be included).
- (3A) Axles, Steel.**
Roller bearing over 8 inch diameter (no axles of shorter length than distance between wheel seats to be included).
- (4) Spikes, Track Bolts and Nuts, and Lock Washers, may include Rail Anchors.**
- (5) Tie Plates.**
Steel.
- (6) Rail Joints, Angle and/or Splice Bars.**
Steel.
- (9) Bolsters and/or Truck Sides, Frames: Uncut.**
Cast steel.
- (11) Cast Steel, No. 2.**
Steel castings, over 18 inches wide and/or over 5 feet long.
- (11A) Cast Steel, No. 1.**
Steel castings, 18 inches and under, not over 5 feet long, including cut truck side frames and bolsters.
- (12) Cast Iron, No. 1.**
Cast iron scrap, such as columns, pipes, plates, and/or castings of miscellaneous nature, but free from stove plates, brake shoes, and burnt scrap. Must be cupola size, not over 24 x 30 inches in dimension and no piece to weigh over 150 pounds. Must be free from foreign material.
- (13) Cast Iron, No. 2.**
Pieces weighing over 150 pounds, but not more than 500 pounds. Free from burnt cast.
- (14) Cast Iron, No. 3.**
Pieces weighing over 500 pounds; includes cylinders, driving wheel centers and/or all other castings. (Free from hammer blocks or bases.)
- (15) Cast Iron, No. 4.**
Burnt cast iron scrap, such as grate bars, stove parts and/or miscellaneous burnt scrap.
- (16) Cast Iron Brake Shoes.**
Brakes shoes of all types except composition-filled shoes.
- (17) Couplers and/or Knuckles.**
Railroad car and/or locomotive steel couplers, knuckles and/or locks stripped clean of all other attachments.
- (18) Frogs and/or Switches, uncut.**
Steel frogs and switches that have not been cut apart, exclusive of manganese.

CODE ITEM

- (18A) **Railbound Manganese Frogs and Switch Points with manganese inserts that have not been cut apart.**
- (23) **Malleable.**
Malleable parts of automobiles, railroad cars, locomotive and/or miscellaneous malleable castings.
- (24) **Melting Steel, Railroad No. 1.**
Clean wrought iron or steel scrap, $\frac{1}{4}$ inch and over in thickness, not over 18 inches in width, and not over 5 feet in length. May include pipe ends and material $\frac{1}{8}$ inch to $\frac{1}{4}$ inch in thickness, not over 15 inches x 15 inches. Individual pieces cut so as to lie reasonably flat in charging box.
- (27) **Rail, Steel No. 1.**
Standard section tee rails, original weight 50 pounds per yard or heavier, 10 feet long and over. Suitable for rerolling into bars and shapes. Free from bent and twisted rails, frog, switch, and guard rails, or rails with split heads and broken flanges. Continuous welded rail may be included provided no weld is over 9 inches from the end of the piece of rail.
- (28A) **Rail, Steel No. 2 Cropped Rail Ends.**
Standard section, original weight of 50 pounds per yard and over, 18 inches long and under.
- (28B) **Rail, Steel No. 2 Cropped Rail Ends.**
Standard section, original weight of 50 pounds per yard and over, 2 feet long and under.
- (28C) **Rail, Steel No. 2 Cropped Rail Ends.**
Standard section, original weight 50 pounds per yard and over, 3 feet long and under.
- (29) **Rail, Steel No. 3.**
Standard section tee, girder, and/or guard rails, to be free from frog and switch rails not cut apart, and contain no manganese, cast, welds, or attachments of any kind except angle bars. Free from concrete, dirt, and foreign material of any kind.
- (30) **Sheet Scrap, No. 1.**
Under $\frac{3}{16}$ inch thick, may include hoops, band iron and/or steel, scoops and/or shovels (free of wood). Must be free from burnt or metal coated material, cushion, or other similar springs.
- (31) **Sheet Scrap, No. 2.**
Galvanized or tinned material and/or gas retorts, and/or any other iron or steel material not otherwise classified.
- (32) **Steel, Tool.**
(Specify kind in offering.)
- (33) **Steel, Manganese.**
All kinds of manganese, rail, guard rails, frogs and/or switch points, cut or uncut.
- (34) **Steel, Spring.**
Coil and/or elliptical, minimum thickness $\frac{1}{4}$ inch, may be assembled or cut apart.
- (34A) **Steel, Spring.**
Coil only.

CODE ITEM

- (35) **Structural, Wrought Iron and/or Steel Uncut.**
All steel or steel mixed with iron from bridges, structures and/or equipment that has not been cut apart, may include uncut bolsters, brakebeams, steel trucks, underframes, channel bars, steel bridge plates, frog and/or crossing plates and/or other steel of similar character.
- (36) **Tires.**
All locomotive, not cut to specified lengths.
- (38) **Turnings, No. 1.**
Heavy turnings from wrought iron and/or steel railroad axles or heavy forgings and/or rail chips, to weigh not less than 75 pounds per cubic foot. Free from dirt or other foreign material of any kind. Alloy steel scrap may be excluded from these specifications by mutual agreement between buyer and seller.
- (38A) **Turnings, Drillings and/or Borings, No. 2.**
Cast, wrought, steel and/or malleable iron borings, turnings and/or drillings mixed with other metals.
- (40) **Wheels, No. 1.**
Cast iron car wheels.
- (42) **Wheels, No. 3.**
Solid cast steel, forged, pressed and/or rolled steel car and/or locomotive wheels, not over 42 inches diameter. (Specify kind in offering.)
- (45) **Destroyed Steel Cars.**
Bodies of steel cars cut apart sufficiently to load. (Specify kind.)
- (45A) **Destroyed Steel Car Sides and Box Car Roofs.**
Cut to a maximum length of... and a maximum width of... suitable for use in super presses and shears without additional preparation.

**Specifications in force as of publication date.*

Guidelines for Glass Cullet: GC-2020

Container Glass Cullet Specifications

Preamble

These standards and practices apply to container glass cullet for purchase or sale in the United States and Canada. Transactions covering shipments to or from other countries may also be in accordance with these standards and practices and may be modified by mutual agreement between buyer and seller. These specifications are guidelines for buying and selling container glass cullet and always subject to the buyer and seller's agreement.

Scrap Glass Definitions

Container Glass Cullet: crushed or whole scrap soda-lime-silica container glass.

Unprocessed Container Glass Cullet: broken or whole scrap glass containers that comply with the proper ISRI glass specifications.

Processed (Furnace Ready) Container Glass Cullet: crushed and whole contaminate-free scrap container glass that complies with the proper ISRI glass specifications.

Organic Matter: consists of organic materials that are non-container glass items; for example, paper labels should not exceed 0.2%.

Ferrous Materials: are magnetic metals, i.e. steel, iron, etc., and therefore must be removed during scrap glass processing.

Non-ferrous Materials: are non-magnetic metals, i.e. aluminum, lead, copper, etc., and therefore must be removed during glass processing.

The Purchase Agreement

Each transaction covering the purchase or sale of container glass cullet should be confirmed in writing and include agreement on the following items:

1. Product

Where possible, each container glass cullet grade shall be specified in accordance with the grade as defined.

2. Quantity

Where possible, the quantity shall always be specified in terms of a definite number of tons of 2,000 pounds each.

A. If the quantity is specified in tons, the order shall be considered completed when aggregate shipments are 5% under or over the quantity ordered.

B. If the quantity is specified in carloads or truckloads, a "load" shall be defined as a truck, trailer, or railroad car loaded to full visible capacity not to exceed established legal weight limits.

3. Packaging

It should be stated whether shipped units are to be in boxes, or in bulk by railroad car, truck, or trailer. Where possible, approximate weights should be specified.

4. Price Units

The price agreed upon shall be clearly stated in US dollars and cents per 2,000 pounds or in US dollars and cents per hundred weight.

5. Terms

Terms shall be "net cash 30 days after date of shipment" unless otherwise agreed upon.

Arbitration

In the event of a total disagreement between buyer and seller, the dispute should be submitted to ISRI arbitration.

In all cases, the cost of arbitration shall be borne by the party found to be at fault, or split in the event of compromise, as determined by the arbitrators.

UNPROCESSED FLINT CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Flint Cullet

Flint	95-100%
Amber	0-5%
Green	0-5%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.) metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed flint container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

UNPROCESSED AMBER CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Amber Cullet

Amber	90-100%
Flint	0-5%
Green	0-5%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.) metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed amber container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

UNPROCESSED GREEN CONTAINER GLASS CULLET SPECIFICATIONS

Composition: soda-lime-silica beverage or food container glass.

Cullet Colors Segregation: Green Cullet

Green	90-100%
Flint	0-10%
Amber	0-10%
Other Colors	0-5%

Size: Cullet may be broken but not pulverized.

Moisture: Cullet should be free of excess moisture.

Contaminant Listings:

Outthrow Materials: Normal container labels; ring and metal closures where processing capabilities permit.

Prohibitive Materials: Non-acceptable items include non-container glass (vision ware, light bulbs, crystal, windows, mirrors, drinking glasses, ceramic, milk glass, etc.) metals, ores, minerals, bricks, clay, grinding and refractory materials, rocks, clay and ceramic closures.

General: The quality of the unprocessed green container glass cullet must be such that after beneficiation with a conventional container glass cullet processor it will be suitable for the production of glass containers.

PROCESSED (FURNACE READY) FLINT CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass.

Container Glass Cullet Colors Segregation: Flint Cullet

Flint	95-100%
Amber	0-5%
Green	0-1%
Other Colors	0-5%
Total NON-Flint Cullet	<5%

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals

Ceramics (such as cups, saucers, dinnerware, pottery, etc.)

Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead-based glass—such as crystal ware, television tubes, vision ware, etc.)

Other Materials (such as bricks, rocks, etc.)

PROCESSED (FURNACE READY) AMBER CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass

Container Glass Cullet Colors Segregation: Amber Cullet

Amber	90-100%
Flint	0-10%
Green	0-10%
Other Colors	0-5%
Total NON-Amber Cullet	<10%

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals
- Ceramics (such as cups, saucers, dinnerware, pottery, etc.)
- Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead-based glass—such as crystal ware, television tubes, vision ware, etc.)
- Other Materials (such as bricks, rocks, etc.)

PROCESSED (FURNACE READY) GREEN CONTAINER GLASS CULLET SPECIFICATIONS

Composition: Soda-lime-silica container glass

Container Glass Cullet Colors Segregation: Green Cullet

Green	70-100%
Flint	0-15%
Amber	0-15%
Other Colors	0-10%
Total NON-Green Cullet	<30%

The color green typically consists of a variety of shades, for example: emerald green or lime green.

Size: Various sizes from whole glass containers to -100 Mesh. However, the ideal material size is 3/8" to 3/4" with a 10% minimum of fine particles. Material size is based upon buyer and seller's agreement.

Contaminant Listings:

Outthrow Materials: Organic Matter, allowable percentage based upon buyer and seller's agreement.

Prohibitive Materials:

- Ferrous Metals
- Nonferrous Metals
- Ceramics (such as cups, saucers, dinnerware, pottery, etc.)

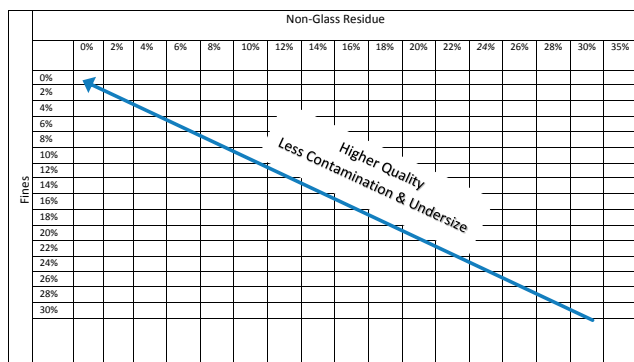
Other Glass (for example, plate window glass, heat-resistant glass—such as Pyrex—and lead based glass—such as crystal ware, television tubes, vision ware, etc.)

Other Materials (such as bricks, rocks, etc.)

Material Recovery Facility (MRF) Glass

Material Recovery Facility-derived 3-Color Mixed Container Glass ("MRF Glass"):

MRF Glass consists of crushed or whole scrap Flint (clear), Amber (brown), and Green (emerald) container/bottle glass made from soda-lime-silica. These standards and practices apply to 3-color mixed glass for purchase or sale in the United States and Canada. Transactions covering shipments to or from other countries may also be in accordance with these standards and practices and may be modified by mutual agreement between buyer and seller. These specifications are guidelines for buying and selling MRF glass and are always subject to the buyer and seller's agreement. It is recognized that MRF Glass may be mixed with other materials as a result of recycling collection convenience and efficiency, and that quality levels vary widely based on the amount of contamination mixed in with the glass.



Since there are many different generations of Material Recovery Facilities (MRFs), cleaning equipment in operation, and curbside collection programs, the quality generated by MRFs varies widely. Processors evaluate this heterogeneous material by evaluating the amount of:

- Residue (non-glass residue): Higher amounts of residue result in a lower rank as the processor must separate this residue and dispose of it.
- Undersize: Undersize is otherwise known as "fines". Higher amounts of undersize result in quality issues as very small pieces of glass can't be optically sorted. If a disproportional amount of the stream is too small, it can overwhelm the processor's capabilities

Contamination:

Non-Glass Residue - Materials found in dual stream and single stream curbside collection programs entering a Material Recovery Facility (MRF). Examples of this material may be: paper, wood, food or organic material, metal/plastic closures, labels, corks, rock, dirt, and other inert materials. Maximum tolerance -35%.

Undersized or Pulverized Material ("Fines") -This material consists of mixed color glass particles crushed so small as to render current optical sortation unfeasible. Glass particles less than 1/8" are typically considered to be fines. Maximum tolerance - 30%.

Ceramics - This material consists of broken bits of household ceramic. Examples of ceramic materials are dinner plates, mugs, cups, etc. Maximum tolerance - 2%

Moisture - This is considered excessive water mixed with glass. Examples of moisture are small fibers soaked by rain, ice or snow. Organic materials and dirt can also contain moisture. Maximum tolerance - 5%.

Prohibitives: This material is not allowed and can subject a load to rejection procedure.

- 025% of total load allowed:
 - Pyro Ceramics (Fireplace glass)
 - Gypsum, wallboard, drywall, glass from construction & demolition debris mixed with CaCO₃ fines
 - Common moisture-absorbing desiccants (silica gels beads, alumina pellets, closet paks, etc.)
- 0% of total load allowed:
 - CRT glass
 - Lead glass
 - Tempered window glass
 - Flammables
 - Radioactive waste
 - Weapons
 - Medical Waste
 - Insecticides
 - Poisons
 - Heavy Metals
 - Asbestos
 - Other materials that can be classified as hazardous or harmful to human health or the environment

Guidelines for Paper Stock: PS-2020

Preamble

These standards and practices apply to paper stock for re-pulping. Transactions may be modified by mutual agreement between Buyer and Seller. Once Buyer and Seller come to an agreement regarding the transaction there will either be a purchase or sales agreement outlining the transaction, terms and conditions which will be used for the signed transactions. This agreement will serve as the "governing document" for the transaction.

"Good Faith" Relationship between Buyer-Seller

The following principles of "good faith" have been established:

1. Seller must use due diligence to ascertain that shipments consist of properly packed paper stock and that shipments are made during the period specified.
2. Arbitrary deductions, cancellations and/or rejections by the Buyer are counter to acceptable good trade practices.
3. Seller shall provide the quality of paper stock agreed upon but shall not be responsible for the use of the paper stock or of the manufactured product.

I. The Purchase Agreement

Each transaction covering the purchase or sale of paper stock shall be confirmed by either a purchase or sales agreement which may include the following:

1. Quality

Where possible, purchases shall be specified in accordance with the grade as defined in the latest paper stock section of the ISRI Scrap Specification Circular. Any deviation from the grade listed in the circular should be otherwise specified and agreed upon by both parties in the purchase or sales agreement.

2. Quantity

- a. The Buyer and Seller shall establish minimum weights for each load
- b. The quantity for the purchase or sale of the paper stock shall always be specified in terms of a definite number of short tons of 2000 pounds each or metric tons of 2204.6 pounds each. In addition, the number of loads shall be specified.
- c. Packing unit type, such as bales, skids, roles, pallets, boxes, securely tied bundles or loose, should be specified in the Agreement.

3. Pricing and Terms

Each transaction covering the purchase or sale of paper stock shall be confirmed in writing stating the negotiated price and payment terms agreed to by both the buyer and seller.

4. Shipping Period, Terms and Instructions

- a. Period shall be understood to be within 30 days of the date of the order unless otherwise specified and subsequently agreed to by both buyer and seller.
- b. Shipping terms shall be indicated by the use of the International Chamber of Commerce's Incoterms for shipping that can be found in the addendum at the end of the preamble.
- c. The Shipping instructions for each load should clearly specify shipping schedule routes, carrier and destination. Shipping instructions shall be provided by the buyer at the time of the order. These instructions should also be included on the bill of lading when shipping for export. Information should include documentation, inspection requirements and pictures if required.

II. Fulfillment by the Seller

The practice of the Seller shall be in accordance with the following:

1. Acceptance

All orders shall be confirmed.

2. Grading

Paper stock which is sold under the grade names appearing in the paper stock section of the *ISRI Scrap Specifications Circular* shall conform to those grading definitions.

3. Packing

Each unit must be sufficiently secured to ensure a satisfactory delivery.

4. Tare

If agreed to by the Buyer, sides and headers may be used to make a satisfactory delivery of the bales but must not be excessive. The weight of skids, Gaylord boxes and other similar materials shall be deducted from the gross invoice weight.

5. Loading

Paper stock shall be loaded as follows:

- a. Before they are loaded, railcars, trucks, trailers and containers shall be free from objectionable materials and odors, and shall have clean sound floors and doors.
- b. All loads should consist entirely of one grade of paper stock unless otherwise agreed to. When two or more grades are included in the same load, units of each grade should be kept together in a separate part of the railcar, truck, trailer or container.
- c. Paper stock must be loaded in a manner that will minimize shifting and breakage. Excessive breakage due to improper loading can be cause for a claim or rejection.
- d. Paper stock shall be loaded in accordance with the customer's preferred safe loading practices or industry safety best practices such as outlines in the ISRI/AF&PA Shipping Guide for Baled Paper Products as a reference.

Please refer to the following guide for valuable safety information: <http://www.isri.org/safeshipping>

6. Shipping Notice/Bill of Lading

A bill of lading or shipping notice shall accompany each shipment to the Buyer and should include the following:

- a. Date of shipment
- b. Release number (if applicable)
- c. Number of units
- d. Grade of paper units
- e. Weight of load - For combination loads, individual unit weights may be indicated.
- f. Name of trucking company, trailer, rail car or container number and driver's signature
- g. Routing Instruction (If applicable)
- h. Destination (If applicable)
- i. Shipper's signature

7. Invoicing

Invoices, if required, should conform to instructions on the order and include the following data:

- a. Date of shipment
- b. Railcar, truck number or container number
- c. Customer's order number
- d. Release Number (if applicable)/Bill of Lading number
- e. Shipper's invoice number
- f. Point of sale
- g. Number of units
- h. Weight and grade
- i. Price and extension
- j. Payment terms, including credit terms and discounts

8. Downgrade Claims/Rejections

When notified of a claim/rejection, the Seller should advise the Buyer, within two business days, as to which of the following procedures the Seller has decided upon:

- a. Agree with the Buyer to a compromise acceptance and settlement.
- b. Inspect the quality of the rejected material. The inspection and final disposition by the Seller should take place within five business days of the notification. By mutual agreement, this time limit may be exceeded.
- c. Order repossession of the material (if applicable).
- d. Request that the Buyer agree to submit the rejected shipment to arbitration.

III. Fulfillment by the Buyer

The practice of the Buyer shall be in accordance with the following:

1. The Buyer will confirm all orders

2. Unloading

While unloading the shipment the buyer is to inspect the contents so far as possible.

If the shipment appears to be in accordance with the purchase or sales agreement, the buyer shall proceed with the unloading.

The Buyer is obligated to supply the Seller with the weight of all the received material.

If the shipment does not appear to be in accordance with the purchase or sales agreement, the Buyer shall immediately notify the Seller.

3. Claims and Rejections

In the event of a claim or rejection, the Buyer shall be responsible for any paper stock used and the freight thereon. The buyer should use due diligence to maintain all controversial or rejected paper stock from external deterioration or contamination.

IV. Miscellaneous Practices

1. Ownership

- a. When loaded the shipment is purchased "ex works" shipping point (INCOTerm - EXW) and is in accordance with the purchase agreement covering the transaction, it becomes the property of the Buyer
- b. When the shipment is purchased on a "delivered" basis and is in accordance with the purchase or sales agreement covering the transaction, it remains the property of the Seller until it is delivered to the Buyer and verified with proof of delivery.

2. Carrier Selection

- a. When shipment is on an EXW basis, selection of the carrier is at the discretion of the Buyer unless otherwise agreed.
- b. When the shipment is on a delivered basis, selection of the carrier is at the discretion of the Seller unless otherwise agreed.

3. Excess Freight and Charges

- a. Any excess freight charges accruing on a shipment due to the failure by the Seller to adhere to the purchase agreement is the liability of the Seller and includes switching and freight charges.
- b. Any excess freight charges accruing on a shipment due to the failure of the Buyer to adhere to the purchase agreement is the liability of the Buyer and includes switching and freight charges
- c. Any demurrage accruing on a shipment due to the failure of the seller to ship in accordance with the purchase agreement except with respect to quality is the liability of the seller
- d. In the event that a rejection for quality stands, any demurrage accruing on the shipment prior to notification to the Seller shall be the Buyer's liability.

4. Weight Discrepancies

In the event of a weight discrepancy between the buyer and seller, the buyer's weight will govern as long as the weight is taken from a certified scale.

In the event that the buyer does not have a certified weight ticket then the seller's weight will govern as long as it is produced from a certified scale.

No adjustments shall be made on any shipment of paper stock when the weight variation is 1% or less for domestic loads and 2% or less for export loads.

If the variation exceeds 1% for domestic loads or 2% for export loads, the Seller may initiate a Weight Review by submitting a certified scale weight (showing the gross, tare and net of the load) and/or a loading tally showing individual bale weights. The Buyer shall then review the data and either:

- a. Adjust the received weight, or
- b. Decline the appeal, in which case the Buyer's weight shall prevail.

5. Moisture Content

All paper must be packed dry with a moisture content of 12% which is deemed to be the maximum dry limit. Prior to shipment the buyer and seller shall agree to a moisture percentage and a method by which moisture is to be tested. The agreement is to be confirmed through the purchase agreement and/or the shipping agreement.

Where and when excess moisture is suspected and determined to be present in the shipment, the Buyer has the right to request an adjustment and if a settlement cannot be reached, the Buyer has the right to reject the shipment. The buyer will conduct testing either by using the mutually agreed upon method or in accordance with the American Forest & Paper Association's Moisture Guide for Measuring Moisture in Recovered Paper Bales. In the event that excess moisture is detected the buyer has the right to request a weight adjustment and if a settlement cannot be reached, the buyer has the right to reject the shipment.

Information: www.afandpa.org/docs/default-source/one-pagers/bale-moisture-guide.pdf

V. Arbitration

In the event of a dispute where agreement cannot be reached between Buyer and Seller, the dispute may be submitted to ISRI arbitration as long as one of the parties is a member of the association. Refer to ISRI Arbitration Services section of this document for further information.

VI. Grade Definitions

The definitions which follow describe grades as they should be sorted and packed. Consideration should be given to the fact that paper stock, as such, is a secondary material produced manually and may not be technically perfect. Definitions may not specifically address all types of processes used in the manufacture or recycling of paper products. Specific requirements should be discussed between Buyer and Seller during negotiations.

1. Outthrows

The term "Outthrows" as used throughout this section is defined as "all papers that are so manufactured or treated or are in such a form as to be undesirable for consumption as the grade specified."

2. Prohibitive Materials

The term "Prohibitive Materials" as used throughout this section is defined as:

- a. Any materials which by their presence in a packing of paper stock, in excess of the amount allowed, will make the pack unusable as the grade specified.
- b. Any materials that may be damaging to equipment.

3. Zero Tolerance

The term "Zero Tolerance" as used throughout this section is defined as:

Any material that contains any amount of Medical, Organic, Food Waste, Hazardous, Poisonous, Radioactive or Toxic waste and other harmful substances or liquids.

4. Other Acceptable Papers

The term "Other Acceptable Papers" as used throughout this section is defined as "all other papers that are deemed acceptable by the buyer and allowed in that buyer's pack up to the percentage allowed."

5. Glossary of Terms

A supplemental glossary of paper stock terms is located at the end of the Guidelines for Paper Stock. The purpose of this limited list of terms is to help the user better understand specific grade definitions contained within this Circular.

(4) Boxboard Cuttings

Consists of new cuttings of paperboard used in the manufacture of folding cartons, set-up boxes and similar box-board products.

Prohibitive Materials may not exceed	1/2 of 1%
Outthrows plus prohibitives may not exceed	2%

(5) Mill Wrappers

Consists of paper used as outside wrap for rolls, bundles, or skids of finished paper.

Prohibitive Materials may not exceed	1/2 of 1%
Outthrows plus prohibitives may not exceed	3%

(9) Over-Issue News (OI or OIN)

Consists of unused, overrun newspapers printed on newsprint, containing not more than the normal percentage of rotogravure and colored sections.

Prohibitive Materials	None permitted
Outthrows plus prohibitives	None permitted

(10) Magazines (OMG)

Consists of coated magazines, catalogues, and similar printed materials. May contain a small percentage of uncoated news-type paper.

Prohibitive Materials may not exceed	1%
Outthrows plus prohibitives may not exceed	3%

(11) Old Corrugated Containers (OCC)

Consists of corrugated containers having liners of either test liner or kraft.

Prohibitive Materials may not exceed	1%
Outthrows plus prohibitives may not exceed	5%

(12) Double-Sorted Old Corrugated (DS OCC)

Consists of double-sorted corrugated containers, generated from supermarkets and/or industrial or commercial facilities, having liners of test liner or kraft. Material has been specially sorted to be free of boxboard, off-shore corrugated, plastic, and wax.

Prohibitive Materials may not exceed	1/2 of 1%
Outthrows plus prohibitives may not exceed	2%

(13) New Double-Lined Kraft Corrugated Cuttings (DLK)

Consists of new corrugated cuttings having liners of either test liner or kraft. Treated medium or liners, insoluble adhesives, butt rolls, slabbed or hogged medium, are not acceptable in this grade.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	2%

(14) Fiber Cores

Consists of paper cores made from either recycled paperboard and/or linerboard, single or multiple plies. Metal or plastic end caps, wood plugs, and textile residues are not acceptable in this grade.

Prohibitive Materials may not exceed	1%
Outthrows plus prohibitives may not exceed	5%

(15) Used Brown Kraft

Consists of brown kraft bags free of objectionable liners and original contents.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1/2 of 1%

(16) Mixed Kraft Cuttings

Consists of new brown kraft cuttings, sheets and bag scrap free of stitched paper.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	.1%

(17) Carrier Stock

Consists of printed or unprinted, unbleached new beverage carrier sheets and cuttings. May contain wet strength additives.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(18) New Colored Kraft

Consists of new colored kraft cuttings, sheets and bag scrap, free of stitched papers.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(19) Kraft Grocery Bag (KGB)

Consists of new brown kraft bag cuttings, sheets and misprint bags.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(20) New Kraft Multi-Wall Bag

Consists of new brown kraft multi-wall bag cuttings, sheets, and misprint bags, free of stitched papers.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(21) New Brown Kraft Envelope Cuttings

Consists of new unprinted brown kraft envelopes, cuttings or sheets.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(22) Mixed Flyleaf Shavings

Consists of trim of magazines, catalogs, inserts and similar printed matter, not limited with respect to groundwood, uncoated or coated stock, and may contain the bleed of cover and insert stock as well as beater-dyed paper and solid color printing.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	2%

(23) Telephone Directories

Consists of clean telephone directories printed for or by telephone directory publishers.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1/2 of 1%

(24) White Blank News (WBN)

Consists of unprinted cuttings and sheets of white newsprint or other uncoated white groundwood paper of similar quality.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(25) Groundwood Computer Printout (GW CPO)

Consists of groundwood papers which are used in forms manufactured for use in data processing machines. This grade may contain colored stripes and impact or nonimpact (e.g., laser) computer printing.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	2%

(26) Publication Blanks (CPB)

Consists of unprinted cuttings or sheets of white coated or filled groundwood content paper.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(27) Coated Flyleaf Shavings

Consists of lightly printed trim from magazines, catalogs and similar printed matter, not limited with respect to groundwood, uncoated or coated stock. The bleed of cover, insert card stock, and beater-dyed paper may not exceed 2%.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(28) Coated Soft White Shavings (SWS)

Consists of unprinted, coated, and uncoated shavings and sheets of white groundwood-free printing paper. May contain a small percentage of groundwood.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(29) (Grade not currently in use)**(30) Hard White Shavings (HWS)**

Consists of shavings or sheets of unprinted, untreated white groundwood-free paper.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1/2 of 1%

(31) Hard White Envelope Cuttings (HWE)

Consists of groundwood-free cuttings, shavings, or sheets of unprinted, untreated, and uncoated white envelope paper.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 1/2 of 1%

(32) (Grade not currently in use)**(33) New Colored Envelope Cuttings**

Consists of groundwood-free cuttings, shavings, or sheets of untreated, uncoated bleachable colored envelope paper.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 2%

(34) (Grade not currently in use)**(35) Semi Bleached Cuttings**

Consists of sheets and cuttings of unprinted, untreated, groundwood-free paper such as file folder stock, untreated milk carton stock, or manila tag.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 2%

(36) Unsorted Office Paper (UOP)

Consists of printed or unprinted paper typically generated in an office environment that may include a document destruction process. This grade may contain white, colored, coated and uncoated papers, manila and pastel colored file folders.

Prohibitive Materials may not exceed 2%
Outthrows plus prohibitives may not exceed 10%

(37) Sorted Office Paper (SOP)

Consists of paper, as typically generated by offices, containing primarily white and colored groundwood-free paper, free of unbleached fiber. May include a small percentage of groundwood computer printout and facsimile paper.

Prohibitive Materials may not exceed 1%
Outthrows plus prohibitives may not exceed 5%

(38) (Grade not currently in use)**(39) Manifold Colored Ledger (MCL)**

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted colored or white groundwood-free paper. All stock must be uncoated and free of nonimpact printing. A percentage of carbonless paper is allowable.

Prohibitive Materials may not exceed 1/2 of 1%
Outthrows plus prohibitives may not exceed 2%

(40) Sorted White Ledger (SWL)

Consists of uncoated, printed or unprinted sheets, shavings, guillotined books, and cuttings of white groundwood-free ledger, bond, writing, and other paper which has similar fiber and filler content.

Prohibitive Materials may not exceed 1/2 of 1%
Outthrows plus prohibitives may not exceed 2%

(41) Manifold White Ledger (MWL)

Consists of sheets, shavings, and cuttings of industrially-generated printed or unprinted white groundwood-free paper. All stock must be uncoated.

Prohibitive Materials may not exceed 1/2 of 1%
Outthrows plus prohibitives may not exceed 2%

(42) (Grade no longer in use)**(43) Coated Book Stock (CBS)**

Consists of coated groundwood-free paper, printed or unprinted in sheets, shavings, guillotined books and cuttings. A reasonable percentage of paper containing fine groundwood may be included.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 2%

(44) Coated Groundwood Sections (CGS)

Consists of printed, coated groundwood paper in sheets, sections, shavings or guillotined books. This grade may not include news quality groundwood paper.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 2%

(45) Lightly Printed Bleached Board Cuttings

Consists of groundwood-free printed bleached board cuttings, free from misprint sheets, cartons, wax, greaseproof lamination, metallic, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed 1/2 of 1%
Outthrows plus prohibitives may not exceed 2%

(46) Printed Bleached Board

Consists of groundwood-free misprint sheets, cartons and cuttings of bleached board, free from wax, greaseproof lamination, metallic, and inks, adhesives or coatings that are insoluble.

Prohibitive Materials may not exceed 1%
Outthrows plus prohibitives may not exceed 2%

(47) Unprinted Bleached Board

Consists of groundwood-free unprinted, untreated bleached board cuttings, sheets or rolls, free from wax, greaseproof lamination and adhesives or coatings that are insoluble.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 1%

(48) #1 Bleached Cup Stock (#1 Cup)

Consists of untreated cuttings or sheets of coated or uncoated cup base stock. Cuttings with slight bleed may be included. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 1/2 of 1%

(49) #2 Printed Bleached Cup Stock (#2 Cup)

Consists of printed, untreated formed cups, cup die cuts, and misprint sheets of coated or uncoated cup base stock. Glues must be water soluble. Must be free of wax, poly, and other coatings that are insoluble.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 1%

(50) Unprinted Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated and unprinted plate cuttings and sheets.

Prohibitive Materials None permitted
Outthrows plus prohibitives may not exceed 1/2 of 1%

(51) Printed Bleached Plate Stock

Consists of groundwood-free bleached coated or uncoated, untreated printed plates and sheets. Must be free of coatings or inks that are insoluble.

Prohibitive Materials	None permitted
Outthrows plus prohibitives may not exceed	1%

(52) Aseptic Packaging and Gable-Top Cartons

Consists of liquid packaging board containers including empty, used, polyethylene (PE)-coated, printed one-side aseptic and gable-top cartons containing no less than 70% bleached chemical fiber and may contain up to 6% aluminum foil and 24% PE film.

Prohibitive Materials may not exceed	2%
Outthrows plus prohibitives may not exceed	5%

(54) Mixed Paper (MP)

Consists of all paper and paperboard of various qualities not limited to the type of fiber content, sorted and processed at a recycling facility.

Prohibitive Materials may not exceed	2%
Outthrows may not exceed	3%

(56) Sorted Residential Papers & News (SRPN)

Consists of sorted newspapers, mail, magazines, printing and writing papers and other acceptable papers generated from residential programs (such as residential household and apartment collections and drop-off centers) sorted and processed at a recycling facility. Containerboard and brown grades (OCC, Kraft bags, boxboard and Kraft carrier board) will be considered as "Outthrows." *Due to some technical questions, a clarification to the language above was made in August 2019.*

Prohibitive Materials may not exceed	2%
Outthrows may not exceed	3%

(58) Sorted Clean News (SCN)

Consists of sorted newspapers from source separated collection programs, converters, drop-off centers and paper drives containing the normal percentages of roto gravure, colored and coated sections. May contain inserts that would normally be included in the newspaper in the proper proportions. Grade must be free of excessive ink, brown grades and non-paper material. (Some mills may require pack to be free of flexographic inks.)

Prohibitive Materials may not exceed	1/2 of 1%
Outthrows plus prohibitives may not exceed	1%
Other papers may not exceed	10%

Specialty Grades

The grades listed below are produced and traded in carload and truckload quantities throughout the United States, and because of certain characteristics (i.e., the presence of wet strength, polycoatings, plastic, foil, carbon paper, hot melt glue), are not included in the regular grades of paper stock. However, it is recognized that many mills have special equipment and are able to utilize large quantities of these grades. Since many paper mills around the world do use these specialty grades, they are being listed with appropriate grade numbers for easy reference.

The Paper Stock Industries Chapter of ISRI is not establishing specific specifications, which would refer to such factors as the type of wet strength agent used, the percentage of wax, the amount of polycoating, whether it is on top of or under the printing, etc. The specification for each grade should be determined between Buyer and Seller, and it is recommended that purchase be made based on sample.

These specialty grades are as follows:

- 1-S White Waxed Cup Cuttings
- 2-S Printed Waxed Cup Cuttings
- 3-S Poly Coated Cup Stock
- 4-S Polycoated Bleached Kraft-Unprinted
- 5-S Polycoated Bleached Kraft-Printed
- 6-S Polycoated Milk Carton Stock
- 7-S Polycoated Diaper Stock
- 8-S Polycoated Boxboard Cuttings
- 9-S (This Grade No Longer in Use)
- 10-S Printed and/or Unprinted Bleached Sulphate Containing Foil
- 11-S Waxed Corrugated Cuttings
- 12-S Wet Strength Corrugated Cuttings
- 13-S (This Number Not Currently in Use)
- 14-S Beer Carton Scrap
- 15-S Contaminated Bag Scrap
- 16-S Insoluble Glued Free Sheet Paper and/or Board (IGS)
- 17-S White Wet Strength Scrap
- 18-S Brown Wet Strength Scrap
- 19-S Printed and/or Colored Wet Strength Scrap
- 20-S File Stock
- 21-S (This Number Not Currently in Use)
- 22-S Ruled White
- 23-S Flyleaf Shavings Containing Hot Melt Glue
- 24-S (This Number Not Currently in Use)
- 25-S Books with Covers
- 26-S (This Number Not Currently in Use)
- 27-S (This Number Not Currently in Use)
- 28-S (This Number Not Currently in Use)
- 29-S (This Number Not Currently in Use)
- 30-S Plastic Windowed Envelopes
- 31-S Textile Boxes
- 32-S Printed TMP
- 33-S Unprinted TMP
- 34-S Manila Tabulating Cards
- 35-S Sorted Colored Ledger
- 36-S Computer Printout (CPO)

Glossary of Paper Stock Terms

The following is a glossary of paper stock terms used within section VI, Grade Definitions, of the Guidelines for Paper Stock. These terms are not intended as a dictionary, but as a guide to help the Circular user better understand specific grade definitions as used in the recovered paper industry.

ADHESIVES: Bonding substances that are non-water soluble are considered contaminants in pulp subs, groundwood and deinking grades.

BEATER-DYED: Paper dyed or colored during the paper manufacturing process.

BLEACHED: Paper that has been whitened by chemicals.

BOARDS: Paperboard 0.006 inch or thicker.

BOGUS: Paper of inferior quality to a standard grade.

BOXBOARD: Paperboard made from a variety of recovered fibers having sufficient folding properties and thickness to be used to manufacture folding or set-up boxes.

CHEMICAL WOOD-FIBER PULP: Generic for cellulose fiber isolated and purified by a chemical digestive process.

CHIPBOARD: Uncoated, non-folding paperboard made from a variety of recovered papers, having sufficient strength and structural properties to be used to manufacture game boards, book covers, notebook backing and similar products.

COATINGS: A layer of adhesives, clays, varnish or any barrier applied to paper.

CONTAINERBOARD: Linerboard and corrugated medium used to manufacture shipping containers.

CORES: Paper tubes on which rolls of paper may be wound for shipment.

CORRUGATED CONTAINERS: Shipping containers made with kraft paper linerboard and corrugated medium.

CUTTINGS: Paper stock by-product of paper converting operations.

FILLER/FILLED: Denotes papers that have minerals (clays or other pigments) added for improving quality or color.

FLYLEAF/SHAVINGS: Trim scrap from printing operations.

FREESHEET: Paper that contains less than 10% groundwood fiber (synonym: groundwood-free).

GROUNDWOOD: Paper made with fibers produced without chemical pulping.

GILT: Metallic (gold or silver) inks used in printing.

HOGGED: Paper that has been mechanically torn or ripped to reduce its original size.

HOT-MELT: A type of glue or adhesive applied while hot/warm. Considered a contaminant in some grades.

IMPACT (PRINTING): A paper printing process that physically applies ink to the paper surface.

INSOLUBLE GLUES: Glues that won't dissolve (break down) in water.

JUTE: Strong, long-fibered pulp made from hemp.

KRAFT: Paper made from sulfate pulp (synonyms: brown and strong).

LAMINATED: Paper manufactured by fusing one or more layers of paper together.

LINERBOARD: Outside layers of a combination board used to manufacture corrugated shipping containers.

MANIFOLD: May denote continuous forms or business forms with several parts (may be interleaved with carbon paper or be carbonless papers).

MEDIUM: The inner corrugated fluted material used to manufacture corrugated shipping containers.

NON-IMPACT: Papers having printing images formed without impact.

OFF-SHORE/ASIAN: Denotes corrugated shipping containers manufactured overseas and containing bogus liners or medium. (Color is somewhat lighter/more yellow than North American produced materials).

PAPERBOARD: Denotes paper products used for packaging (corrugated boxes, folding cartons, set-up boxes, etc.).

ROTOGRAVURE: A paper printing (intaglio) process typically used to create the highest quality of smoothness on coated and uncoated papers. Excess quantities are considered an outthrow in grades #7, #8, and #9.

SECTIONS: Unbound, unused printed material with full ink coverage.

SHAVINGS: Trim from converting and bindery operations.

SIGNATURES: A section of book obtained by folding a single sheet of printing paper.

SLABBED: Type of paper stock normally generated by cutting rolls.

SULFITE: Papers and boards made from pulps made from an acid process.

SULPHATE: Papers and boards made from alkaline processed pulps.

TEST LINER: Liners, which are the outer ply of any kind of paperboard, containing 100% recycled material.

TMP: Thermomechanical pulp.

TREATED: Paper manufactured with additives.

TRIM: Cuttings of paper stock generated at converting or bindery operations which normally have little or no printing.

ULTRA-VIOLET (UV) INKS/COATINGS: Papers having inks or coatings dried by utilizing an ultraviolet radiation method. Considered a contaminant in deinking grades.

WET STRENGTH: Papers that have been treated with a moisture-resistant chemical that inhibits pulping.

Guidelines for Plastic Scrap: P-2020

Baled Recycled Plastic Scrap Commercial Guidelines

General Information

Commercial Guidelines for Baled Recycled Plastic Scrap were developed to provide industry-wide quality standards. These standards will facilitate commodity trading of these materials. They will also focus suppliers of such material on the quality requirements of their customers.

Product

These guidelines are designed with the potential for dealing with all recycled plastic in bale form. Initial specifications refer only to bottles. The code framework allows for generation of guidelines for all types of plastic packaging materials (including rigids and flexibles) with room for expansion to other plastic products and resins including those which are used to produce durable goods. Guidelines for those products may be added at a later date.

Bale Density

Bales shall be compressed to a minimum density of 10 pounds per cubic foot and a maximum density to be determined by individual contract between Buyer and Seller. Increased density may improve transportation efficiency, but over-compression may adversely affect the ability of a Buyer to separate, sort, and reprocess the material.

Bale Tying Material

Bale wires, ties, or straps shall be made of non-rusting or corroding material.

Bale Integrity

Bale integrity must be maintained through loading, shipping, handling, and storage. Distorted or broken bales are difficult to handle. They are unacceptable and may result in downgrading, rejection, or charge back.

Allowable Contamination

Unspecified materials must not exceed 2% of total bale weight. Bales which contain over 2% will be subjected to reduction in the contracted price of the material as well as charges for disposal of the contaminants. The reduced percentage will vary depending upon the amount and type of contamination. Quality of the baled plastic is the primary factor which determines the value.

Prohibited Material

Certain materials are understood to be specified as "prohibited." Such materials will render the bale "non-specification" and may cause some customers to reject the entire shipment. These may include plastic materials which have a deleterious effect on each other when reprocessed, and materials such as agricultural chemicals, hazardous materials, flammable liquids and/or their containers, and medical waste.

Liquids

Plastic containers/materials should be empty and dry when baled. The bale should be free of any free flowing liquid of any type.

General

Shipments should be essentially free of dirt, mud, stones, grease, glass, and paper. The plastic must not have been damaged by ultraviolet exposure. Every effort should be made to store the material above ground and under cover. A good faith effort on the part of the supplier will be made to include only rinsed bottles which have closures removed.

Definitions for Plastic Materials

Baled

Loose material that is compressed and bound together.

Densified

Material that is compressed through mechanical means. Typically applies to foam (purged) and film (turned into "popcorn"). Densified material is typically sent on for additional processing.

Durable Goods

Electrical and electronic equipment, appliances, automobiles (called "transportation equipment" in ISO 15270), construction products (included in ISO 15270) and industrial equipment (included in ISO 15270)

Flake

A generic term that refers to size and shape. Typically consists of plastic bottles or plastic film typically ground into a chip.

Installed

Material that has been purchased by a consumer and used for its original purpose. Such material may be scrap from the installation process. The material may have reached the end of its serviceable life and has been removed from service. In distribution center or worksite environments, the packaging has been opened and exposed to environmental conditions causing a higher likelihood of contamination. This material can also be categorized as "post-consumer."

Mixed Load Plastic

Shredded plastic that contains various types of resins and requires mechanical sorting to reach final specification. Typically baled and not granulated. Types and grades included in the bale to be agreed to by buyer and seller.

Plastic Bottle

A rigid container which is designed with a neck that is smaller than the body. Normally used to hold liquids and emptied by pouring.

Plastic Film

A thin flexible sheet which does not hold a particular shape when unsupported.

Postconsumer

Products generated by a business or consumer that have served their intended end use and have been separated or diverted from the solid waste stream for the purpose of recycling.

Purge

Plastic that has been melted and has hardened. This material has no set shape or form.

Recovered Plastic

Plastic materials which have been recovered or diverted from the solid waste stream. Does not include materials generated from and commonly reused within an original manufacturing process.

Recycled Plastic

Plastics composed of either post-consumer or recovered material or both.

Reground

A generic term that refers to hard rigid plastic typically ground into a chip. Typically consists of material that is the same grade, color and type. It can be used in extrusion or molding processes.

Rigid Plastic Container

A package (formed or molded container) which maintains its shape when empty and unsupported.

Shred

Size reduced material. The typical upper size can be between 3" to 12", although in some cases the upper size can be as small as about 1". Size range, characteristics should be agreed to between buyer and seller.

Shredded Plastic

Generic term. Material that contains a high plastic content. Typically contains 90% plastic content.

Shredder Residue

The remaining mixture after the majority of metals have been recovered from durable goods "shred." The mixture can contain plastics, rubber, wood, glass, rocks, dirt, paper, film, textiles, wires and other metals missed during the metal recovery process. The predominant single material is often plastic, which can vary from about 15% to about 90% depending on the type of durable goods and the steps taken in the metal separation process. Size range, characteristics should be agreed to between buyer and seller.

Uninstalled

Can be found in multiple environments such as worksite, distribution centers or OEM facilities. The material has not been used due to a defect or other circumstance. It can be obsolete or surplus material. Material is that recovered from the distribution chain can also be categorized as "post-consumer." Material recovered before the distribution chain can be categorized as "pre-consumer."

Common issues for this category:

The following list applies to all materials listed in this category.

- Caps, enclosures, and labels are acceptable.
- Product need not be washed, but preferred.

PET Bottles

Description: Any whole Polyethylene Terephthalate (PET, #1) bottle with a screw-neck top that contains the ASTM D7611 "#1, PET or PETE" resin identification code and that is clear, transparent green, or transparent light blue. All bottles should be free of contents or free flowing liquids and rinsed.

Product: PET Bottles

Source: Post-Consumer Material

Contamination: Please check with your pet buyer(s) as to their allowances for:

- Other Colored PET Containers
- PET Thermoforms, e.g., microwave trays ,dishes, bakery trays, deli containers, clam shell containers, drink cups

PET Bottle Bale Grade Chart

PET Bale Grade	Grade A	Grade B	Grade C	Grade F
Total PET Fraction by Weight	>94%	93% to 83%	82% to 73%	<72%
Total Amount of Contamination Allowed	6%	7% to 17%	18% to 27%	>28%

"PET fraction" refers to the total weight of PET bottles in a PET bale, inclusive of caps and labels when still attached to PET containers, as a percentage of the total weight of that bale.

Including closures (caps, lids, and rings) on bottles is acceptable. Removal of closures is also acceptable.

Total contaminants should not exceed the percentages, by weight, as defined by PET bale grades in chart above.

- High-Density Polyethylene (HDPE, #2) Rigid Plastic Containers
- Low Density Polyethylene (LDPE, #4) Rigid Plastic Containers
- Polypropylene (PP, #5) Rigid Plastic Containers
- Aluminum
- Metal containers or cans
- Paper or cardboard
- Liquid residues, primarily water (2% maximum allowed)

The following contaminants are not allowed at any level (zero percent allowed)

- Polyvinyl Chloride (PVC, #3) in any form
- Chemically incompatible low temperature melting materials, including Polystyrene (PS, #6) plastic and PLA plastic, as rigid or foam in any product.
- Chemically compatible low temperature melting materials, such as PETG
- Any plastic bags or plastic film
- Wood, glass, oils and grease
- Rocks, stones, mud, dirt
- Medical and hazardous waste
- Items containing degradable additives

General: Refer to the General Information section for additional information.

HDPE Color Bottles

Description: Any whole, blow-molded, High-Density Polyethylene (HDPE, #2) bottle containing the ASTM D7611 “#2, HDPE” resin identification code that is pigmented and opaque, and was generated from a curbside, drop-off, or other public or private recycling collection program. All bottles should be free of contents or free flowing liquids and rinsed.

Product: Bottles Only.

Source: Post-Consumer material

Contamination: Total contaminants should not exceed the percentages, by weight, as defined by the HDPE bale grade chart listed below.

HDPE Bale Grade Chart

HDPE Bale Grade	Grade A	Grade B	Grade C	Grade F
Total HDPE Fraction by Weight	>95%	94% to 85%	84% to 80%	<79%
Total amount of contamination allowed	5 %	6% to 15%	16% to 20%	21%

“HDPE Fraction” refers to the total weight of HDPE bottles in a HDPE bale, inclusive of caps and labels when still attached to HDPE containers, as a percentage of the total weight of that bale

Including closures (caps, lids, and rings) on bottles is acceptable. Removal of closures is also acceptable.

No more than 2% of the following individual items are allowed :

- Polyethylene Terephthalate (PET, #1)
- Low Density Polyethylene (LDPE, #4)
- Polypropylene (PP, #5)
- Polystyrene (PS, #6)
- Other (#7)
- Liquid residues
- Aluminum
- Paper or cardboard

The following contaminants are not allowed at any level (zero percent allowed)

- Bulky rigids
- Any plastic with PLA or foaming agents
- Plastic bags or film
- Polyvinyl Chloride (PVC, #3) plastic in any form
- High-density Polyethylene (HDPE, #2) motor oil or other automotive fluid containers
- Metal
- Rocks, stones, mud, dirt
- Wood, glass, oils, grease
- Medical and hazardous waste

General: Refer to the General Information section for additional information.

Tubs and Lids

Description: Any whole Polypropylene (PP, #5), High-Density Polyethylene (HDPE, #2), and/or Low Density Polyethylene (LDPE, #4), container generated through a positive sort from curbside, drop-off or other public or private recycling collection program. Tubs are containers that have a neck or mouth similar in size to its base. Lids

are caps for tubs that have a fastening feature other than threads. Examples include: yogurt cups, margarine tubs, ice cream tubs, cold drink cups (transparent, cold serve).

Product: Tubs and Lids

Source: Post-Consumer material generated from a curbside, drop off, or other public or private recycling collection program.

Contamination: Total contaminants should not exceed 10% by weight

The following levels of contamination are allowed:

2% Maximum acceptable

- Metal;
- Paper/cardboard;
- Injection-molded High-Density Polyethylene (HDPE, #2);
- Polyethylene Terephthalate (PET, #1) Bottles or thermoforms);
- Any plastic containers or packaging including Polyethylene Terephthalate (PET, #1), Polyvinyl Chloride (PVC, #3), Polystyrene (PS, #6), Other (#7);
- Liquid/other residues.

The following contaminants are not allowed at any level (zero percent allowed)

- Any plastic bags, sheets, or film;
- Wood, glass, electronics scrap;
- Oils, grease, rocks, mud, dirt;
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides;
- Medical and hazardous waste;
- Products with degradable additives.

General: Refer to the General Information section for additional information.

Tubs and Lids w/Bulky Rigid Plastic

Description: Any whole Polypropylene (PP, #5), High-Density Polyethylene (HDPE, #2), and/or Low Density Polyethylene (LDPE, #4), container generated through a positive sort from curbside, drop-off or other public or private recycling collection program. Tubs are containers that have a neck or mouth similar in size to its base. Lids are caps for tubs that have a fastening feature other than threads. Bulky Rigid plastic is allowed. Examples include: yogurt cups, margarine tubs, ice cream tubs, cold drink cups (transparent, cold serve).

Product: Tubs and Lids

Source: Post-Consumer material generated from a curbside, drop off, or other public or private recycling collection program.

Contamination: Total contaminants should not exceed 10% by weight

The following levels of contamination are allowed:

2% Maximum acceptable

- Metal;
- Paper/cardboard;
- Injection-molded High-Density Polyethylene (HDPE, #2);
- Polyethylene Terephthalate (PET, #1) Bottles or thermoforms);
- Any plastic containers or packaging including Polyethylene Terephthalate (PET, #1), Polyvinyl Chloride (PVC, #3), Polystyrene (PS, #6), Other (#7);
- Liquid/other residues. (cont.)

The following contaminants are not allowed at any level (zero percent allowed)

- Any plastic bags, sheets, or film;
- Wood, glass, electronics scrap;
- Oils, grease, rocks, mud, dirt;
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides;
- Items with circuit boards or battery packs;
- Medical and hazardous waste;
- Products with degradable additives.

General: Refer to the General Information section for additional information.

1-7 Bottles and SMALL Rigid Plastic

Description: Rigid plastic generated in a positive sort from a curbside, drop-off, or other public or private recycling program that does not separately sort any plastic bottles. Bales consist of all plastic bottles—no bottles should be removed from the mix prior to baling—and household containers (including thermoform packaging, cups, trays, clamshells, food tubs and pots).

- Bulky rigid plastic, greater than 5 gallons, should be avoided (e.g., drums, crates, buckets, baskets, toys, totes and lawn furniture);
- Bales should consist of 65% bottles.

Product: Bottle and non-bottle containers

Source: Post-Consumer Material

Contamination: Total contaminants should not exceed 5% by weight

- 2% maximum acceptable
 - o Paper/cardboard
- 1% maximum acceptable
 - o Metal
 - o Plastic bags, sheets, film
 - o Liquid or other residues

The following contaminants are not allowed at any level (zero percent allowed)

- Wood, glass, electronics scrap
- Oils, grease, rocks, mud, dirt
- Items with circuit boards or battery packs
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides.
- Medical and hazardous waste
- Products with degradable additives

General: Refer to the General Information section for additional information.

3-7 Bottles and SMALL Rigid Plastic

Description: Rigid plastic items generated in a positive sort from a curbside, drop-off, or other public or private recycling programs from which the Polyethylene Terephthalate (PET, #1) and High-Density Polyethylene (HDPE, #2) bottles have been removed. Pre-picked plastic consists of non-PET and non-HDPE household bottles and all non bottle containers including thermoform packaging, cups, trays, clamshells, food tubs and pots, and all large rigid plastics, primarily Polyethylene and Polypropylene (PP, #5) (includes plastic crates, carts, buckets, baskets and plastic lawn furniture). Metal, as typically found in toys or bucket handles, should be removed when possible. Plastic items from construction or demolition should not be included in Pre-Picked bales.

- Bulky rigid plastic, greater than 5 gallons, should be avoided (e.g., drums, crates, buckets, baskets, toys, totes and lawn furniture)

Product: Bottle and non-bottle Containers

Source: Post-Consumer material

Contamination: Total contaminants should not exceed 5% by weight

- 2% maximum acceptable
 - o Metal
 - o Paper/cardboard (2% maximum acceptable)
- 1% maximum acceptable
 - o Liquid or other residues (1 % maximum acceptable)

The following contaminants are not allowed at any level (zero percent allowed)

- Any plastic bags, sheets, or film
- Wood, glass, electronics scrap
- Oils, grease, rocks, mud, dirt
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides.
- Items with circuit boards or battery packs
- Medical and hazardous waste
- Products with degradable additives

General: Refer to the General Information section for additional information.

MRF Film

Description: Film collected and sorted at a MRF, typically generated from curbside collections consisting of HDPE grocery/retail bags, LDPE, or LLDPE films.

Product: Film

Contamination: Contaminants not to exceed 10% of loose paper, rigid plastics, non-ethylene film

Prohibited Items: NO food, trash, cans, glass, wood, oil, rocks, liquids, PET plastics, or PVC plastics.

General: Refer to the General Information section for more information.

HDPE Natural Bottles

Description: Any whole, blow-molded, High-Density Polyethylene (HDPE, #2) containing the ASTM D7611 “#2, HDPE” resin identification code that is unpigmented, and was generated from a curbside, drop-off or public or private collection program. All bottles should be free of contents or free flowing liquids and rinsed.

Product: Bottles only

Source: Post-Consumer material

Contamination: Total contaminants should not exceed the percentages, by weight, as defined by the HDPE bale grade chart listed below.

HDPE Bale Grade Chart

HDPE Bale Grade	Grade A	Grade B	Grade C	Grade F
Total HDPE Fraction by Weight	>95%	94% to 85%	84% to 80%	<79%
Total amount of contamination allowed	5 %	6% to 15%	16% to 20%	21%

“HDPE Fraction” refers to the total weight of HDPE bottles in a HDPE bale, inclusive of caps and labels when still attached to HDPE containers, as a percentage of the total weight of that bale

Including closures (caps, lids, and rings) on bottles is acceptable. Removal of closures is also acceptable. No more than 2% of the following individual items are allowed :

- Non-dairy pigmented High-Density Polyethylene (HDPE, #2) Bottles;
- Paper or Cardboard;
- Any other non-HDPE rigid plastic container;
- Liquid Residues;
- Packaging, including Polyethylene Terephthalate (PET, #1), Low Density Polyethylene (LDPE, #4);
- Aluminum
- Polypropylene (PP, #5), Polystyrene (PS, #6), Other (#7)
- Injection-molded High-Density Polyethylene (HDPE, #2) based cups, tubs, other wide-mouthed containers or non-bottle High-Density Polyethylene (HDPE, #2) materials.

The following contaminants are not allowed at any level (zero percent allowed)

- Pigmented white and yellow High-Density Polyethylene (HDPE, #2) milk jugs
- Bulky Rigids
- Any Plastics with PLA or Foaming Agents
- Wood, glass, oils, grease
- Rocks, Stones, Mud, Dirt
- Medical and Hazardous Waste
- Any plastic bags or film from any resin PVC (#3) in any form
- Metal

General: Refer to the General Information section for additional information

Mixed Bulky Rigids

Description: Any large rigid High-Density Polyethylene (HDPE, #2) and/or Polypropylene (PP, #5) plastic bulky item, created through a positive sort from curbside, drop-off or other public or private recycling collection program. Examples include: crates, buckets, baskets, totes, and lawn furniture. Metal such as axels and bolts should be removed. Buckets/pails with metal handles can be included.

Product: Bulky Rigid Plastic

Source: Post-Consumer material created from a positive sort from a curbside, drop-off or other public or private recycling collection program.

Contamination: This bale should not contain mixed #1-7 bottles or containers, toys with metal, drums, jugs (either HMW or 55 gallons) or Polyvinyl Chloride (PVC, #3).

Total allowed - 15% by weight.

- Any plastic items or packaging including Polyethylene Terephthalate (PET, #1), Polyvinyl Chloride (PVC, #3), Polystyrene (PS, #6) #7 Other (4% maximum acceptable) ;
- Metal (2% maximum acceptable);
- Liquid/other residues (2% max. acceptable);
- Wood (2% max);
- Paper/cardboard (2% maximum acceptable) ;
- Any plastic bags, sheets or film (2% max);
- Glass (2% max).

The following items are not allowed at any level (0% allowed):

- Oils, grease, rocks, mud, dirt;
- PS Foam and any other types of foam;
- Medical and hazardous waste;
- Products with degradable additives;
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides;
- Electronics scrap and items with circuit boards or battery packs;

General: Refer to the General Information section for more information

PET Thermoforms

Description: Any whole Polyethylene Terephthalate (PET, #1) package labeled with the ASTM D7611 “#1, PET or PETE” resin identification code including and not limited to egg cartons, baskets, clamshell containers, cups, lids, cake domes, covers, blister pack without paperboard backing, tubs, deli containers, trays and folded PET sheet containers. All packages should be free of contents or free flowing liquids and rinsed. This grade does not include bottles and jars.

Product: PET Thermoform Plastic

Source: Post-Consumer material

Contamination: Including closures (caps, lids, and rings) on bottles is acceptable. Removal of closures is also acceptable.

Total contaminants should not exceed 5% by weight.

No more than 2% by weight of any of following individual contaminants will be allowed:

- Aluminum
- Metal containers or cans
- Loose paper or cardboard (cont.)

- Polystyrene
- PLA
- PVC
- PETG
- Liquid residues, primarily water (2% maximum allowed).

The following contaminants are not allowed at any level (zero percent allowed):

- Any plastic bags or plastic film
- Wood, glass, oils and grease
- Rocks, stones, mud, dirt
- Medical and hazardous waste
- Items containing degradable additives

General: Refer to the General Information section for additional information.

HDPE Injection Bulky Rigids

Description: Any injection grade #2 HDPE, typically found to be wide mouthed containers and/or oversized items generated through a positive sort from curbside, drop-off or other public or private recycling collection program. Examples include: carts, crates, buckets, baskets, lawn furniture, etc. Metal such as axels and bolts should be removed. Buckets/pails with metal handles are acceptable.

Product: Buckets, Pails, Oversized Rigid Plastics

Source: Post-Consumer Material

Contamination: The following levels of contamination are allowed

- 10% maximum acceptable
 - o Polypropylene (PP, #5)
- 4% maximum acceptable
 - o Polyethylene Terephthalate (PET, #1) plastics
 - o Polyvinyl Chloride (PVC, #3) plastics
 - o Low Density Polyethylene (LDPE, #4) plastics
 - o Polystyrene (PS, #6) plastics
 - o Other (#7)
- 2% maximum acceptable
 - o Metal
 - o Liquid or other residues
 - o Paper/cardboard

The following contaminants are not allowed at any level (zero percent allowed)

- Plastic bags, sheets, film
- Oil, grease, rocks, dirt
- Wood
- Glass
- Electronic scrap
- Medical and hazardous waste
- Products with degradable additives
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides

General: Refer to the General Information section for additional information.

Polypropylene SMALL Rigids Plastic

Description: Any Polypropylene (PP, #5) whole bottle, container product, generated through a positive sort from curbside, drop off or other public or private recycling collection program. Examples include: prescription bottles, yogurt cups, margarine tubs, ice cream tubs, cold drink cups, microwaveable trays, tofu tubs, dishwasher safe storage containers, hangers, bottle cap enclosures, etc.

- Bulky Polypropylene (PP, #5) plastic items greater than 5 gallons, should be avoided (e.g., drums, crates, buckets, baskets, toys, totes, and lawn furniture).

Product: Polypropylene Containers

Source: Post-Consumer Material

Contamination: Total contaminants should not exceed 8% by weight

The following levels of contamination are allowed

- 2% Maximum acceptable
 - o Metal
 - o Paper/Cardboard
 - o Liquid or other residue
 - o High-Density Polyethylene (HDPE, #2)
 - o Any plastic container or packaging containing Polyethylene Terephthalate (PET, #1), Polyvinyl Chloride (PVC, #3), Polystyrene (PS, #6), Other (#7)

The following contaminants are not allowed at any level (zero percent allowed)

- Plastic bags, sheets, film
- Oil, grease, rocks, dirt
- Wood
- Glass
- Electronic scrap
- Medical and hazardous waste
- Products with degradable additives
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides

General: Refer to the General Information section for additional information.

Polypropylene All Rigid Plastic

Description: Any Polypropylene (PP, #5) whole bottle, container product, generated through a positive sort from curbside, drop off or other public or private recycling collection program. Bulky Polypropylene (PP, #5) are items greater than 5 gallons, (e.g. buckets, crates, waste baskets, toys, and storage bins).

Examples include: prescription bottles, yogurt cups, margarine tubs, ice cream tubs, cold drink cups, microwaveable trays, tofu tubs, dishwasher safe storage containers, hangers, bottle cap enclosures, etc.

Product: Polypropylene Containers

Source: Post-Consumer Material

Contamination: Total contaminants should not exceed 8% by weight

The following levels of contamination are allowed

- 2% Maximum acceptable
 - o Metal
 - o Paper/Cardboard
 - o Liquid or other residue

- o High-Density Polyethylene (HDPE, #2)
- o Any plastic container or packaging containing Polyethylene Terephthalate (PET, #1), Polyvinyl Chloride (PVC, #3), Polystyrene (PS, #6), Other (#7)

The following contaminants are not allowed at any level (zero percent allowed)

- Plastic bags, sheets, film
- Oil, grease, rocks, dirt
- Wood, glass, electronic scrap
- Medical and hazardous waste
- Products with degradable additives
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides

General: Refer to the General Information section for additional information.

1-7 Bottles and ALL Rigid Plastic

Description: Rigid plastic generated in a positive sort from a curbside, drop-off, or other public or private recycling program that does not separately sort any plastic bottles. Bales consist of all plastic bottles—no bottles should be removed from the mix prior to baling—and household containers (including thermoform packaging, cups, trays, clamshells, food tubs and pots, and bulky rigid plastic (e.g., drums, crates, buckets, baskets, toys, totes and lawn furniture).

Product: Bottle and non-bottle containers

Source: Post-Consumer Material

Contamination: Total contaminants should not exceed 5% by weight

- 2% maximum acceptable
 - o Paper/cardboard
- 1% maximum acceptable
 - o Metal
 - o Plastic bags, sheets, film
 - o Liquid or other residues

The following contaminants are not allowed at any level (zero percent allowed)

- Wood, glass, electronics scrap
- Oils, grease, rocks, mud, dirt
- Items with circuit boards or battery packs
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides.
- Medical and hazardous waste
- Products with degradable additives

General: Refer to the General Information section for additional information.

3-7 Bottles and ALL Other Rigid Plastic

Description: Rigid plastic items generated in a positive sort from a curbside, drop-off, or other public or private recycling programs from which the Polyethylene Terephthalate (PET, #1) and High-Density Polyethylene (HDPE, #2) bottles have been removed. Pre-picked plastic consists of non-PET and non-HDPE household bottles and all non bottle containers including thermoform packaging, cups, trays, clamshells, food tubs and pots, and all large rigid plastics, primarily PE and PP (includes plastic crates, carts, buckets, baskets and plastic lawn furniture). Metal, as typically found in toys or bucket handles, should be

removed when possible. Plastic items from construction or demolition should not be included in Pre-Picked bales.

Product: Bottle and non-bottle Containers

Source: Post-Consumer material

Contamination: The following levels of contamination are allowed

- 5% Maximum acceptable
 - o Metal (2% maximum acceptable)
 - o Paper/cardboard (2% maximum acceptable)
 - o Liquid or other residues (1 % maximum acceptable)

The following contaminants are not allowed at any level (zero percent allowed)

- Any plastic bags, sheets, or film
- Wood, glass, electronics scrap
- Oils, grease, rocks, mud, dirt
- Containers which held flammable, corrosive or reactive products, pesticides or herbicides.
- Items with circuit boards or battery packs
- Medical and hazardous waste
- Products with degradable additives

General: Refer to the General Information section for additional information.

PE Retail Mix Film

Description: Any polyethylene bag and overwrap accepted by retailers from their customers or polyethylene stretch wrap or other film generated back of house may be included. Bags may be mixed color or printed and primarily High-Density Polyethylene (HDPE, #2) but are expected to include other polyethylene bags and LDPE/LLDPE overwrap. Films may be coded with ASTM D7611 resin identification code “#2, HDPE” and #4, LDPE”. All bag bundles should be free of free-flowing liquids.

Product: Mixed Film

Source: Post-Consumer material

Contamination: Total contaminants should not exceed 5% by weight.

- Non-polyethylene other plastics;
- Loose Paper;
- Strapping, twine or tape;
- Liquid residue (2% maximum).

The following contaminants are not allowed at any level (zero percent allowed)

- Medical and hazardous waste;
- Food waste;
- Wood;
- Glass;
- Oils and Grease;
- Rocks, stones, mud, dirt;
- Metallized labels or films;
- Multi-material pouches;
- Silicone coated film;
- Film with oxo or bio-degradable additives;
- PVDC layers;
- Acrylic coatings;

General: Refer to the General Information section for additional information.

LDPE Colored Film

Description: Any mixture of natural translucent Low Density Polyethylene (LDPE, #4) film and mixed color translucent Low Density Polyethylene (LDPE, #4) film with limited label contamination is acceptable. Films may be coded with ASTM D7611 resin identification code #4, LDPE. All film bundles should be free of free-flowing liquids.

Product: LDPE Colored Film

Source: Post-Consumer material

Contamination: Total contaminants should not exceed 2% by weight. No more than 2% by weight of any of following individual contaminants will be allowed:

- Non-polyethylene other plastics;
- Labels;
- Water.

The following contaminants are not allowed at any level (zero percent allowed)

- Medical and hazardous waste
- Wood
- Glass
- Oils and Grease
- Rocks, stones, mud, dirt
- Metallized labels or films
- Multi-material pouches
- Silicone coated film
- Film with oxo or bio-degradable additives
- PVDC layers

General: Refer to the General Information section for additional information.

LDPE Furniture Mix

Description: Any mixture of natural Low Density Polyethylene (LDPE, #4) film used for sofa overwrap, bubble wrap, mattress bag and Linear Low Density Polyethylene (LLDPE, #4) stretch film and polyethylene thin foam which is white and gray foam backed with LDPE film. Color contribution can be only from the white foam, gray foam backed with LDPE film, and blue mattress bags. The mass shall consist of 70% to 80% LDPE and/or LLDPE films and the remainder polyethylene foam. Films may be coded with ASTM D7611 resin identification code #4, LDPE. All film bundles should be free of free-flowing liquids.

Product: LDPE or LLDPE Film

Source: Post-Consumer material

Contamination: Total contaminants should not exceed 2% by weight. No more than 2% by weight of any of following individual contaminants will be allowed:

- Non-polyethylene other plastics;
- Labels;
- Water.

The following contaminants are not allowed at any level (zero percent allowed)

- Medical and hazardous waste
- Wood
- Glass
- Oils and Grease
- Rocks, stones, mud, dirt
- Metallized labels or films

- Multi-material pouches
- Silicone coated film
- Film with oxo or bio-degradable additives
- PVDC layers
- Acrylic coatings

General: Refer to the General Information section for additional information.

PE Clear Film

Description: Any mix of natural polyethylene, High-Density Polyethylene (HDPE, #2), Low Density Polyethylene (LDPE, #4) or Linear Low Density Polyethylene (LLDPE, #4) film,

PE Clear Film Description Variances

Grade B	Grade C
80% clear, up to 20% color, clean and Natural LDPE and/or LDPE films.	50% clear, 50% color, dry, LDPE or LLDPE Films

totaling at least 95% clear or natural polyethylene film is accepted. Films may be coded with ASTM D7611 resin identification code.

Product: Polyethylene film

Source: Post-Consumer or Post-Commercial material

Contamination: Total contaminants should not exceed 5% by weight.

- Pigmented polyethylene films
- Non-polyethylene other plastics such as strapping
- Labels,
- Liquid residue (2% maximum).

The following contaminants are not allowed at any level (zero percent allowed)

- Medical and hazardous waste
- Wood
- Glass
- Oils and Grease
- Rocks, stones, mud, dirt
- Metallized labels or films
- Multi-material pouches
- Silicone coated film
- Film with oxo or bio-degradable additives
- PVDC layers
- Acrylic coatings

General: Refer to the General Information section for additional information.

Agricultural Greenhouse Film

Films not used on the ground for agriculture or farming. Examples of which may be bale wrap, greenhouse films, dairy bags and bunker silo films which are polyethylene based.

Product: Film

Contamination: Contaminants not to exceed 20% of non-PE film, dirt, rocks, or moisture.

Prohibited Items: NO food, trash, cans, glass, wood, or oil

General: Refer to the General Information section for more information.

Agricultural Ground Cover Film

Any film collected after in field use. Examples of which may be mulch film and irrigation (drip) tubing which is polyethylene based.

Product: Film

Contamination: Contaminants not to exceed 50% of non-PE Film, dirt, rocks, or moisture.

Prohibited Items: NO food, trash, cans, glass, wood or oil.

General: Refer to the General Information section for more information.

Post-Consumer TPO Plastic Automotive Bumper Covers

Description: This grade consists of painted auto bumper covers removed from motor vehicles.

Product: Post-Consumer Auto Part

Source: Post-Consumer material generated by collision or refurbishment centers or automobile dismantlers.

Contamination: The following parts must be removed from the bumper cover: head lamps, tail lamps, grills, emblems, rub strips, reflectors, and any other components attached to the bumper. Everything attached to the bumper cover should be removed before baling. Contamination should be limited to small metal parts such as clips, bolts, and screws.

No TPU or RIM Plastic allowed.

General: Refer to the "General Information" section for more information.

Rigid PVC—Siding

Description: Typically consists of PVC siding used in residential applications. May contain PVC downspouts. Not all siding is PVC and may contain PE variants, which are typically molded. Recyclability and market value increases with additional color segregation.

Product: PVC Bale

Source: Installed or Uninstalled Material

Technical Information: Hardness Level > 65D. Rigid PVC does not contain plasticizer and will typically measure above 65 on the Shore D scale.

Explanation of the Shore Scale: Shore durometer measurement devices can be used to measure the indentation of a prescribed needle into the material. The test method conforms to ASTM D2240.

Contamination:

Prohibitives—Material not accepted at any level, 0% allowed.

- a. PET plastic of any form
- b. Insulation
- c. Medical and hazardous waste
- d. Lead or cadmium stabilized rigid PVC materials,
- e. Materials containing asbestos fillers or reinforcement.
- f. Used household soil or waste plumbing lines with visible bioresidue. (May have debris and paper)
- g. CPVC—should be separated and marketed separately—typically includes pipe and molded fittings and runners;

Contamination material allowed at small percentages:

- a. Plastics other than PVC such as HDPE, LDPE, PP, PS
- b. Foamed PVC
- c. Liquids
- d. Paper & Cardboard
- e. Ferrous and Non-Ferrous Metals

f. Rocks, Stones, Mud, Dirt

g. Wood, Glass, Oils, Grease

General: Refer to the General Information section for additional information.

Rigid PVC—Pipe

Description: PVC pipe that is round in shape and can be green, white, blue, purple and grey in color. Comes from installed and un-installed sources or scrap. Is mainly used in water plumbing applications. Care should be taken when compressing the bale as too much pressure will crush material and make identification and inspection difficult. Recyclability and market value increases with additional color segregation.

Product: PVC Bale

Source: Installed or Uninstalled Material

Technical Information: Hardness Level > 65D. Rigid PVC does not contain plasticizer and will typically measure above 65 on the Shore D scale.

Explanation of the Shore Scale: Shore durometer measurement devices can be used to measure the indentation of a prescribed needle into the material. The test method conforms to ASTM D2240.

Contamination:

Prohibitives—material not accepted at any level, 0% allowed.

- a. CPVC (typically gray electrical conduit)
- b. PET plastic of any form
- c. Medical and hazardous waste
- d. Lead or cadmium stabilized rigid PVC materials,
- e. Materials containing asbestos fillers or reinforcement.
- f. Used household soil or waste plumbing lines with visible bioresidue. (May have debris and paper)
- g. ABS

Contamination material allowed at small percentages:

- a. Plastics other than PVC such as HDPE, LDPE, PP, PS
- b. Foamed PVC
- c. Liquids
- d. Paper & Cardboard
- e. Ferrous and Non-Ferrous Metals
- f. Rocks, Stones, Mud, Dirt
- g. Wood, Glass, Oils, Grease

General: Refer to the General Information section for additional information.

Rigid PVC—Window Profiles

Descriptions: Typically consists of window and door frames. Sourced primarily from door and window manufacturers.

Product: PVC Bale

Source: Installed or Uninstalled Material

Technical Information: Hardness Level > 65D. Rigid PVC does not contain plasticizer and will typically measure above 65 on the Shore D scale.

Explanation of the Shore Scale: Shore durometer measurement devices can be used to measure the indentation of a prescribed needle into the material. The test method conforms to ASTM D2240.

Contamination:

Prohibitives—material not accepted at any level, 0% allowed.

- a. Loose rubber weather stripping
- b. Glass

- c. Metal
- d. PET plastic of any form
- e. Medical and hazardous waste
- f. Lead or cadmium stabilized rigid PVC materials,
- g. Materials containing asbestos fillers or reinforcement.
- h. Used household soil or waste plumbing lines with visible bioresidue. (May have debris and paper)
- i. CPVC—should be separated and marketed separately – typically includes pipe and molded fittings and runners;

Contamination material allowed at small percentages:

- h. Plastics other than PVC such as HDPE, LDPE, PP, PS
- i. Foamed PVC
- j. Liquids
- k. Paper & Cardboard
- l. Ferrous and Non-Ferrous Metals
- m. Rocks, Stones, Mud, Dirt
- n. Wood, Glass, Oils, Grease

General: Refer to the General Information section for additional information.

Flexible PVC

Description: Typically consists of molding, weather stripping, flexible tubing, purging, battery covers, medical tubing, auto decals, flexible films and sheeting. It is typically resistant to chemicals, non-porous and extruded. It can be found in long profiles and can be wound onto a reel.

Product: PVC Bale

Source: Post-Consumer or Post Industrial (including Pre-consumer)

Technical Information: Durometer Level less than 90A

Explanation of the Durometer Scale: Explanation of the Shore Scale: Shore durometer measurement devices can be used to measure the indentation of a prescribed needle into the material. The test method conforms to ASTM D2240. Flexible PVC is typically measured using the A scale.

Contamination:

Prohibitives—material not accepted at any level, 0% allowed.

- a. PET plastic of any form
 - b. Medical and hazardous waste
- Contamination material allowed at small percentages
- a. Plastics other than PVC such as HDPE, LDPE, PP, PS
 - b. Rigid PVC
 - c. Liquids
 - d. Paper & Cardboard
 - e. Ferrous and Non-Ferrous Metals
 - f. Glue, adhesives, sticky tape
 - g. Co-extruded materials
 - h. Reinforcement weaves and fabrics

General: Refer to the General Information section for additional information.

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Guidelines for Electronics Scrap: ES-2020

Electronics Scrap

Commercial Guidelines for Electronics Scrap were developed to provide industry-wide quality standards. These standards will facilitate commodity transactions domestically and internationally. Transactions covering shipments to or from other countries may be in accordance with these standards and may be modified by mutual agreement between Buyer and Seller.

Electronic Scrap Definitions

The following E-Recycling definitions will facilitate a more consistent language for both domestic as well as international transactions.

“END-OF-LIFE ELECTRONIC PRODUCTS”

EOL Electronic Products are either obsolete for their intended purpose or no longer useful by the current user and lack any significant market value as an operational unit. These products are represented by any of the following categories of electronic products:

IT and telecommunications electronic equipment including:

- Centralized data processing:
 - Mainframes
 - Minicomputers
 - Printer units
- Personal computing:
 - Personal computers (CPU, mouse, screen and keyboard included)
 - Laptop computers (CPU, mouse, screen and keyboard included)
 - Notebook computers
 - Notepad computers
 - Printers
- Copying equipment
- Electrical and electronic typewriters
- Pocket and desk calculators
- Other products and equipment for the collection, storage, processing, presentation or communication of information by electronic means
- User terminals and systems
- Facsimile
- Telex
- Telephones
- Pay telephones
- Cordless telephones
- Cellular telephones
- Answering systems
- Other products or equipment for transmitting sound, images or other information by telecommunications

Consumer electronic equipment including:

- Radio sets
- Television sets
- Video cameras
- Video recorders
- Eli-h recorders
- Audio amplifiers
- Musical instruments and other products or equipment for the purpose of recording or reproducing sound or images, including signals or other technologies for the distribution of sound and image by telecommunications

Toys, leisure and sports electronic equipment including:

- Electric trains or car racing sets
- Hand-held video game consoles
- Video games
- Computers for biking, diving, running, rowing, etc.
- Sports equipment with electric or electronic components
- Coin slot machines

Medical devices (except all implanted and infected products and radioactive components) including:

- Radiotherapy equipment
- Cardiology
- Dialysis
- Pulmonary ventilators
- Nuclear medicine
- Laboratory equipment or in-vitro diagnostics
- Analyzers
- Freezers
- Fertilization tests
- Other appliances for detecting, preventing, monitoring, treating, or alleviating illness, injury or disability

Monitoring and control instruments including:

- Smoke detectors
- Heating regulators
- Thermostats
- Measuring, weighing or adjusting appliances for household or as laboratory equipment
- Other monitoring and control instruments used in industrial installations (e.g. Irra control panels)

“E-Recycling”

E-Recycling is any process by which End-of-Life (EOL) electronic products which would otherwise become solid waste are collected, separated, reused or processed and returned to use in the form of raw materials or products.

“E-Demanufacturing”

Demanufacturing is the process of separating EOL electronic products (electronic materials) into metallic and non-metallic parts that can be reused or recycled.

“E-Dismantler”

Dismantler is a person who engages in the manual demanufacturing of EOL electronic products (electronic materials) to reuse or recycle components and commodities contained within.

“E-Dismantling”

Dismantling is the manual demanufacturing of EOL electronic products (electronic materials) to reuse or recycle components and commodities contained within.

“E-Processor”

Processor is a person who engages in the mechanical demanufacturing of EOL electronic products (electronic materials) to reuse or recycle various commodities contained within.

“E-Processing”

Processing is the mechanical demanufacturing of EOL electronic products (electronic materials) to recover various commodities contained within.

“E-Broker”

Broker is a person who engages in the buying, selling, and trading of electronic products (electronic materials) without demanufacturing.

“E-Brokering”

Brokering is the buying, selling, and trading of electronic products (electronic materials) without demanufacturing.

Electronics Scrap Metals—EM

Preface: The following metals specifications are directed to processing plants generating value-added commodities for consumers producing metal products. All the specifications below are subject to final terms and conditions as agreed between buyer and seller.

EM1—Eddy-Current (EC) Aluminum

Shall consist of the shredded aluminum fraction generated by EC separation of electronic products being predominately aluminum. Bulk density to be a minimum of 30 pounds per cubic foot (subject to terms between buyer and seller). Material may contain agreed-upon amounts of zinc and copper but shall not contain more than a total 5% maximum of nonmetallics, of which no more than 1% shall be rubber and plastics. To be free of excessively oxidized material and any sealed or pressurized items. Any variation to be sold by special arrangement between buyer and seller. Note: Refer to ISRI nonferrous specifications for Tweak or Twitch.

EM2—Eddy-Current (EC) Scrap

Shall consist of a combination of nonferrous metals that should be predominately aluminum but may contain statistically significant percentages of zinc or other nonferrous metals. Bulk density to be a minimum of 30 pounds per cubic foot and subject to terms between buyer and seller. Material to be bought/sold under this guideline shall be identified as EM2 with a number to follow indicating the estimated percentage of nonferrous metal (e.g., EM2-90 means the material contains approximately 90% nonferrous metal content). May also be screened to permit description by specific size ranges. Note: Refer to ISRI nonferrous specification for Zorba.

Note: Specifications for clean aluminum scrap produced by demanufacturing or pretreating EOL scrap prior to shredding can be found under ISRI Guidelines for Nonferrous Scrap. For aluminum streams that contain less than 85% aluminum, consult the general aluminum scrap specifications.

EM3—Circuitboards and Shredded Circuitboards From the Processing of End-of-Life Electronics

Shall consist of whole or shredded copper/precious metal-bearing populated or unpopulated circuitboards from the manual dismantling of electronic products. May also consist of shredded circuitboards from end-of-life electronic product processing systems with a maximum piece size of 2 inches. Maximum acceptable metal contamination: aluminum, 5%; ferrous, 2%; zinc, 2%; magnesium, 1%; and beryllium, 200 ppm. Other elements subject to agreement between buyer and seller. Maximum plastic content: 40%. Typically sold on an assay basis and classified into different categories denominated by the gold levels contained in the material. Major classifications are:

- 1) <50 grams per mt
- 2) <200 g/mt
- 3) >200 g/mt

EM4—Light Iron

Shall consist of whole No. 1 and whole No. 2 wrought iron and/or steel scrap and No.1 busheling from the manual dismantling of electronic products. Refer also to 200, 204, and 207 Guidelines for Ferrous Scrap.

EM5—Iron Frag

Shall consist of shredded No. 1 and No. 2 whole wrought iron and/or steel scrap and No. 1 busheling from end-of-life electronic product processing systems. Refer also to 210 and 211 Guidelines for Ferrous Scrap.

Electronics Scrap Glass and CRT Cullet Specifications

Shipping/Packaging/Labeling—All shipments shall be packaged, labeled, and transported in accordance with all applicable transportation laws and packed in a manner that prevents releases to the environment and protects the health and safety of workers handling the material at generating or receiving facilities.

Whole Monitors/TVs with or with cords. The equipment is intact with housing. Minimal to no disassembly has occurred.

Whole Intact Tubes with gun and vacuum intact or released and with or without the band.

Whole Tubes without gun and with or without the band.

Processed Tubes to include both funnel and panel glass. Particle size will be determined by contract between shipper and smelter or treatment facility. Material should be free of all loose metals, bands, and shadow masks. May or may not be cleaned prior to shipping.

Leaded Funnel Glass and Frit for smelting or other recovery/treatment. This material may include up to 10% panel glass. May or may not be cleaned prior to shipment. Particle

size will be determined by contract between shipper and smelter or treatment facility.

Panel Glass (minimal or lead free) for multiple uses including construction, sand blasting, art glass, etc. May or may not be cleaned prior to shipment. Particle size will be determined by contract between shipper and receiving facility.

Clean Panel Glass with metal oxide concentrations of less than 5 ppm, free of coatings.

Electronics Scrap Plastics

Applicable to all Specs:

- All specifications are subject to final terms and conditions as agreed to between the buyer and the seller
- Plastic should not contain hazardous materials, medical waste or free-flowing liquid
- Contamination includes: painted/coated; laminated; metals; dirt; and wood

Baled Specs:

Baled CRT TV Plastic

- From disassembled CRT TVs
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Light Colored CRT Monitor Plastic

- From disassembled light colored (white, beige) CRT computer monitors
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Dark Colored CRT Monitor Plastic

- From disassembled dark (black, dark grey) colored CRT monitors
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Dark Colored Flat Panel Monitor Plastic

- From disassembled dark (black, dark grey) colored LED and LCD monitors
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Dark Colored Printer Plastic

- From disassembled dark (black, dark grey) colored printers
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Light Colored Printer Plastic

- From disassembled light (white, beige) colored printers
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Dark Colored Mixed Electronics Plastic

- From disassembled dark (black, dark grey) mixed electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Light Colored Copier Plastic

- From disassembled light (white, beige) colored copiers
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Dark Colored Copier Plastic

- From disassembled dark (black, dark grey) colored copiers
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Light Colored Mixed Electronics Plastic

- From disassembled light colored (white, beige) electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Baled Mixed Color Electronics Plastic

- From disassembled mixed (all colors) colored electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Specs:

Shredded CRT TV Plastic

- From shredded or disassembled TVs
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Light Colored CRT Monitor Plastic

- From shredded or disassembled light (white, beige) colored monitors
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Dark CRT Monitor Plastic

- From shredded or disassembled dark (black, dark grey) colored monitors
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Dark Electronics Plastic

- From shredded or disassembled dark (black, dark grey) colored electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Light Electronics Plastic

- From shredded or disassembled light (white, beige) colored electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

Shredded Mixed Color Electronics Plastic

- From shredded or disassembled mixed (all colors) colored electronics equipment
- 36,000 +/- pounds per 40 ft. HC or tractor trailer
- Maximum Contamination < or = 2.0% by weight

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Guidelines for Tire Scrap: TS-2020

Rubber From Scrap Tires

General Guidelines

Items not covered in the specifications, and any variations in the specification are subject to special arrangement between Buyer and Seller. Percentages listed below are by weight.

Definitions

Fines consist of materials that pass a 4.75 mm sieve. These materials may include rubber, fiber, inorganic and organic matter, dirt, and other non-tire materials.

Sizes will be determined by sieving. Suitable sieve sizes will be selected. Nest the sieves in order of decreasing size of opening from top to bottom and place the sample on the top sieve. Agitate the sieves by hand or by mechanical apparatus for a sufficient period so that additional sieving does not result in substantial additional material passing through the sieves.

TDM refers to tire-derived material.

Rubber Primarily Used for Civil Engineering

TDM 2-A

All material must be smaller than 4";
at least 90% must be smaller than 2½";
at least 50% must be larger than 1½";
at least 90% must be larger than ½";
maximum of ½" protrusion of steel; and
maximum of 1% fines.

TDM 2-B

All material must be smaller than 4";
at least 90% must be smaller than 2½";
at least 50% must be larger than 1½";
at least 90% must be larger than ½";
at least 90% must not exceed 1" protrusion of steel; and
maximum of 5% fines.

TDM 2-C

All material must be smaller than 4";
at least 90% must be smaller than 2½";
at least 50% must be larger than 1½";
at least 90% must be larger than ½"; and
maximum of 5% fines.

TDM 3-A

At least 90% must be smaller than 4";
at least 75% must be larger than 1½";
at least 90% must be larger than ½";
maximum of ¼" protrusion of steel; and
maximum of 1% fines.

TDM 3-B

At least 90% must be smaller than 4";
at least 75% must be larger than 1½";
at least 90% must be larger than ½";
at least 90% must not exceed 1" protrusion of steel;
and maximum of 5% fines.

TDM 3-C

At least 90% must be smaller than 4";
at least 75% must be larger than 1½";
at least 90% must be larger than ½"; and
maximum of 5% fines.

TDM 5-A

All material must be smaller than 8";
at least 90% must be smaller than 6";
at least 50% must be larger than 3";
at least 90% must be larger than 1½";
maximum of 1" protrusion of steel; and
maximum of 1% fines.

TDM 5-B

All material must be smaller than 8";
at least 90% must be smaller than 6";
at least 50% must be larger than 3";
at least 90% must be larger than ½";
at least 90% must not exceed 2" protrusion of steel;
and maximum of 5% fines.

TDM 5-C

All material must be smaller than 8";
at least 90% must be smaller than 6";
at least 50% must be larger than 3";
at least 90% must be larger than ½"; and
maximum of 5% fines.

TDM 8-A

At least 90% must be smaller than 12";
at least 75% must be smaller than 8";
at least 50% must be larger than 3";
at least 75% must be larger than 1½";
maximum of 2" protrusion of steel; and
maximum of 1% fines.

TDM 8-B

At least 90% must be smaller than 12";
at least 75% must be smaller than 8";
at least 50% must be larger than 3";
at least 75% must be larger than 1½";
at least 90% must not exceed 2" protrusion of steel;
and maximum of 5% fines.

TDM 8-C

At least 90% must be smaller than 12";
at least 75% must be smaller than 8";
at least 50% must be larger than 3";
at least 75% must be larger than 1½"; and
maximum of 5% fines.

TDM 12-A

At least 90% must be smaller than 18";
at least 50% must be larger than 6";
at least 75% must be larger than 1½";
maximum of 2" protrusion of steel; and
maximum of 1% fines.

TDM 12-B

At least 90% must be smaller than 18";
at least 50% must be larger than 6";
at least 75% must be larger than 1½";
at least 90% must not exceed 2" protrusion of steel;
and maximum of 5% fines.

TDM 12-C

At least 90% must be smaller than 18";
at least 50% must be larger than 6";
at least 75% must be larger than 1½"; and
maximum of 5% fines.

Guidelines for Metals Transactions

These Guidelines are intended as a reference to assist members in carrying out their business obligations in a manner consistent with accepted industry practices. While the Guidelines are not obligatory, it is suggested that potential problems and misunderstandings may often be avoided by following these recommended procedures, in conjunction with ISRI's scrap descriptions.

At times, the respective parties to a transaction may be unaware of the differences in trading practices of the other party. This diversity of interpretation often leads to misunderstandings, disputes, and in some instances expensive lawsuits. It is with the objective of providing members the means of avoiding such friction that ISRI has published these Guidelines, which are based on those practices most common and current in the industry.

On those points where it is impractical to provide recommendations, it is advised that the points be mutually agreed upon by the parties involved.

Part I: Guidelines for Contracts

A contract is an agreement between two or more parties to perform a legally enforceable act.

Therefore, all contracts should be in writing and set forth in **specific** terms. Before signing a contract, one should carefully read and understand all terms of it. No discrepancies or ambiguities should exist at the time the contract is executed. If you receive a contract with terms that are objectionable, you should immediately notify the other party in writing of your objections. An attorney should be consulted when legal advice is needed.

It should be kept in mind that if a dispute arises under a contract, and a court is called in to interpret its terms, certain general rules will be applied. First, contracts will be construed as a "whole," and specific clauses will be subordinated to the contract's general intent. Second, the courts will construe words according to their "ordinary" meaning unless it is clearly shown that they were meant to be used in a technical sense. Also, where provisions appear to be inconsistent, the courts will determine whether some of the provisions are printed (indicating a form contract), as compared to others which are written or typed. The latter kinds of provisions will prevail.

It should be remembered that where you and a Buyer (or Seller) have reached verbal agreement on a transaction, your failure to sign and return a contract which is sent to you in confirmation of that verbal agreement may not relieve you of the obligations of the terms and conditions enumerated in that contract.

These Guidelines were developed to cover routine transactions. It is essential that any unusual arrangements must be completely spelled out in a contract. With these factors in mind, the following list of items is enumerated as a **Check-**

list for you to follow, either in the construction of a contract, or for the review of another party's contract proposal. We cannot overemphasize the need for accuracy and specificity.

Checklist Items

(BE SPECIFIC AT ALL TIMES)

I. Parties to Agreement:

Indicate full name and address of Buyer and Seller. Include name of individual person or persons involved. Buyer's and Seller's signatures are fundamental.

II. Date of Contract:

- (a) Give date the initial agreement was reached
- (b) Give Contract Number.

III. Description of Material:

Use NF code names or clearly describe what is being traded. Any allowable quality variation to be so stated. Ex: "X percent moisture allowed" or "Minimum CU content to be X percent" or "X percent painted material allowed."

IV. Quantity:

State exact quantity expected and indicate allowable tolerances or minimum/maximum limitations. Ex: "40,000 lbs. (5% More/Less allowed)" or "38,000 to 42,000 lbs."

V. Packing:

State type of packing allowable and restrictions if such are required. Ex: "Bales not to exceed 60 inches"; "Bales not to exceed 3,500 lbs."

VI. Delivery:

Show complete address of shipping or delivery point, including where applicable, specific rail siding or junction, forwarding warehouse, and party to be notified. Ex: "FOB (Actual Point of Shipment) Chicago, Ill."; "FOB (Actual Point of Delivery) St. Louis, Mo."; "FAS Baltimore Container Yard"; "C&F Tokyo, Japan." If these details cannot be furnished at the time of writing of contract, it should state "shipping/delivery instructions to follow." State means of conveyance to be employed. State size and type of truck, rail car, container or number of shipments expected or permitted.

VII. Shipment:

Time allowed for shipment or delivery should be clearly stated. Ex: "Shipment by Jan. 15, 2008 LATEST"; or "Delivery by Jan. 15, 2008." Indicate at whose option, Buyer's or Seller's, shipment shall be made in time period stated.

VIII. Price:

State price per unit. Ex: "\$20.00/CWT"; "20.00 Cents/Pound"; "\$400.00/Net Ton"; "\$440.92/Metric Ton." and indicate where appropriate "Clean and Dry"; "Full Copper Content." If applicable, state exact processing, smelting, refining charge, or unit deductions for impurities. (Avoid the use of the word "penalties.")

IX. Payment:

Terms of payment should be explicit. Ex: "Net 30 days after shipment"; "Net 15 days after mill receipt." Avoid phrases such as "usual;" "Net 30;" "Net Cash." Documents required to effect payment to be clearly stated. Ex: "Bill of Lading"; "Invoice"; "Weight Certificate." State how payment shall be made. If there is discussion of compensation for delayed payments, it should be included in the contract. If Letter of Credit is called for as a means of payment, it is advisable that the terms to be included in the Letter of Credit also be stated in the contract. When applicable, contract should state whether Buyer or Seller is responsible for payment of taxes, duties, or any other levies to which a shipment could be subjected. Contract should state whether the Seller's or Buyer's weights shall govern the basis of settlement.

X. Assignment:

The contract may state whether the Buyer and/or the Seller has the right to assign the contract. If it does, it should emphasize that the obligation arising under the contract shall be equally binding on his assignee.

XI. Notice:

The Seller should specify how notice to be given under the contract should be received—i.e. by hand, by telegram, by certified or registered mail. One should also specify when notice is deemed to be received by the party to whom it is given.

XII. Disclaimer of Warranties:

Depending on the type of transaction, or the metal involved, the Seller may want to limit his liability by disclaiming any warranties of merchantability or of fitness for a particular purpose.

XIII. Default:

The contract should contain a provision setting forth the events which would result in a default of the contract. This provision might also contain a clause stipulating damages and/or setting forth available remedies (i.e. specific performance) in the event a default does, in fact, occur.

XIV. Force Majeure:

This item is related to the item of default, as indicated in paragraph XIII. Seller or Buyer may enumerate, either generally or specifically, what events (i.e. strikes, fires, accidents) constitute circumstances beyond its control and thereby absolve him/her of any liability for damages or delay.

XV. Non-Waiver:

The Seller or Buyer should state in the contract that his/her failure to insist upon strict performance in any given instance shall not be construed as a waiver or relinquishment for the future of any of the terms, covenants and conditions contained therein.

XVI. Claims:

The Seller may specify that any claims involved in a metals transaction for contaminated materials, weight shortage, or for any other cause is waived by the Buyer unless brought to the Seller's attention within a certain number of days after delivery.

XVII. Arbitration and Applicable Law:

The contract should set forth which state's or country's law will apply in the event of a legal dispute under the contract. It should also provide for arbitration procedure. (If ISRI Arbitration is desired, the contract should so stipulate.)

XVIII. Benefit:

The contract should stipulate on whom it is binding. For instance, the Seller or Buyer may want to specify that the contract inures to the benefit of the parties, their legal representatives, successors and assignees.

XIX. Entire Agreement:

This provision is especially important in the area of metals transactions, which frequently involve extensive preliminary negotiations. A clause may be inserted into the contract stating that the contract constitutes the parties' entire agreement and supersedes all prior agreements and understandings with respect to the subject matter of the contract.

XX. Modification:

A clause may be included in the contract stating that the contract's requirements can only be modified by a written instrument signed by the parties or their respective agents. This insures that the parties' informal discussions will not later be construed as affecting an alteration of the contract.

Part II: Packing, Weighing, Shipping and Receiving

It is recommended that strict adherence to contract terms will minimize many of the potential problems in this area. If there is a question about any item, one should communicate with his/her Buyer/Seller and clarify the situation prior to shipping. Listed below are some specific guidelines to be used in avoiding the most frequently reported problems.

Packing (All Shipments)**Seller's Responsibility:**

- a. Pack in the manner and form agreed. Example: In sound bales, briquettes, boxes, pallets, drums, loose, etc.
- b. Be sure that Buyer agrees with your definition of words and phrases, i.e. Bale, Briquette, Coil, etc. as well as allowed dimensions and weights of such.
- c. Material and packages should be securely tied or supported so that packages will hold in transit and normal handling.

Buyer's Responsibility:

- a. Advise Seller of any specific prohibitions, i.e. type or method of packing, size or weight of pieces, units or packages, etc.
- b. Be sure that Seller agrees with your definition of words and phrases, i.e. Bale, Briquette, Coil, etc., as well as allowed dimensions and weights of such.

Weighing, Shipping and Receiving (Truck Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire truckload should be checkweighed for comparison. Reconcile or explain any differences. If truck is

weighed during inclement weather or wind, make note of this on weight ticket.

- b. Trailers should be drop-weighed (both empty and loaded).
- c. All equipment should be inspected before loading, and cleaned or repaired where necessary to avoid loss or spillage.
- d. Open top trucks or trailers should be tarped or covered.
- e. Vans and closed trailers should be sealed and seal numbers indicated on all documents.
- f. If your customer requires appointments, make one in advance. Otherwise, as a courtesy, advise the Buyer of your anticipated delivery schedules.
- g. A complete manifest and packing list should accompany each shipment. This should clearly indicate the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package. This detailed information should be put into an envelope and attached to the inside wall of the truck or van. If this cannot be done, give a complete set of papers to the driver to deliver with the original Bill of Lading covering the shipment. At the very least, notify Buyer by telephone, telex or wire of these details on the day shipment leaves.
- h. Different lots should always be properly segregated and bulkheaded to avoid comingling. Each package should be tagged or marked to aid in proper identification and segregation at the receiving point.
- i. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material is loaded safely. Proper care should be taken to insure that the material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. If Seller requires appointment prior to pickup, make one in advance. Otherwise, as a courtesy, advise the Seller of your anticipated pickup schedule.
- b. Trailers should be drop-weighed (both empty and loaded).
- c. Carefully check shipment advices and compare package count, seal numbers, weights.
- d. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred.
- e. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- f. Truck or trailer should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyers should cooperate in every way to help minimize losses.

Weighing, Shipping and Receiving (Rail Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire rail car should be checkweighed for comparison. Reconcile or explain any differences. If rail car is weighed during inclement weather or wind, make note of this on weight ticket.
- b. Railroad cars should be uncoupled and at rest (if possible) before weighing.
- c. All equipment should be inspected before loading, and cleaned or repaired where necessary to avoid loss or spillage.
- d. Railroad cars should be sealed and seal numbers indicated on all documents.
- e. A complete manifest and packing list should accompany each shipment. This should clearly indicate the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package. This detailed information should be put into an envelope and attached to the inside wall of the railroad car. If this cannot be done, mail a complete set of papers to the Buyer on the day shipment leaves.
- f. Different lots should always be properly segregated and bulkheaded to avoid comingling. Each package should be tagged or marked to aid in proper identification and segregation at the receiving point.
- g. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. Railroad cars should be uncoupled and at rest (if possible) before weighing.
- b. Carefully check shipment advices and compare package count, seal numbers, weights.
- c. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred.
- d. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- e. Rail car should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyer should cooperate in every way to help minimize losses.

Weighing, Shipping and Receiving (Export/Import Shipment)

Seller's Responsibility:

- a. Each package should be individually weighed and the entire container load should be check-weighed for comparison. If container is weighed during inclement weather or wind, make note of this on weight ticket.

- b. Container and chassis should be drop-weighed, if possible, both empty and loaded.
- c. Prepare and send to Buyer a complete manifest and packing list indicating the order number, items shipped, number and type of packages of each commodity, as well as the gross, tare and net weights of each package and the seal numbers.
- d. If shipment is against a Letter of Credit, pay strict attention to all terms.
- e. Place seals on all container doors and indicate seal numbers on documentation.
- f. Material and packages should be properly stowed and braced to prevent movement during shipment.
- g. Be aware that someone at the delivery point will have to unload the shipment. Pay particular attention to door areas to assure that material is loaded safely. Proper care should be taken to insure that the material can be unloaded in a safe and expedient manner.

Buyer's Responsibility:

- a. Container and chassis should be drop-weighed, if possible, both empty and loaded.
- b. Carefully check shipment advices and compare package count, seal numbers, weights.
- c. **Prior to unloading**, if a significant* weight difference is apparent, the Seller should be notified promptly and, if requested, another weight should be taken to determine if spillage or theft might have occurred. Seller should be given opportunity to appoint surveyor or representative to verify weights.
- d. **After unloading**, promptly advise Seller of any significant* differences between advised and actual weights, segregation, classification or quality. (Note: Refer to Part IV of the circular for recommended procedures in handling quality problems.)
- e. Container should be completely unloaded including any spilled material which should be picked up, weighed and identified as spilled from original containers. Buyer should cooperate in every way to help minimize losses.

*For purposes of this section, the meaning of the word "significant" shall be determined by agreement between Buyer and Seller, depending on the commodities and their values.

Part III: Transportation Guide

The mode and type of conveyance should be specified in the contract. If it has not been, then it is important that Buyer and Seller agree upon the mode and type to be used. These guidelines will assist in determining the appropriate means of transportation to employ.

A. Mode—Truck/Trailer

- 1. Type:
 - a. Dump
 - b. Removable sides
 - c. Van—open or closed
 - d. Dimensions of unit (20 ft., 40 ft., etc.)

- e. Determine if truck/trailer capacity meets minimum weight specified on contract.

B. Mode—Rail Car

- 1. Type:
 - a. Box car or gondola
 - b. Size of door opening, i.e. single or double door
 - c. Special type D.F., Hi-Cube, etc.
 - d. Dimensions of car (40 ft., 50 ft., 60 ft., etc.)
 - e. Determine if rail car capacity meets minimum weight specified on contract.

C. Export Shipments

- 1. Container:
 - a. Type of container, i.e. closed, open-top, flat rack, Hi-cube, etc.
 - b. Size of container (20 ft., 35 ft., 40 ft., 45 ft., etc.)
 - c. Determine if container capacity meets minimum weight specified on contract.
- 2. Breakbulk

Part IV: Rejections—Downgrades—Claims

A brief explanation of these items will help one understand and implement the procedures recommended in this section.

Rejections: Rejections can occur when a Buyer refuses to accept a shipment of material that does not conform to the description specified in the contract. Usually in such cases, the Buyer cannot utilize the material and the Seller is asked to remove the material from the Buyer's place of delivery. A rejection can occur prior to unloading, but often the cause of the problem cannot be determined until the material has been off loaded and graded. Any part, or all, of the shipment may be subject to rejection.

Downgrades: Downgrades can occur when all, or part, of the material in a shipment is not in conformity with the description specified in the contract. Often, in such cases, the Buyer can utilize the material and is willing to accept delivery of the material, subject to a price commensurate with its value.

Claims: This term is used mostly in export-import movements, and is used generically to encompass both **rejections** and **downgrades**, as well as **weight shortages**.

Strict adherence to contract terms can minimize the common causes of these difficulties. However, if a problem arises, it should be given prompt attention and settlement should be attempted as quickly as is practical. It is essential that both parties cooperate and keep communications open to minimize expenses and to preserve the relationship. Negotiations should not be conflicting but mutually beneficial and fair. Listed below are some recommended steps to be taken when a problem arises.

Domestic Shipments

Buyer's Responsibilities:

- a. In the event of a rejection Buyer must notify Seller immediately by telephone or telex. If Seller fails to

respond within two business days, Buyer may return material in most prudent manner. Subject to contract provisions, Buyer should promptly advise Seller concerning replacement of rejected material.

- b. In the event of a downgrade Buyer must notify Seller immediately by telephone or telex and afford Seller an opportunity to inspect the material prior to its use. If material is to be inspected by Seller or his/her representative, Buyer should agree to a mutually convenient time to do so.
- c. Buyer must give Seller option of removing material if he/she does not agree to downgrade. (All costs of unloading and reloading are for Seller's account.)

Seller's Responsibilities:

- a. In the event of a rejection Seller should respond promptly and advise Buyer of his/her intentions. Seller must reply within two business days. Subject to contract provisions, he/she must advise Buyer promptly concerning replacement of rejected material.
- b. In the event of an unacceptable downgrade Seller must advise Buyer within two business days if he/she wishes to inspect material and agree upon a mutually convenient time to do so.

- c. If Seller wishes to remove downgraded material from Buyer's delivery point, he/she must advise Buyer promptly. (All costs of unloading and reloading are for Seller's account.)

Export-Import Shipments

Buyer's Responsibility:

- a. In the event of a claim, time is of the essence and notification should be given to Seller within a reasonable period of time after arrival of vessel in receiving port.
- b. In the event of a claim, the material should be held intact until agreement has been reached. The acceptable portion of the material may be consumed and/or arrangements may be made to sample a portion of material, i.e., 10-25% with balance held intact pending resolution of claim.

Seller's Responsibility:

- a. In the event of a claim, Seller should respond to Buyer's notification promptly by telephone, telex, wire, or cable.
- b. When a claim settlement has been agreed upon, terms of settlement must be followed promptly.

Inbound Residential Single Stream

Inbound Residential Single Stream is the material derived from a recycling method whereby residents of a community place allowed materials in a specifically designated receptacle to be left at a drop off point outside their residence.

Materials in the receptacle are then collected by a recycler for processing at a Materials Recovery Facility. Organic and other materials that can be considered solid waste are not permitted in this material mix.

Any other recyclable materials may be added or deleted based on the individual agreement between buyer (MRF) and seller (Hauler or Municipality).

Description

A commodity mix of certain materials placed in specifically designated receptacles to be left at a drop off point outside their residence.

Paper	Plastic	Metal	Glass
Uncoated White Office Paper, Printing and Writing Paper	Empty PET (#1), HDPE (#2), PP (#5) Plastic Bottles, Jugs, Jars And Containers	Aluminum, tin, and steel beverage and product containers	Bottles and jars of any color
Colored Paper	Bulky Rigid Plastics Such As Crates, Buckets, Totes, Baskets		
Newspaper	Tubs and Lids		
Magazines			
Phonebooks			
Junk Mail			
Paperboard			
Tissue boxes/rolls			
Paper towel and toilet paper rolls			
Cardboard			
Brown or Kraft paper			
Paper boxes/cartons			
Pizza Boxes, remove food and liner			

- All materials should be clean, loose, and dry.

Contamination

Contamination is defined as anything not considered acceptable in the specification.

- None permitted unless specifically agreed to in writing between buyer and seller.
- No bagged recyclables unless otherwise accepted in local curbside collection program.

The following items are considered contamination:

Paper	Plastic	Metal	Glass
Shredded Paper	Plastic Bags & Plastic Film	All metal with the exception of that listed above	All glass with the exception of that listed above
Containers coated with wax, plastic or other materials	Expanded Polystyrene Foam (#6)	Aerosol cans that are under pressure or partly filled	Drinking glasses, crystal or tableware
Wallpaper	Multi-layered juice pouches		Mirrors
Material with excess food residue or other organic material	Plastic from electronics		Non-container glass
	Plastic marked as biodegradable or compostable		Light bulbs
			Windows

Prohibited Materials

The term “Prohibited Materials” as used throughout this document is defined as items never allowed and includes any material that contains medical, organic, food, hazardous, poisonous, radioactive or toxic waste and other harmful substances or liquids.

Additional examples of prohibited items are:

- a) Sharps and Needles
- b) Batteries
- c) Radioactive materials
- d) Hazardous materials
- e) Corrosives
- f) Medical waste
- g) Pesticides, poisons, bio hazards
- h) Compressed gas cylinders
- i) Refrigerants
- j) PCB containing capacitors, transformers, ballast
- k) Asbestos
- l) Materials that may be damaging to equipment
- m) Materials containing information protected or regulated under any local, state or federal privacy or data security laws, including, but not limited to the Health Insurance Portability and Accountability Act of 1996, as amended, or other regulations or ordinances.
- n) Wax
- o) Electronics
- p) Large items such as tires, appliances, roofing materials
- q) Wood
- r) Ceramics
- s) Food Waste or other items that can otherwise be composted
- t) Rock, dirt, asphalt, concrete

Residential curbside recycling systems can offer a significant amount of variability. Please check with the recycling program coordinator for more information on what is considered acceptable in the jurisdiction.

Inbound Residential Dual Stream

Inbound Residential Dual Stream is the material derived from a recycling method whereby residents of a community place allowed materials in a specifically designated receptacle to be left at a drop off point outside their residence. Materials in the receptacle are then collected by a recycler for processing at a Materials Recovery Facility. Organic and other materials that can be considered solid waste are not permitted in this material mix.

Any other recyclable materials may be added or deleted based on the individual agreement between buyer (MRF) and seller (Hauler or Municipality).

Description

A commodity mix of certain materials placed in specifically designated receptacles to be left at a drop off point outside the residence resulting from Dual Stream collection systems that separate bins, or carts for Paper and Containers and/or collected in separate compartments on one or more trucks.

Paper Separated at the Collection point (Either stacked below or separate; not to be mixed with Containers)		(not to be mixed with Paper)		
		Plastic	Metal	Glass
Uncoated White Office Paper, Printing and Writing Paper		Empty PET (#1), HDPE (#2), PP (#5) Plastic Bottles, Jugs, Jars And Containers	Aluminum and tin beverage and product containers	Bottles and Jars of any color
Colored Paper		Bulky Rigid Plastics Such As Crates, Buckets, Totes, Baskets		
Newspaper		Tubs and Lids		
Magazines		Cartons		
Phonebooks				
Junk Mail				
Paperboard				
Tissue boxes/rolls				
Paper towel and toilet paper rolls				
Cardboard				
Brown or Kraft paper				
Paper boxes				
Pizza Boxes, remove food and liner				

- All materials should be clean, loose, and dry.

Contamination

Contamination is defined as anything not considered acceptable in the specification.

- None permitted unless specifically agreed to in writing between buyer and seller.
- No bagged recyclables unless otherwise accepted in local curbside collection program.

The following items are considered contamination:

Paper	Plastic	Metal	Glass
Shredded Paper	Plastic Bags & Plastic Film	All metal with the exception of that listed above	All glass with the exception of that listed above
Containers coated with wax, plastic or other materials	Expanded Polystyrene Foam (#6)	Aerosol cans that are under pressure or partly filled	Drinking glasses, crystal or tableware
Wallpaper	Multi-layered juice pouches		Mirrors
Material with excess food residue or other organic material	Plastic from electronics		Non-container glass
	Plastic marked as biodegradable or compostable		Light bulbs
			Windows

Prohibited Materials

The term “Prohibited Materials” as used throughout this document is defined as items never allowed and includes any material that contains medical, organic, food, hazardous, poisonous, radioactive or toxic waste and other harmful substances or liquids.

Additional examples of prohibited items are:

- a) Sharps and Needles
- b) Batteries
- c) Radioactive materials
- d) Hazardous materials
- e) Corrosives
- f) Medical waste
- g) Pesticides, poisons, bio hazards
- h) Compressed gas cylinders
- i) Refrigerants
- j) PCB containing capacitors, transformers, ballast
- k) Asbestos
- l) Materials that may be damaging to equipment
- m) Materials containing information protected or regulated under any local, state or federal privacy or data security laws, including, but not limited to the Health Insurance Portability and Accountability Act of 1996, as amended, or other regulations or ordinances.
- n) Wax
- o) Electronics
- p) Large items such as tires, appliances, roofing materials
- q) Wood
- r) Ceramics
- s) Food Waste or other items that can otherwise be composted
- t) Rock, dirt, asphalt, concrete

Residential curbside recycling systems can offer a significant amount of variability. Please check with the recycling program coordinator for more information on what is considered acceptable in the jurisdiction.

ISRI Arbitration Service

ISRI established an arbitration service as a means to enable members to use arbitration to resolve disputes.

ISRI arbitration is a voluntary procedure and must be agreed upon by both parties in the dispute. It is not required that both parties to the dispute be ISRI members.

The complete procedure for arbitration is set forth in ISRI's "Rules for Arbitration," which are available from Association headquarters in Washington, D.C. The rules contain the necessary form that must be completed to initiate arbitration. ISRI treats all filings, awards, and proceedings as confidential.

The rules are highlighted below:

1. Anyone may propose arbitration in a dispute, though at least one party must be a member of the association. Both parties must agree to the arbitration by signing a "Submission to Arbitrate" form and agreeing to abide by the applicable Arbitration Rules.
2. A panel of arbitrators has been established by the association. The arbitrators serve without compensation, except for reasonable expenses. The arbitration parties must draw their arbitrators from the panel. A maximum of three arbitrators can be issued in any proceeding; the parties are encouraged to use a single arbitrator.
3. There is a specific schedule of fees listed in the "Rules for Arbitration." Each party must deposit with the association in advance \$500 plus \$500 for each arbitrator. The total deposit for each party thus is either \$1,000 or \$2,000, depending on whether one arbitrator is to be used or three. A portion of the fee is refundable if not required to defray arbitrators' costs. The arbitrators

may require the losing party to reimburse the prevailing party for its share of these costs.

4. The arbitration procedure usually includes a hearing, at which time the parties involved are required to appear, present their respective cases, and be available for questioning by the arbitrator(s). All physical evidence (contracts, correspondence, relevant comments, etc.) may be required to be submitted in advance to the arbitrators. A party in the arbitration may be accompanied by counsel but must inform the other party in advance and receive permission from the arbitrators. Witnesses may also be called to an arbitration hearing. There is also an optional procedure for conducting the arbitration without an oral hearing.
5. An award by the arbitrator(s) will be made promptly, within 20 days after hearings have been completed or final briefs submitted. The award is made in writing.
6. The rules state that the parties to the dispute shall be deemed to have consented that a judgment upon the award be entered in any court having jurisdiction over an action to enforce the award.

Members who wish to provide an automatic basis for the settlement of any disputes arising from a transaction are encouraged to provide in their contracts that the ISRI Arbitration Procedure shall prevail in the event of any ensuing controversy and that each party will take all necessary steps to initiate such arbitration. Members are urged to obtain and carefully read the "Rules for Arbitration" before proceeding.

For more information, contact Robin Wiener, 202/662-8512 or rwiener@isri.org.

THE SEARCH STARTS HERE FOR MORE EFFICIENT SOLUTIONS IN RESOURCE RECLAMATION

Start with Steinert – The Resource Search Engine

- + Magnetic Separators
- + Eddy Current Separators
- + Overbelt Magnets
- + Magnet Drums
- + X-Ray Sorting (XRT / XRF)
- + Induction Sorting
- + NIR (Near-Infrared) Sorting
- + Color Sorting
- + Laser / Shape Sorting

THE RESOURCE
SEARCH ENGINE

Ag Pb Al Fe Cu



Our high sorting depths and precise recovery systems result in more economic reclamation of valuable material fractions for new revenue streams and to upgrade the value of residual materials.

We have dedicated more than 130 years' experience toward upgrading secondary materials into premium grade resources for the metals and recycling industry.



MAGNETIC + SENSOR **SORTING SOLUTIONS**



Get started at
steinertglobal.com/us/metal-recycling/

285 Shorland Drive | Walton KY 41094 | 1 (800) 595-4014 | sales@steinertus.com

APPENDIX B. PROPERTY OWNER'S AUTHORIZATION



Metal Management Midwest, Inc.

2500 S. Paulina Street
Chicago, IL 6068

October 21, 2021

To Whom It May Concern,

Metal Management Midwest authorizes the following Chicago, IL facility to operate as a Large Recycling Facility in accordance with the requirements within the Chicago Recycling Facility Ordinance.

Paulina Facility
2500 S. Paulina Street
Chicago, IL 60608

If you have any questions or concerns, please feel free to contact me.

Sincerely,

A handwritten signature in black ink, appearing to read "George Malamis", followed by a long horizontal flourish.

George Malamis, VP
Metal Management Midwest, Inc.
d/b/a Sims Metal

APPENDIX C. PROPERTY TAX INFORMATION

SIMS METAL MANAGEMENT Check: 900006945 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203D USD 2/3/2021 11,237.04 0.00 11,237.04

Total

11,237.04

Payment: 210203D

Prepared by KT Date 2/9/21

Reviewed by _____ Date _____

Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006945 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203D USD 2/3/2021 11,237.04 0.00 11,237.04

Total

11,237.04

Payment: 210203D

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006945

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 11,237.04***

PAY ELEVEN THOUSAND TWO HUNDRED THIRTY SEVEN AND 4/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
P.O. BOX 805436
CHICAGO, IL 60680-4116
USABank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006945⑈ ⑈071923284⑈5590039714⑈

\$ 11,237.04

By 03/02/21 (on time)

20 First Installment Property Tax Bill

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classificati
17-30-210-009-0000	601	77044	2020	2021	WEST CHICAGO	5-9

IF PAYING AFTER
03/02/21, PLEASE PAY03/03/21 - 04/01/21
\$11,237.04

OR

04/02/21 - 05/03/21
\$11,237.04

OR

05/04/21 - 06/01/21
\$11,405.60**TAXING DISTRICT DEBT AND FINANCIAL DATA**

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		20,430.98
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	11,237.04

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2265 S ASHLAND AVE
CHICAGO IL 60608**MAILING ADDRESS**METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 11,237.04**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)
17-30-210-009-0000TILE
Volume
601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

00202001007173021000900004006922400011237043000112370430001123704300011405606

20 17-30-210-009-0000 0 20 0 0736357 73740

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17302100090000/0/20/E/0001123704/1

SIMS METAL MANAGEMENT Check: 900006949 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
210203H	USD	2/3/2021	12,307.80	0.00	12,307.80
Total					12,307.80
Payment: 210203H					

Prepared by KT Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006949 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
210203H	USD	2/3/2021	12,307.80	0.00	12,307.80
Total					12,307.80
Payment: 210203H					

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW



1 Linden Avenue East
Jersey City, NJ 07305

SIMS
METAL
MANAGEMENT

No. 900006949

70-2328
719 IL

PAY TWELVE THOUSAND THREE HUNDRED SEVEN AND 80/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
P.O. BOX 805436
CHICAGO, IL 60680-4116
USA

DATE
02/09/2021

CHECK AMOUNT
\$ 12,307.80***

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006949⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill**\$ 12,307.80**

By 03/02/21 (on time)

Property Index Number (PIN) 17-30-400-003-0000	Volume 601	Code 77021	Tax Year (Payable In) 2020 2021	Township WEST CHICAGO	Classification 5-81
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IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$12,307.80	OR	04/02/21 - 05/03/21 \$12,307.80	OR	05/04/21 - 06/01/21 \$12,492.42
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TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		22,377.82
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	12,307.80

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2700 S WOOD ST
CHICAGO IL**MAILING ADDRESS**METAL MGMT MIDWEST
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 12,307.80**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)
17-30-400-003-0000Tax
Volume
601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

Internal use only

00202001007173040000300002008922400012307807000123078070001230780700012492426

20 17-30-400-003-0000 0 20 0 0736368 73749

METAL MGMT MIDWEST
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17304000030000/0/20/E/0001230780/1

SIMS METAL MANAGEMENT Check: 900006950 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203I USD 2/3/2021 23,622.76 0.00 23,622.76

Total 23,622.76

Payment: 210203I

Prepared by KD Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006950 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203I USD 2/3/2021 23,622.76 0.00 23,622.76

Total 23,622.76

Payment: 210203I

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006950

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 23,622.76***

PAY TWENTY THREE THOUSAND SIX HUNDRED TWENTY TWO AND 76/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006950⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill**\$ 23,622.76**

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classificat
17-30-210-034-0000	601	77044	2020	2021	WEST CHICAGO	5-9:

IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$23,622.76	OR	04/02/21 - 05/03/21 \$23,622.76	OR	05/04/21 - 06/01/21 \$23,977.10
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TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		42,950.47
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	23,622.76

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2542 S WOOD ST
CHICAGO IL**MAILING ADDRESS**METAL MANAGEMENT INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 23,622.76**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)
17-30-210-034-0000716
Volume
601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

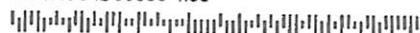
Internal use only

00202001007173021003400006008922400023622764000236227640002362276400023977103

20 17-30-210-034-0000 0 20 0

0736362

73748

METAL MANAGEMENT INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17302100340000/0/20/E/0002362276/1

SIMS METAL MANAGEMENT Check: 900006951 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
210203J	USD	2/3/2021	5,271.72	0.00	5,271.72

Total

5,271.72

Payment: 210203J

Prepared by KT Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006951 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
210203J	USD	2/3/2021	5,271.72	0.00	5,271.72

Total

5,271.72

Payment: 210203J

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006951

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 5,271.72***

PAY FIVE THOUSAND TWO HUNDRED SEVENTY ONE AND 72/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006951⑈ ⑈071923284⑈5590039714⑈

\$ 5,271.72

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-039-0000	601	77021	2020	2021	WEST CHICAGO	5-8

IF PAYING AFTER
03/02/21, PLEASE PAY03/03/21 - 04/01/21
\$5,271.72

OR

04/02/21 - 05/03/21
\$5,271.72

OR

05/04/21 - 06/01/21
\$5,350.80**TAXING DISTRICT DEBT AND FINANCIAL DATA**

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		9,584.95
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	5,271.72

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2232 S ASHLAND AVE
CHICAGO IL 60608**MAILING ADDRESS**METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 5,271.72**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)
17-30-210-039-0000TAX
Volume
601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

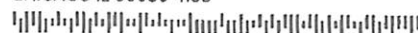
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20 17-30-210-039-0000 0 20 0 0736365 73752

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307



COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155



17302100390000/0/20/E/0000527172/1

SIMS METAL MANAGEMENT Check: 900006952 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203K USD 2/3/2021 16,922.02 0.00 16,922.02

Total

16,922.02

Payment: 210203K

Prepared by KT Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006952 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203K USD 2/3/2021 16,922.02 0.00 16,922.02

Total

16,922.02

Payment: 210203K

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006952

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 16,922.02***

PAY SIXTEEN THOUSAND NINE HUNDRED TWENTY TWO AND 2/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006952⑈ 1071923284⑈5590039714⑈

\$ 16,922.02

By 03/02/21 (on time)

Property Index Number (PIN) Volume Code Tax Year (Payable In) Township Classification
 17-30-210-045-0000 601 77021 2020 2021 WEST CHICAGO 5-93

IF PAYING AFTER 03/03/21 - 04/01/21 OR 04/02/21 - 05/03/21 OR 05/04/21 - 06/01/21
 03/02/21, PLEASE PAY \$16,922.02 \$16,922.02 \$17,175.85

TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX 30,767.31
 2020 ESTIMATE X 55%
 2020 TOTAL TAX = 16,922.02

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**

2501 S WOOD ST
 CHICAGO IL 60608

MAILING ADDRESS

METAL MANAGEMENT INC
 2500 S PAULINA ST
 CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 16,922.02**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN) T16
 17-30-210-045-0000 Volume
 601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

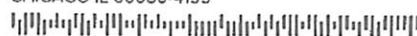
SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

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20 17-30-210-045-0000 0 20 0 0736366 73751
 METAL MANAGEMENT INC
 OR CURRENT OWNER
 2500 S PAULINA ST
 CHICAGO IL 60608-5307



COOK COUNTY TREASURER
 PO BOX 805436
 CHICAGO IL 60680-4155



17302100450000/0/20/E/0001692202/1

SIMS METAL MANAGEMENT Check: 900006955 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203N USD 2/3/2021 11,325.23 0.00 11,325.23

Total 11,325.23

Payment: 210203N

Prepared by KD Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006955 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203N USD 2/3/2021 11,325.23 0.00 11,325.23

Total 11,325.23

Payment: 210203N

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006955

70-2328
719 IL

DATE

02/09/2021

PAY ELEVEN THOUSAND THREE HUNDRED TWENTY FIVE AND 23/100 USD

CHECK AMOUNT

\$ 11,325.23***

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006955⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill

\$ 11,325.23

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-037-0000	601	77021	2020	2021	WEST CHICAGO	5-93

IF PAYING AFTER
03/02/21, PLEASE PAY03/03/21 - 04/01/21
\$11,325.23

OR

04/02/21 - 05/03/21
\$11,325.23

OR

05/04/21 - 06/01/21
\$11,495.11

TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINE

at cookcountytreasurer.com from your bank account or credit card

TAX CALCULATOR

2019 TOTAL TAX		20,591.33
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	11,325.23

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES

PROPERTY LOCATION

2537 S WOOD ST
CHICAGO IL 60608

MAILING ADDRESS

METAL MANAGEMENT INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE

\$ 11,325.23

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	TUS Volume
17-30-210-037-0000	601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

Internal use only

00202001007173021003700004008922400011325237000113252370001132523700011495117

2017-30-210-037-0000 0 20 0 0736364 73753

METAL MANAGEMENT INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17302100370000/0/20/E/0001132523/1

SIMS METAL MANAGEMENT Check: 900006956 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
2102030	USD	2/3/2021	21,172.46	0.00	21,172.46
Total					21,172.46

SIMS METAL MANAGEMENT Check: 900006956 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number	Currency	Invoice date	Gross amount	Cash discount	Payment amount
2102030	USD	2/3/2021	21,172.46	0.00	21,172.46
Total					21,172.46



Void

No. 900006956

70-2328
719 IL

PAY TWENTY ONE THOUSAND ONE HUNDRED SEVENTY TWO AND 46/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
P.O. BOX 805436
CHICAGO, IL 60680-4116
USA

Void

DATE
02/09/2021

CHECK AMOUNT
\$ 21,172.46***

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006956⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill**\$ 21,172.46**

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-032-0000	601	77044	2020	2021	WEST CHICAGO	5-9

IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$21,172.46	OR	04/02/21 - 05/03/21 \$21,172.46	OR	05/04/21 - 06/01/21 \$21,490.05
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TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		38,495.38
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	21,172.46

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2500 S ASHLAND AVE
CHICAGO IL 60608**MAILING ADDRESS**METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 21,172.46**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	Tax Volume
17-30-210-032-0000	601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

00202001007173021003200000008922400021172462000211724620002117246200021490050

20 17-30-210-032-0000 0 20 0 0736360 73756

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17302100320000/0/20/E/0002117246/1

SIMS METAL MANAGEMENT Check: 900006959 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203R USD 2/3/2021 1,736.99 0.00 1,736.99

Total

1,736.99

Payment: 210203R

Prepared by

KD

Date

2/9/21

Reviewed by

Date

Approved by

Date

SIMS METAL MANAGEMENT Check: 900006959 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203R USD 2/3/2021 1,736.99 0.00 1,736.99

Total

1,736.99

Payment: 210203R

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006959

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 1,736.99***

PAY ONE THOUSAND SEVEN HUNDRED THIRTY SIX AND 99/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER

P.O. BOX 805436

CHICAGO, IL 60680-4116

USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006959⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill

\$ 1,736.99

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-019-0000	601	77021	2020	2021	WEST CHICAGO	5-80

IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$1,736.99	OR	04/02/21 - 05/03/21 \$1,736.99	OR	05/04/21 - 06/01/21 \$1,763.04
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TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINE

at cookcountytreasurer.com from your bank account or credit card

TAX CALCULATOR

2019 TOTAL TAX		3,158.16
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	1,736.99

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES

PROPERTY LOCATION

2301 S ASHLAND AVE
CHICAGO IL 60608

MAILING ADDRESS

METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE

\$ 1,736.99

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	PIS
17-30-210-019-0000	Volume
	601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

Internal use only

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20 17-30-210-019-0000 0 20 0

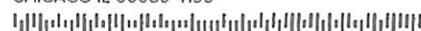
0736359

73761

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307



COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155



17302100190000/0/20/E/0000173699/1

SIMS METAL MANAGEMENT Check: 900006961 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203T USD 2/3/2021 48,107.52 0.00 48,107.52

Total 48,107.52

Payment: 210203T

Prepared by KT Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006961 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203T USD 2/3/2021 48,107.52 0.00 48,107.52

Total 48,107.52

Payment: 210203T

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006961

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 48,107.52***

PAY FORTY EIGHT THOUSAND ONE HUNDRED SEVEN AND 52/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006961⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill**\$ 48,107.52**

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-035-0000	601	77021	2020	2021	WEST CHICAGO	5-93

IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$48,107.52	OR	04/02/21 - 05/03/21 \$48,107.52	OR	05/04/21 - 06/01/21 \$48,829.13
---	------------------------------------	----	------------------------------------	----	------------------------------------

TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		87,468.22
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	48,107.52

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**2425 S WOOD ST
CHICAGO IL 60608**MAILING ADDRESS**METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 48,107.52**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	TUG Volume
17-30-210-035-0000	601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

00202001007173021003500009008922400048107520000481075200004810752000048829131

20 17-30-210-035-0000 0 20 0 0736363 73759

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

17302100350000/0/20/E/0004810752/1

SIMS METAL MANAGEMENT Check: 900006962 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203U USD 2/3/2021 6,891.78 0.00 6,891.78

Total

6,891.78

Payment: 210203U

Prepared by KD 2/9/21

Reviewed by _____

Approved by _____

SIMS METAL MANAGEMENT Check: 900006962 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203U USD 2/3/2021 6,891.78 0.00 6,891.78

Total

6,891.78

Payment: 210203U

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006962

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 6,891.78***

PAY SIX THOUSAND EIGHT HUNDRED NINETY ONE AND 78/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
P.O. BOX 805436
CHICAGO, IL 60680-4116
USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006962⑈ ⑈071923284⑈5590039714⑈

\$ 6,891.78

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classification
17-30-210-010-0000	601	77021	2020	2021	WEST CHICAGO	5-9

IF PAYING AFTER	03/03/21 - 04/01/21	OR	04/02/21 - 05/03/21	OR	05/04/21 - 06/01/21
03/02/21, PLEASE PAY	\$6,891.78		\$6,891.78		\$6,995.16

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

at cookcountytreasurer.com from your bank account or credit card

2019 TOTAL TAX		12,530.51
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	6,891.78

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

MAILING ADDRESS

2319 S ASHLAND AVE
CHICAGO IL 60608

METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

IMPORTANT PAYMENT MESSAGES

\$ 6,891.78

By 03/02/21 (on time)

If paying later, refer to amounts above.

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	MLG
17-30-210-010-0000	Volume 601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

0020200100717302100100000100892240000689178200006891782000068917820000689178200006995165

20 17-30-210-010-0000 0 20 0

0736358

73766

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307

COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155

[illegible]

17302100100000/0/20/E/0000689178/1

SIMS METAL MANAGEMENT Check: 900006963 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203V USD 2/3/2021 21,420.00 0.00 21,420.00

Total

21,420.00

Payment: 210203V

Prepared by KD Date 2/9/21

Reviewed by _____ Date _____

Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006963 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203V USD 2/3/2021 21,420.00 0.00 21,420.00

Total

21,420.00

Payment: 210203V

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006963

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 21,420.00***

PAY TWENTY ONE THOUSAND FOUR HUNDRED TWENTY AND 00/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
P.O. BOX 805436
CHICAGO, IL 60680-4116
USABank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006963⑈ ⑆071923284⑆5590039714⑈

2020 First Installment Property Tax Bill**\$ 21,420.00**

By 03/02/21 (on time)

Property Index Number (PIN)	Volume	Code	Tax Year	(Payable In)	Township	Classificat
17-30-210-047-0000	601	77021	2020	2021	WEST CHICAGO	5-81

IF PAYING AFTER 03/02/21, PLEASE PAY	03/03/21 - 04/01/21 \$21,420.00	OR	04/02/21 - 05/03/21 \$21,420.00	OR	05/04/21 - 06/01/21 \$21,741.30
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TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX		38,945.45
2020 ESTIMATE	X	55%
2020 TOTAL TAX	=	21,420.00

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**

2401 S ASHLAND AVE
CHICAGO IL 60608

MAILING ADDRESS

METAL MGMT MIDWEST INC
2500 S PAULINA ST
CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 21,420.00**

By 03/02/21 (on time)

If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN)	Tax Volume
17-30-210-047-0000	601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

Internal use only

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

00202001007173021004700006008922400021420005000214200050002142000500021741302

20 17-30-210-047-0000 0 20 0 0736367 73762

METAL MGMT MIDWEST INC
OR CURRENT OWNER
2500 S PAULINA ST
CHICAGO IL 60608-5307



COOK COUNTY TREASURER
PO BOX 805436
CHICAGO IL 60680-4155



17302100470000/0/20/E/0002142000/1

SIMS METAL MANAGEMENT Check: 900006966 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203Y USD 2/3/2021 11,982.25 0.00 11,982.25

Total

11,982.25

Payment: 210203Y

Prepared by KD Date 2/9/21
 Reviewed by _____ Date _____
 Approved by _____ Date _____

SIMS METAL MANAGEMENT Check: 900006966 Check date: 2/9/2021

Vendor : NT001163, COOK COUNTY TREASURER

Invoice number Currency Invoice date Gross amount Cash discount Payment amount

210203Y USD 2/3/2021 11,982.25 0.00 11,982.25

Total

11,982.25

Payment: 210203Y

THIS CHECK IS VOID WITHOUT A GREEN & BLUE BORDER AND BACKGROUND PLUS A KNIGHT & FINGERPRINT WATERMARK ON THE BACK - HOLD AT ANGLE TO VIEW

SIMS
METAL
MANAGEMENT1 Linden Avenue East
Jersey City, NJ 07305

No. 900006966

70-2328
719 IL

DATE

02/09/2021

CHECK AMOUNT

\$ 11,982.25***

PAY ELEVEN THOUSAND NINE HUNDRED EIGHTY TWO AND 25/100 USD

PAY TO THE ORDER OF

COOK COUNTY TREASURER
 P.O. BOX 805436
 CHICAGO, IL 60680-4116
 USA

Bank of America, N.A.
Northbrook, IL

AUTHORIZED SIGNATURE 1

AUTHORIZED SIGNATURE 2

⑈0900006966⑈ ⑆071923284⑆5590039714⑈

\$ 11,982.25

By 03/02/21 (on time)

Property Index Number (PIN) Volume Code Tax Year (Payable In) Township Classification
 17-30-210-033-0000 601 77021 2020 2021 WEST CHICAGO 5-B

IF PAYING AFTER 03/03/21 - 04/01/21 OR 04/02/21 - 05/03/21 OR 05/04/21 - 06/01/21
 03/02/21, PLEASE PAY \$11,982.25 \$11,982.25 \$12,161.98

TAXING DISTRICT DEBT AND FINANCIAL DATA

Your Taxing Districts	Money Owed by Your Taxing Districts	Pension and Healthcare Amounts Promised by Your Taxing Districts	Amount of Pension and Healthcare Shortage	% of Pension and Healthcare Costs Taxing Districts Can Pay
Metro Water Reclamation Dist of Chicago	\$3,404,722,000	\$2,909,890,000	\$1,377,581,000	52.66%
Chicago Park District	\$1,247,590,000	\$1,665,945,000	\$1,268,296,000	23.87%
Board of Education Chicago	\$13,408,938,000	\$27,721,071,511	\$16,682,240,052	39.82%
Chicago Community College Dist	\$514,035,889	\$98,287,002	\$98,287,002	0.00%
City of Chicago	\$42,103,151,000	\$42,196,885,000	\$32,616,444,000	22.70%
Cook County Forest Preserve District	\$193,646,842	\$457,040,680	\$246,669,734	46.03%
County of Cook	\$6,898,027,070	\$23,257,290,307	\$13,395,266,525	42.40%
Total	\$67,770,110,801	\$98,306,409,500	\$65,684,784,313	

PAY YOUR TAXES ONLINEat cookcountytreasurer.com from your bank account or credit card**TAX CALCULATOR**

2019 TOTAL TAX 21,785.91
 2020 ESTIMATE X 55%
 2020 TOTAL TAX = 11,982.25

The First Installment amount is 55% of last year's total taxes. All exemptions, such as homeowner and senior exemptions, will be reflected on your Second Installment tax bill.

IMPORTANT MESSAGES**PROPERTY LOCATION**

2534 S WOOD ST
 CHICAGO IL

MAILING ADDRESS

METAL MANAGEMENT INC
 2500 S PAULINA ST
 CHICAGO IL 60608-5307

DETACH & INCLUDE WITH PAYMENT

TOTAL PAYMENT DUE**\$ 11,982.25**

By 03/02/21 (on time)
 If paying later, refer to amounts above.

IMPORTANT PAYMENT MESSAGES

Use of this coupon authorizes the Treasurer's Office to reduce the check amount to prevent overpayment. Include only one check and one coupon per envelope.

Property Index Number (PIN) TUG
 17-30-210-033-0000 Volume
 601

Amount Paid

\$

Include name, PIN, address, phone and email on check payable to "Cook County Treasurer."

SN 0020200100 RTN 500001075 AN (see PIN) TC 008922

Internal use only

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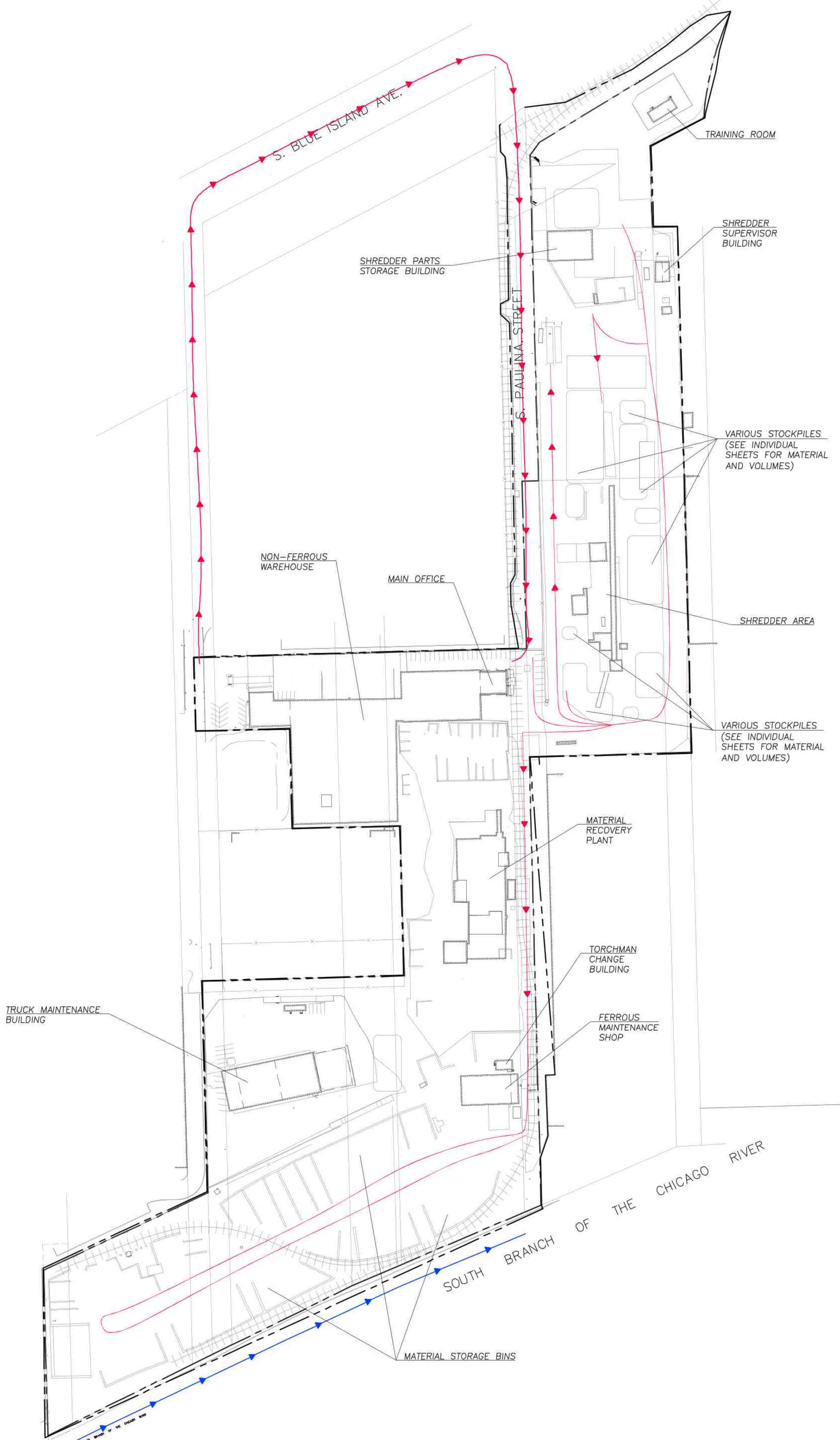
20 17-30-210-033-0000 0 20 0 0735361 73765
 METAL MANAGEMENT INC
 OR CURRENT OWNER
 2500 S PAULINA ST
 CHICAGO IL 60608-5307

COOK COUNTY TREASURER
 PO BOX 805436
 CHICAGO IL 60680-4155

17302100330000/0/20/E/0001198225/1

APPENDIX D. GENERAL FACILITY LAYOUT

EEA - X:\Unassigned Projects\Sims Metal Management - CDPH Permit\By Others\Survey\2021-10-08\28840-001_clean.dwg
Plotted: 10/26/21 @ 7:58pm By: jspach



Scale: 1"=100'

LEGEND

EXISTING	PROPOSED
	Manhole
	Catch Basin
	Inlet
	Area Drain
	Clean Out
	Flared End Section
	Storm Sewer
	Sanitary Sewer
	Combined Sewer
	Water Main
	Gas Line
	Overhead Wires
	Electrical Cable (Buried)
	Telephone Line
	Fire Hydrant
	Valve Vault
	Buffalo Box
	Downspout
	Bollard
	Gas Valve
	Gas Meter
	Electric Meter
	ComEd Manhole
	Hand Hole
	Light Pole
	Light Pole w/ Mast Arm
	Utility Pole
	Telephone Pedestal
	Telephone Manhole
	Sign
	Fence
	Accessible Parking Stall
	Curb & Gutter
	Depressed Curb
	Curb Elevation
	Gutter Elevation
	Pavement Elevation
	Sidewalk Elevation
	Ground Elevation
	Top of Retaining Wall Elevation
	Slope
	Contour Line
	Deciduous Tree
	Coniferous Tree
	Brushline
	Tree Protection
	Fencing at Drip Line
	Truck Traffic Flow
	Barge Traffic Flow
	Roll Road

ERIKSSON ENGINEERING ASSOCIATES, LTD.
145 COMMERCE DRIVE, SUITE A
GRAYSLAKE, ILLINOIS 60030
PHONE: (847) 223-4864
FAX: (847) 223-4864
EMAIL: INFO@EEA-LTD.COM
PROFESSIONAL DESIGN FIRM
LICENSE NO. 184-053320
EXPIRES: 04/30/2023

SIMS METAL MANAGEMENT
2500 S. PAULINA ST
CHICAGO, ILLINOIS 60608

Reserved for Seal:

EXPIRATION DATE: 11/30/21

No.	Date	Description
1	10/26/21	SIMS METAL LAYOUT

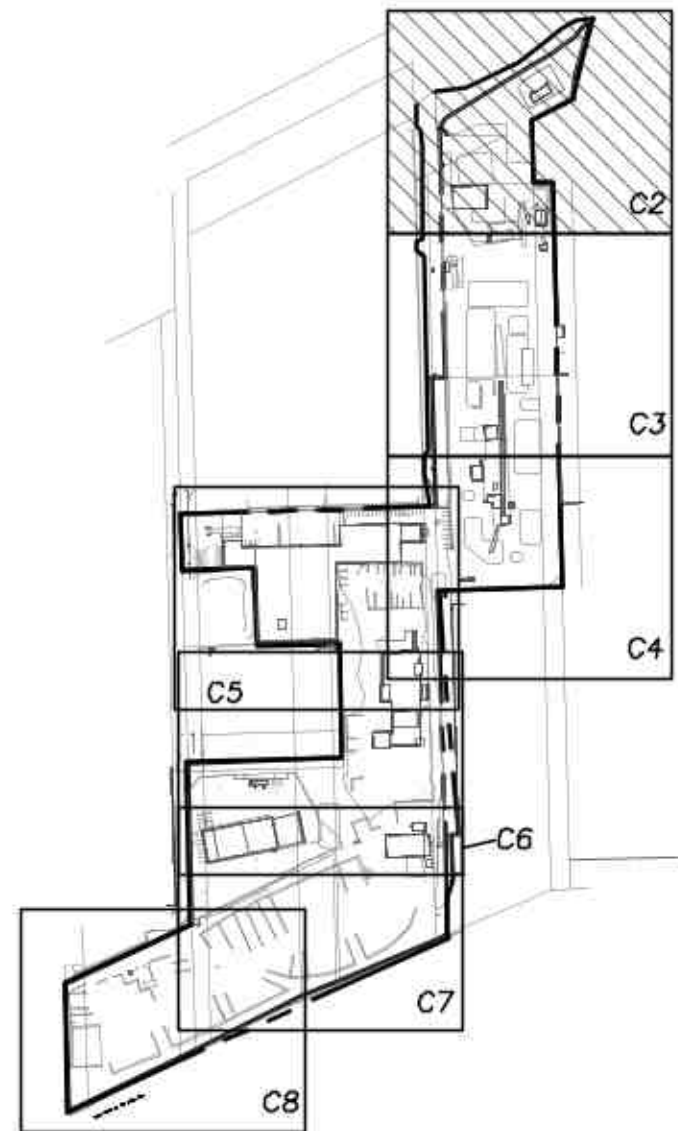
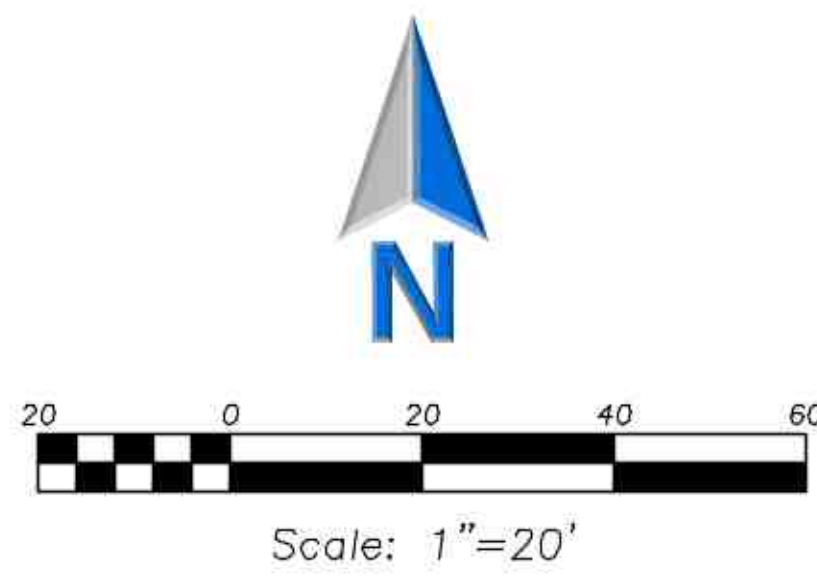
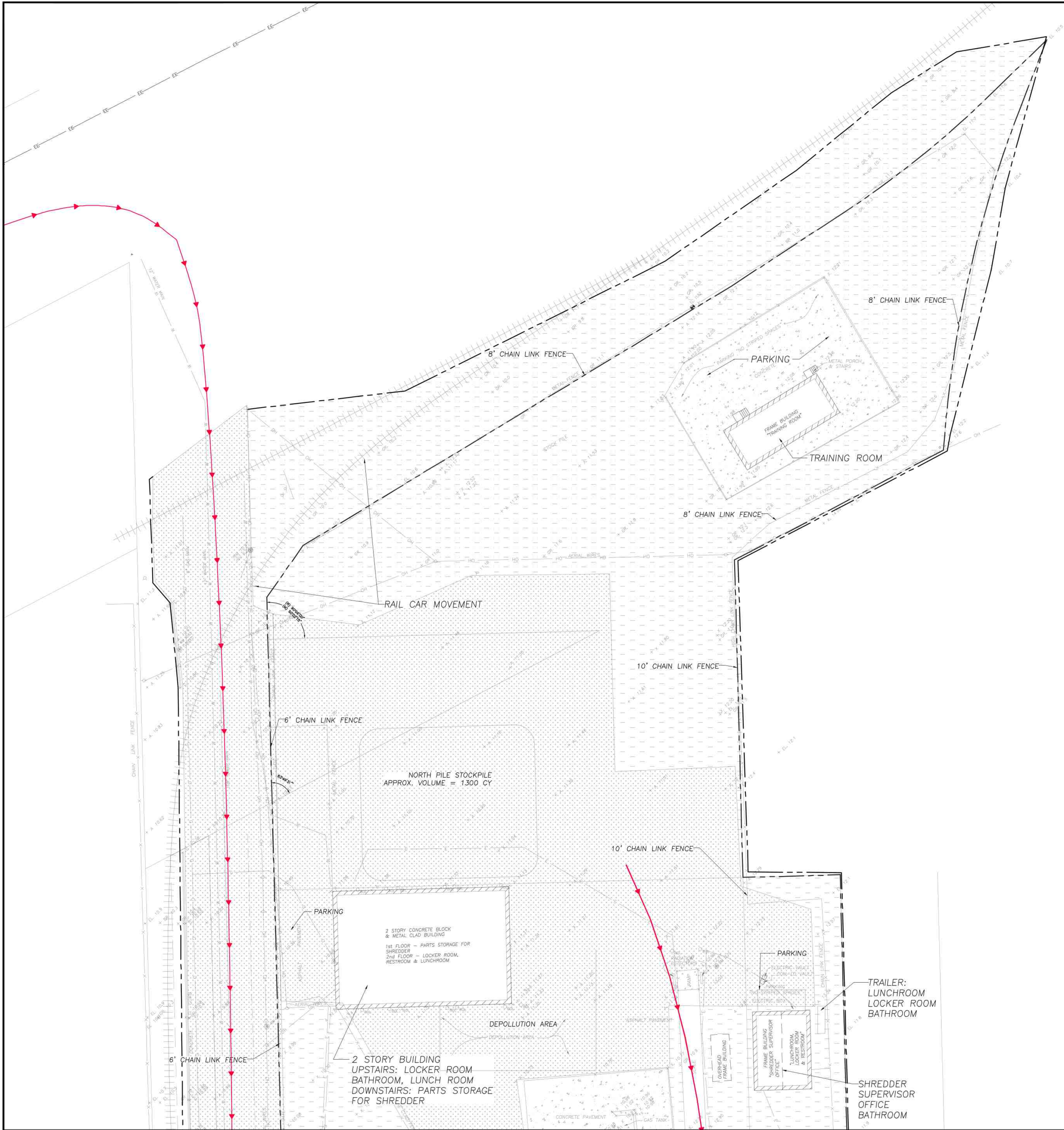
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Design By:	Approved By:	Date:
JK	CF/MR	10/26/21

Sheet Title:
OVERALL GENERAL LAYOUT PLAN

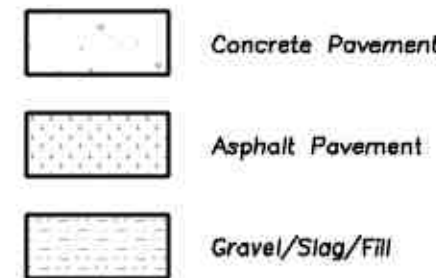
Sheet No:
C1

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Plotted: 10/26/21 @ 8:05pm By: jaspach

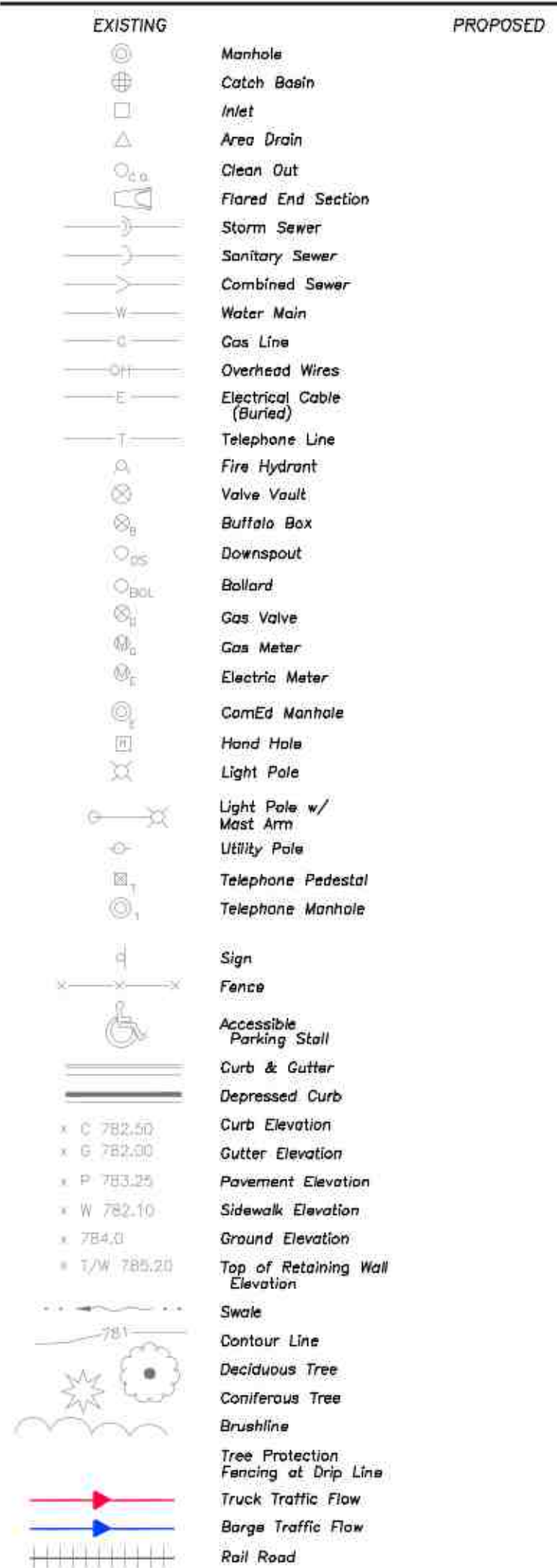


KEY PLAN

PAVING & SURFACE
LEGEND



LEGEND



Reserved for Seal:



EXPIRATION DATE: 11/30/21

No.	Date	Description
1	10/26/21	SIMS METAL LAYOUT

© ERIKSSON ENGINEERING ASSOCIATES, LTD. 2021

Design By: JK Approved By: CF/MR Date: 10/26/21

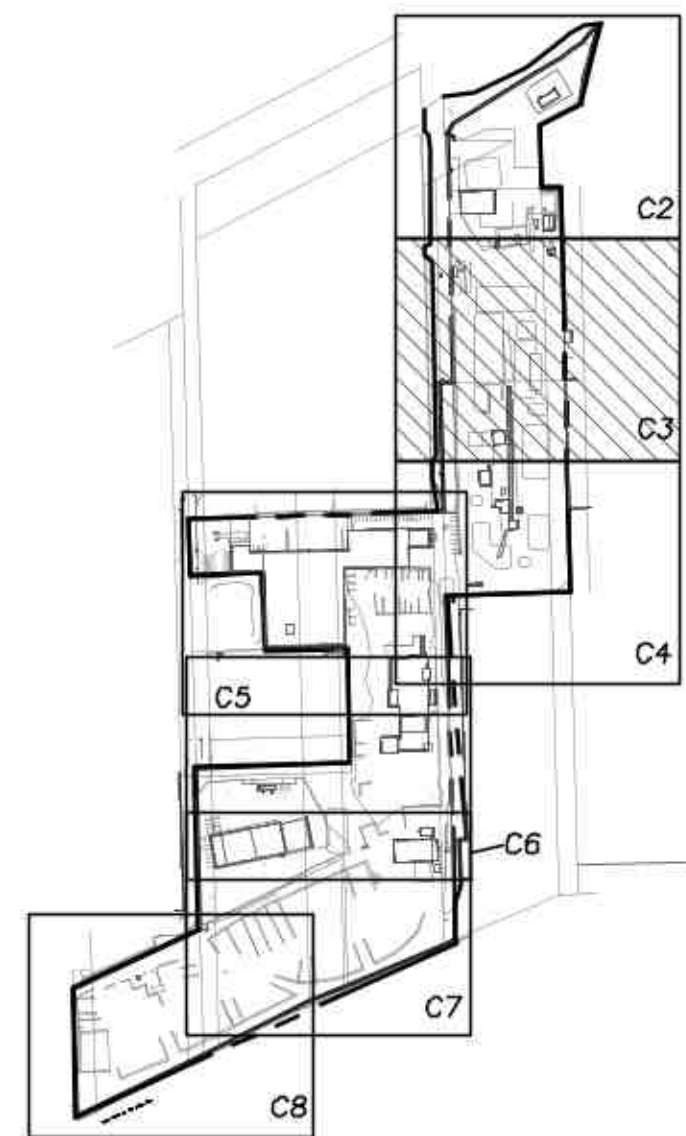
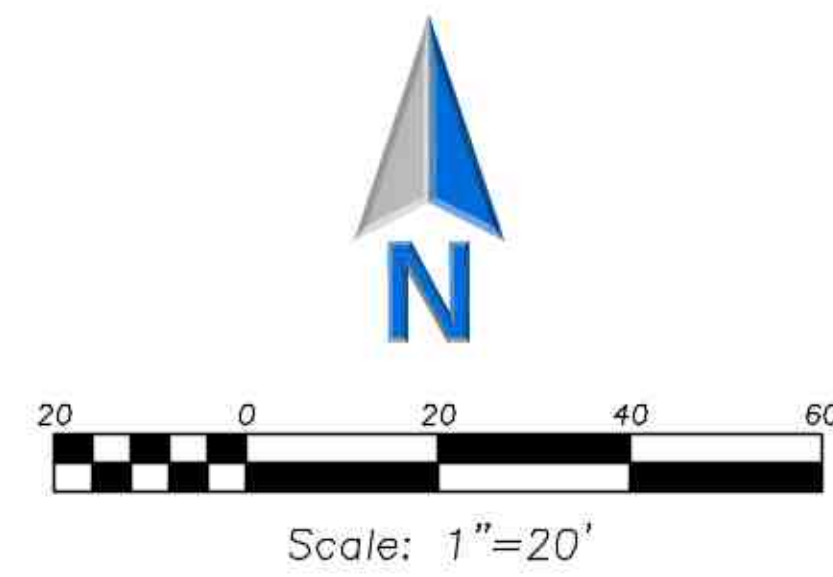
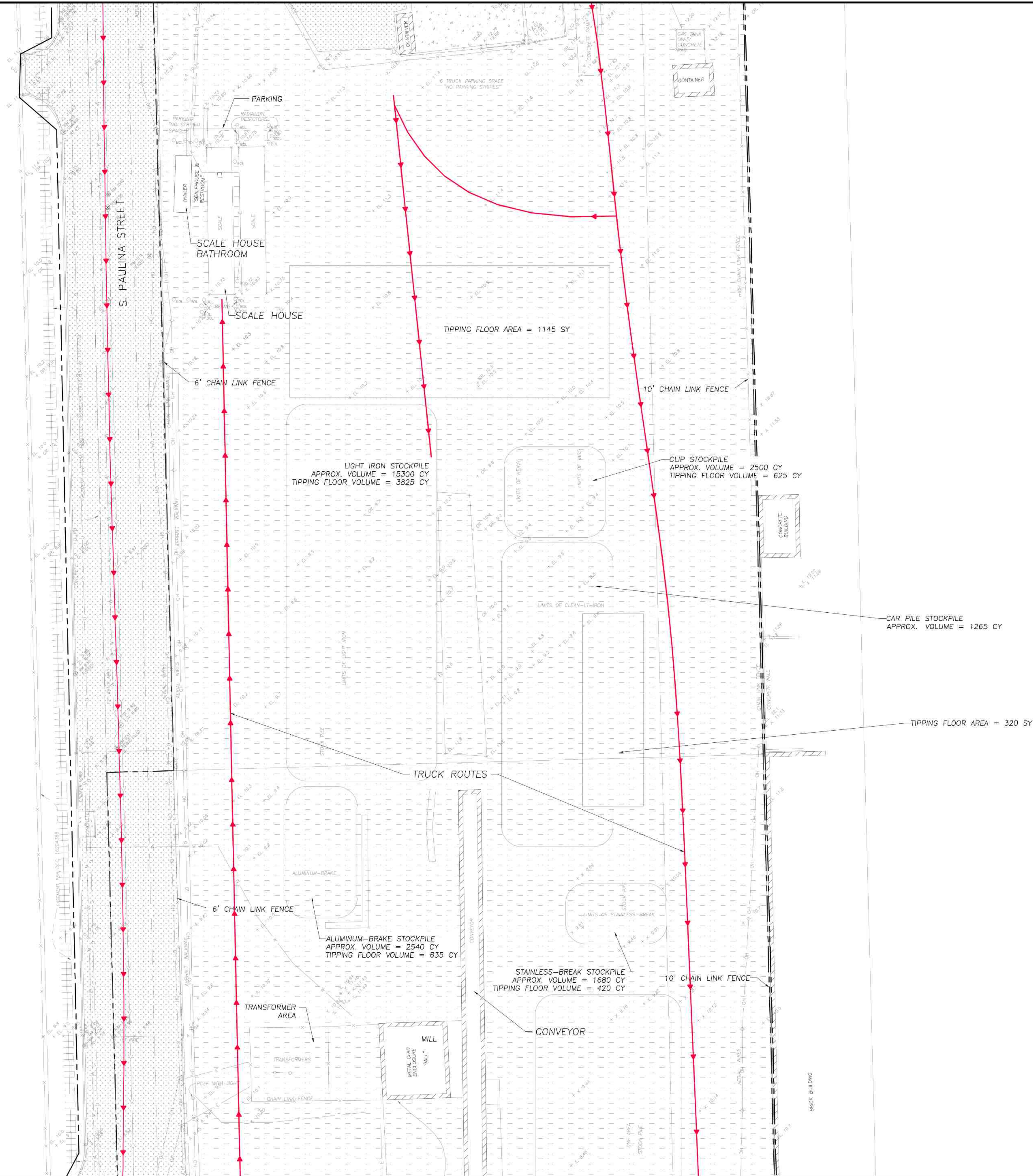
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**GENERAL
LAYOUT PLAN**

Sheet No:

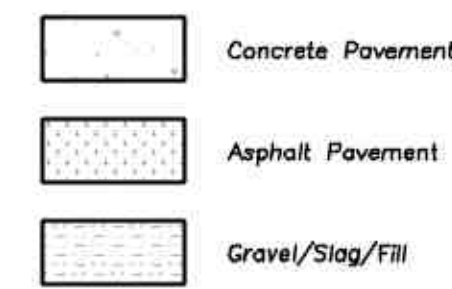
C2

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Plotted: 10/26/21 @ 8:10am By: jaspach

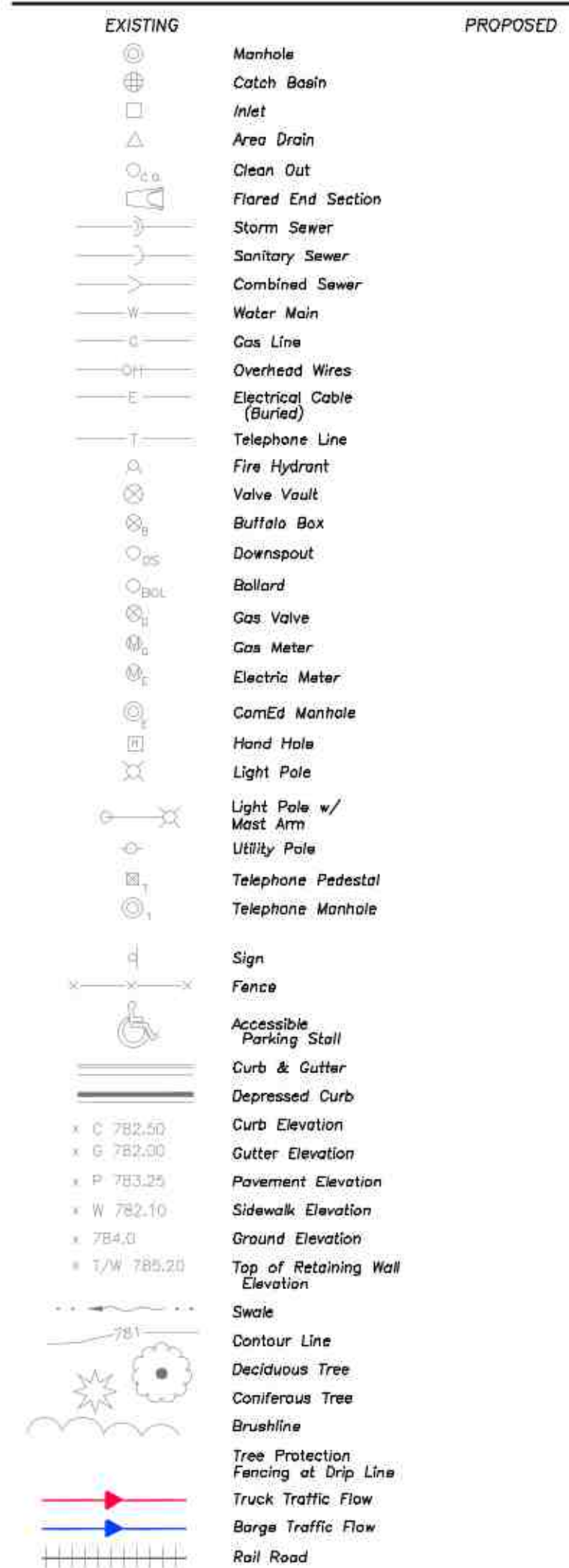


KEY PLAN

PAVING & SURFACE
LEGEND



LEGEND



Reserved for Seal:



EXPIRATION DATE: 11/30/21

No.	Date	Description
1	10/26/21	SIMS METAL LAYOUT

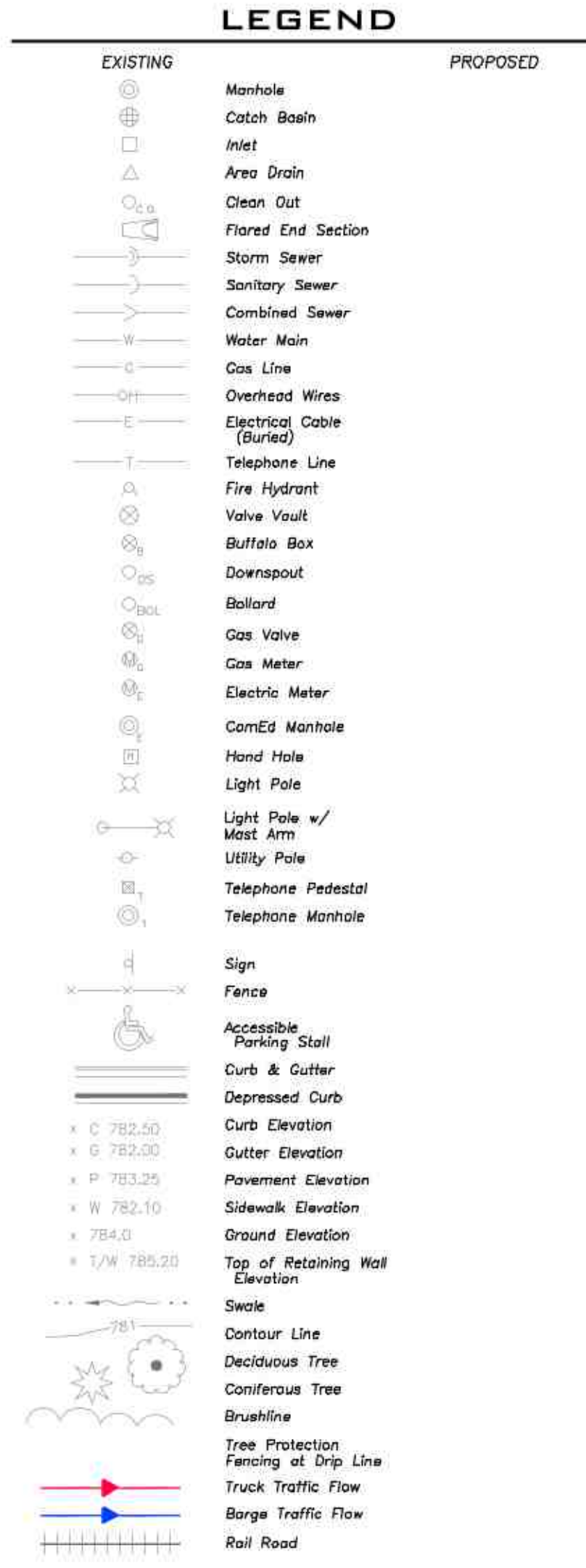
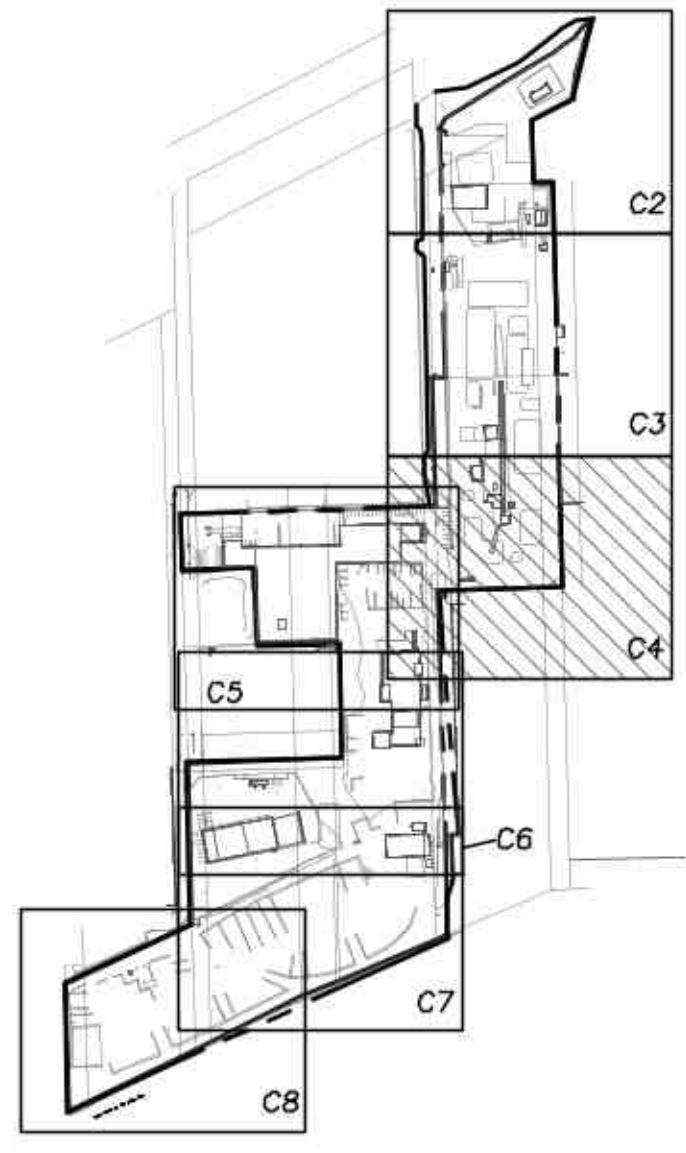
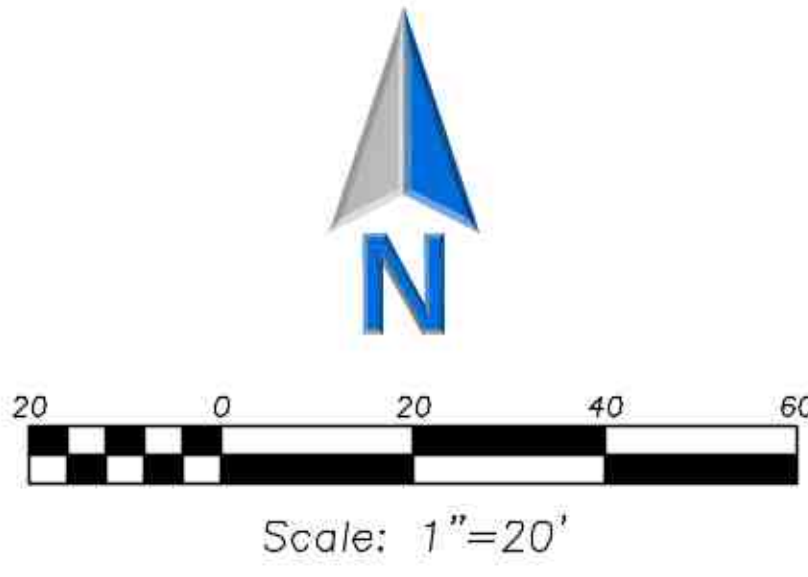
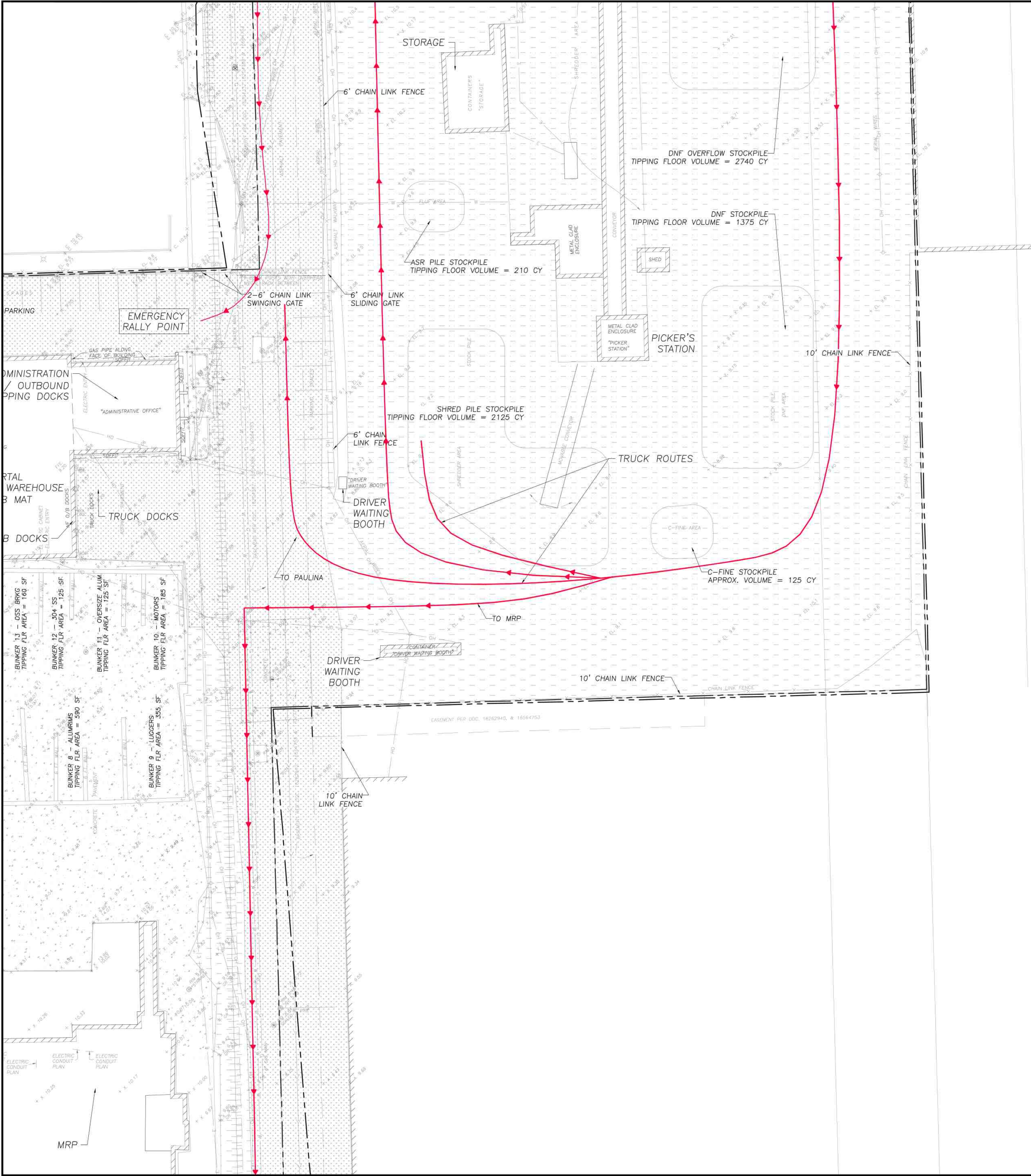
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C3

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**SIMS METAL
MANAGEMENT**
2500 S. PAULINA ST
CHICAGO, ILLINOIS 60608

Reserved for Seal:



CHRISTOPHER M. ERIKA
REGISTERED
PROFESSIONAL
ENGINEER
OF
ILLINOIS

EXPIRATION DATE: 11/30/21

No.	Date	Description
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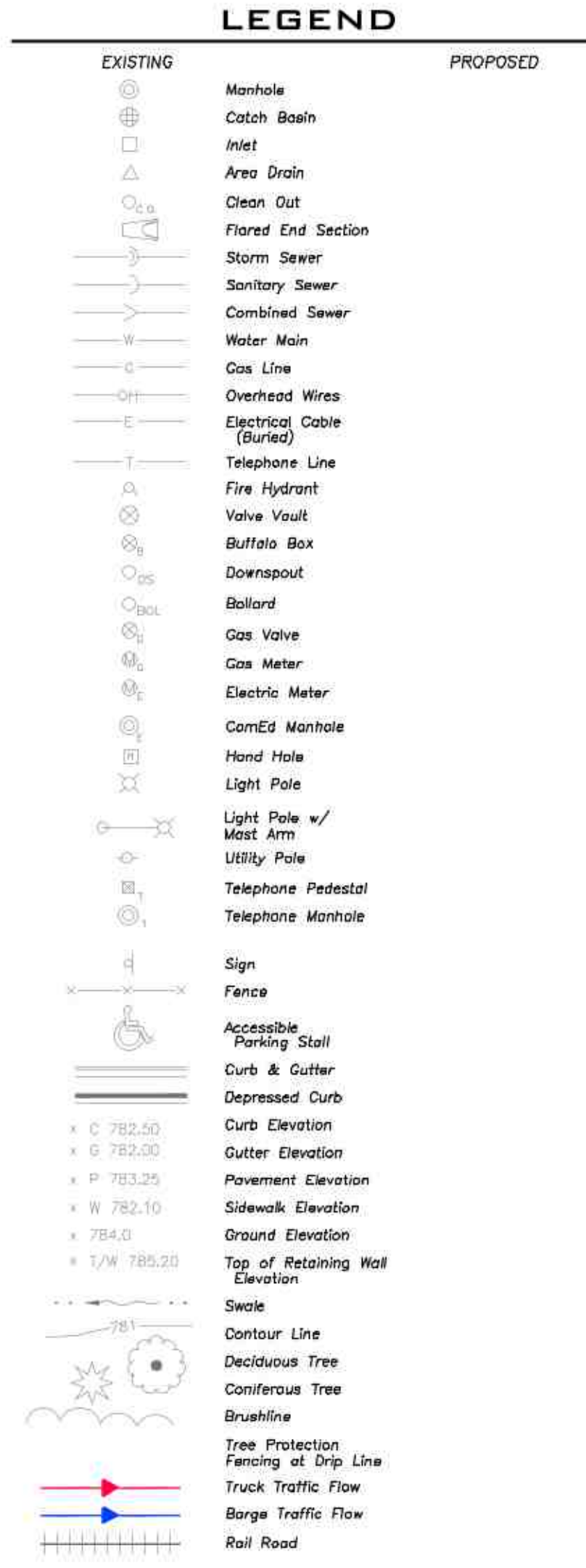
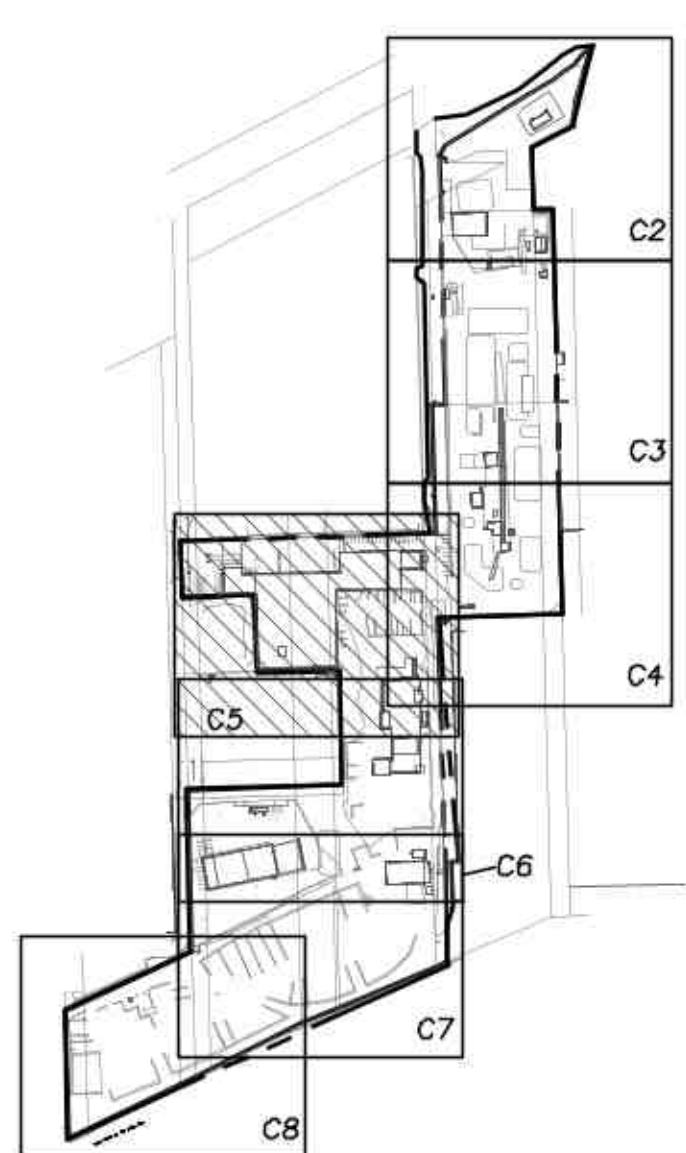
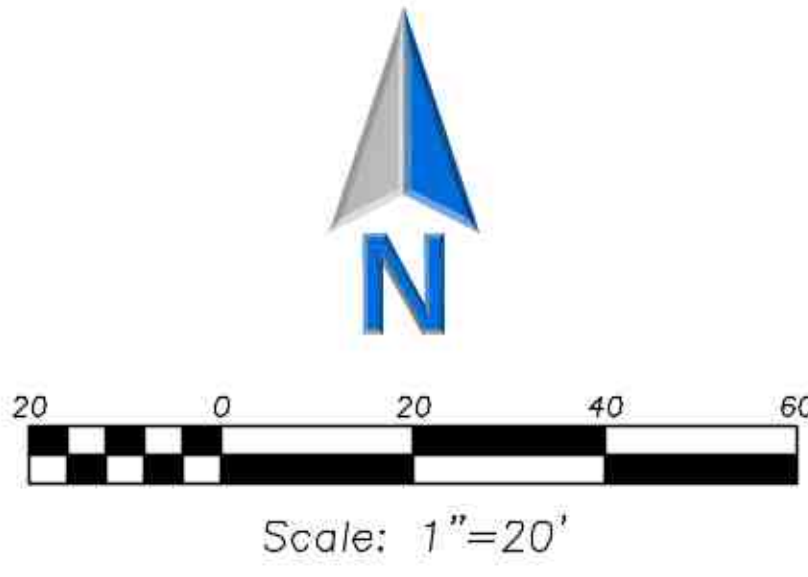
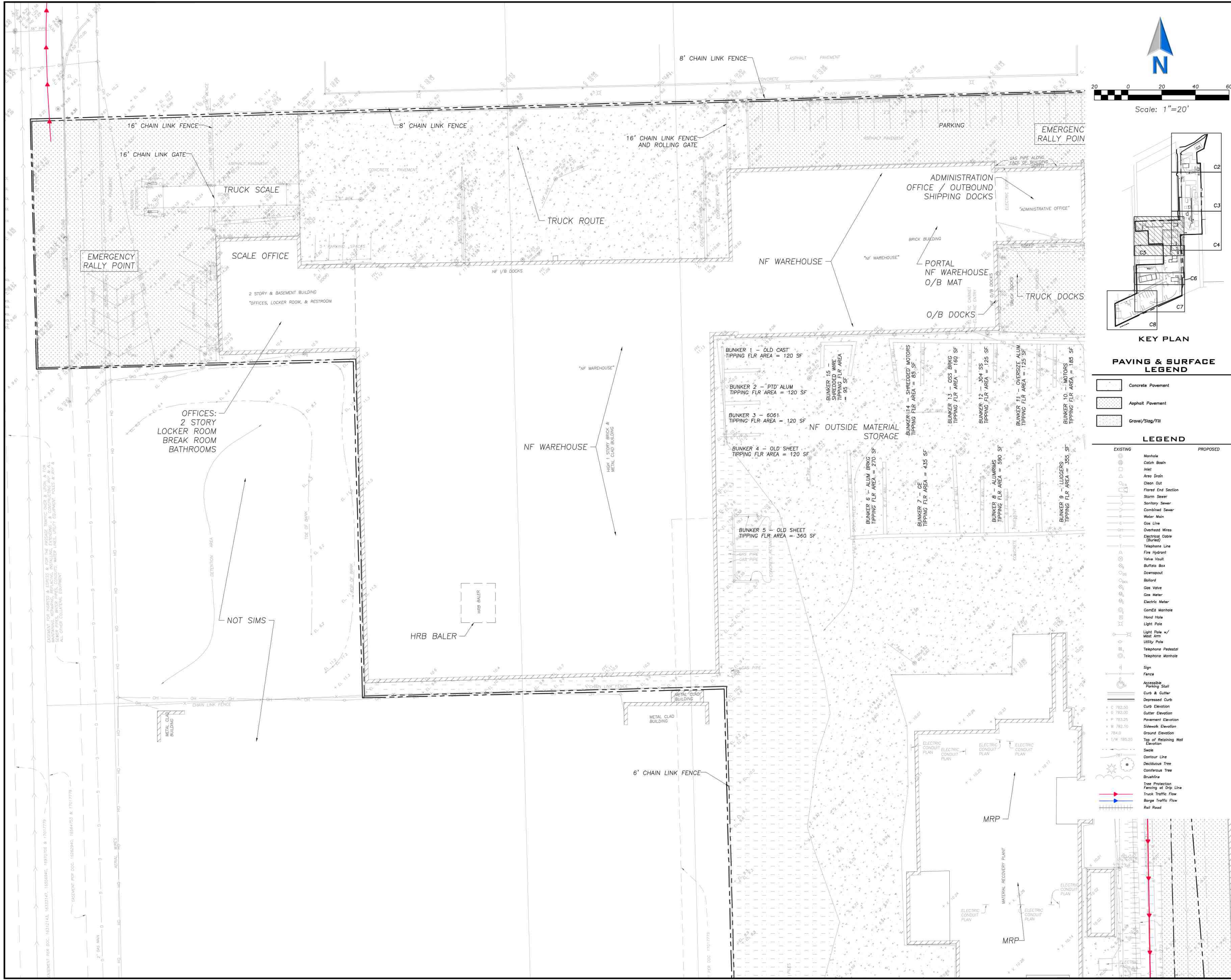
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**GENERAL
LAYOUT PLAN**

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C4



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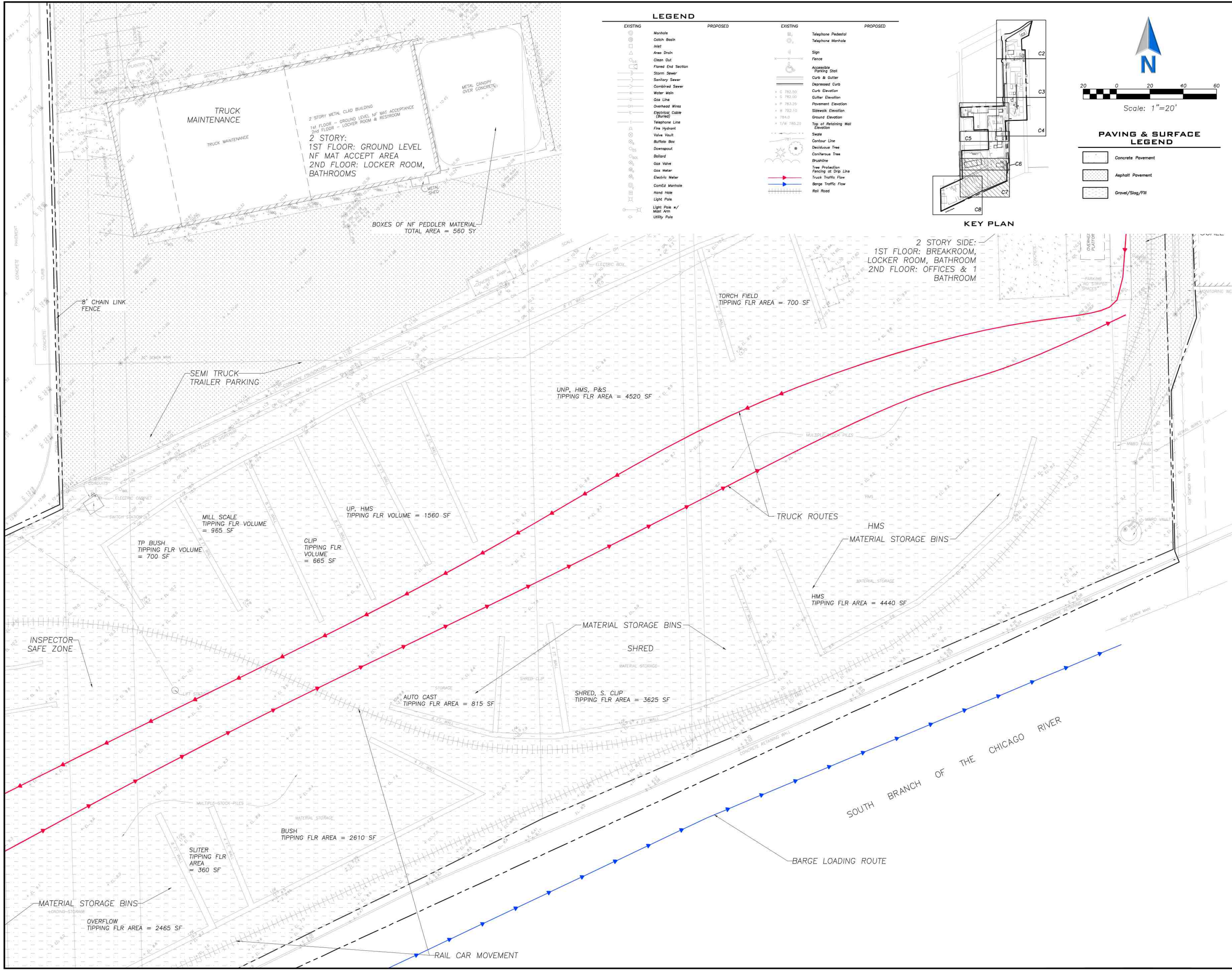
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1	10/26/21	SIMS METAL LAYOUT

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Sheet Title:
GENERAL LAYOUT PLAN

Sheet No:
C5

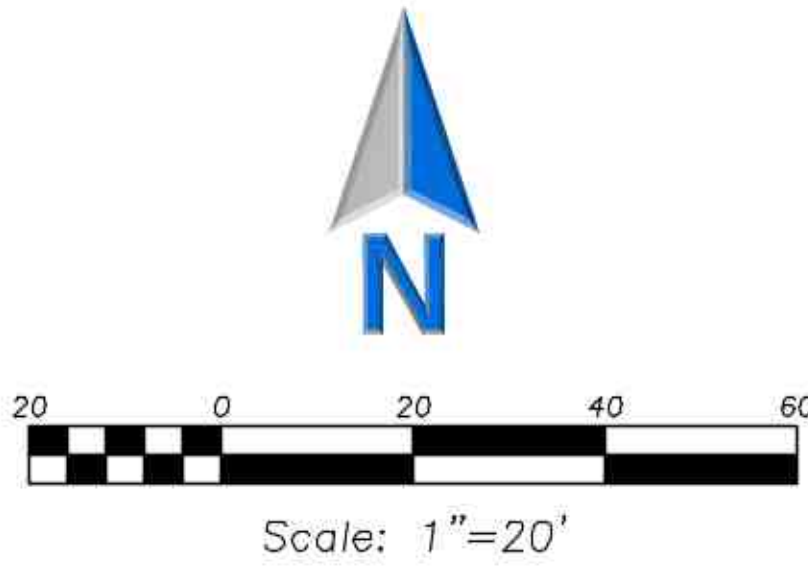
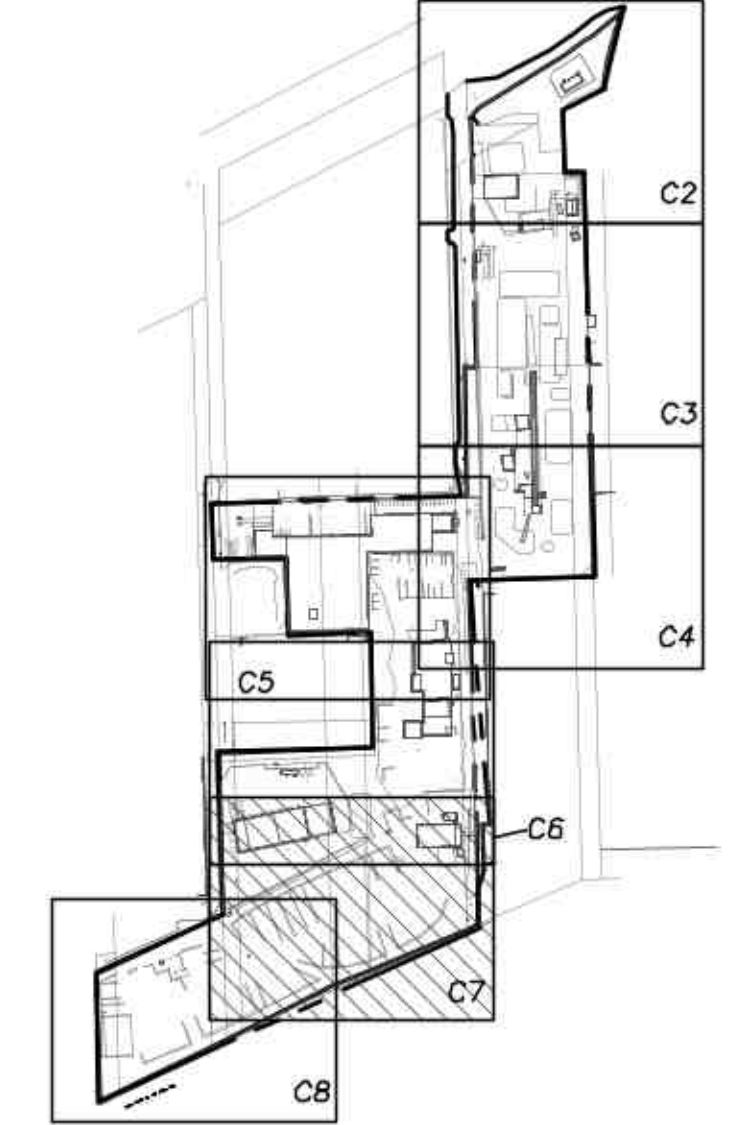
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LEGEND

EXISTING	PROPOSED	EXISTING	PROPOSED
Manhole		Telephone Pedestal	
Catch Basin		Telephone Manhole	
Joint		Sign	
Area Drain		Fence	
Clean Out		Accessible Parking Stall	
Flored End Section		Curb & Gutter	
Storm Sewer		Depressed Curb	
Sanitary Sewer		Curb Elevation	
Combined Sewer		Gutter Elevation	
Water Main		Pavement Elevation	
Gas Line		Sidewalk Elevation	
Overhead Wire		Ground Elevation	
Electrical Cable (Buried)		Top of Retaining Wall Elevation	
Telephone Line		Swale	
Fire Hydrant		Contour Line	
Valve Vault		Deciduous Tree	
Buffalo Box		Coniferous Tree	
Downspout		Brushline	
Ballard		True Protection	
Gas Valve		Fencing at Drip Line	
Gas Meter		Truck Traffic Flow	
Electric Meter		Barge Traffic Flow	
ComEd Manhole		Roll Road	
Hand Hole			
Light Pole			
Light Pole w/ Mast Arm			
Utility Pole			

KEY PLAN



PAVING & SURFACE LEGEND

	Concrete Pavement
	Asphalt Pavement
	Gravel/Slag/Fill

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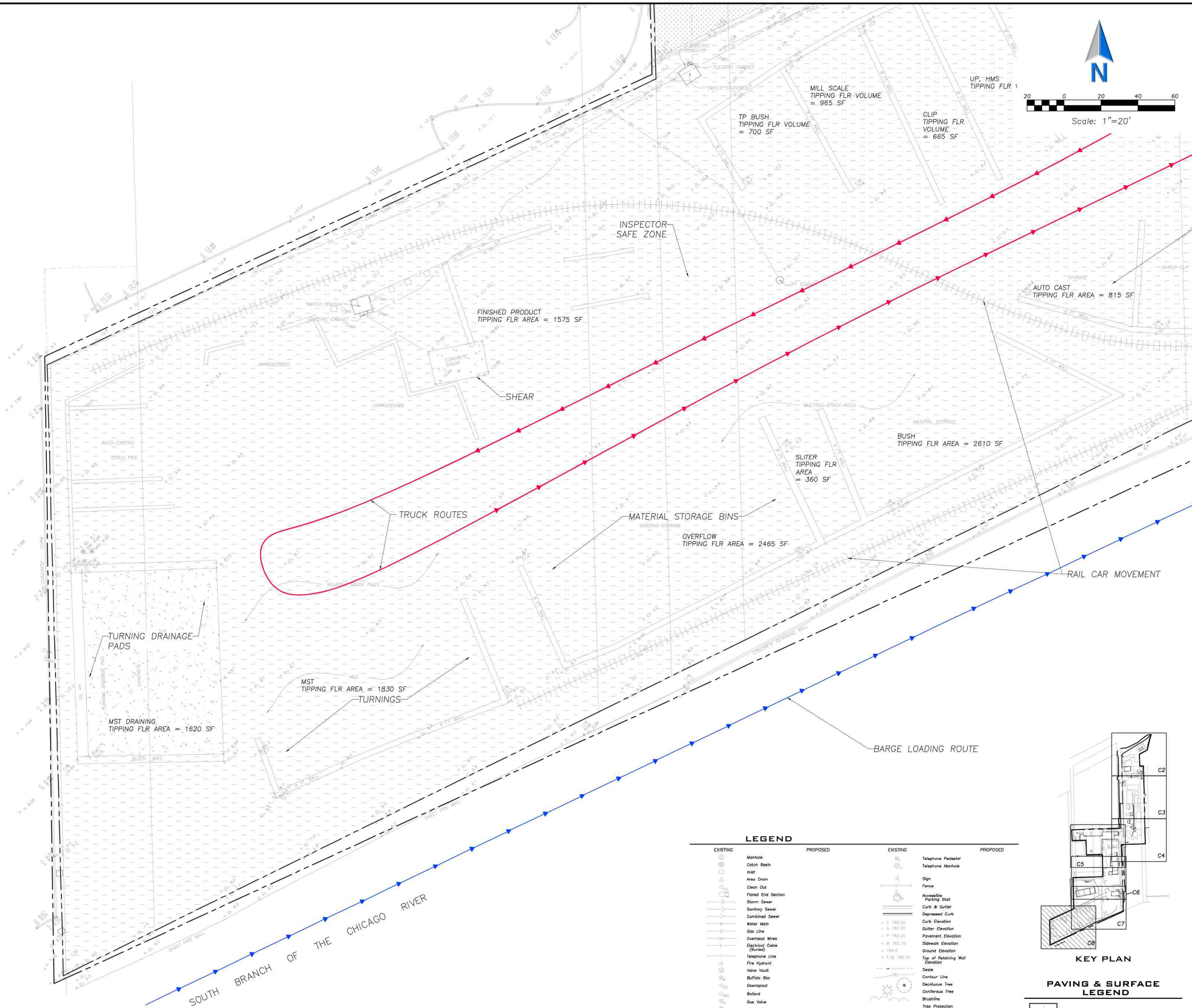
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2500 S. PAULINA ST
CHICAGO, ILLINOIS 60608

Reserved for Seal:

CHRYSTOPHER M. ERIKSSON
REGISTERED PROFESSIONAL ENGINEER
OF ILLINOIS

EXPIRATION DATE: 11/30/21

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GENERAL LAYOUT PLAN

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APPENDIX E. BUILDING LAYOUTS

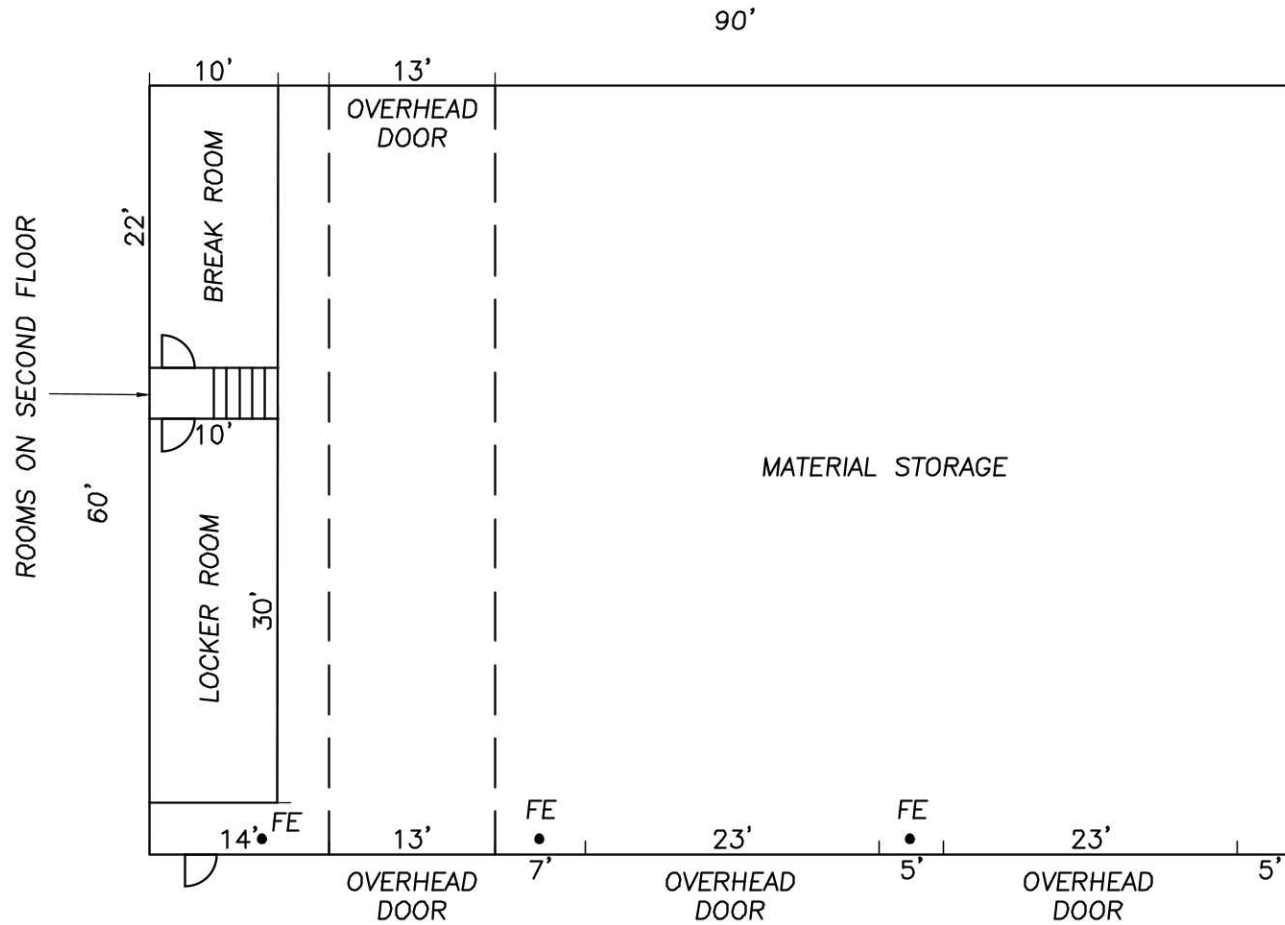


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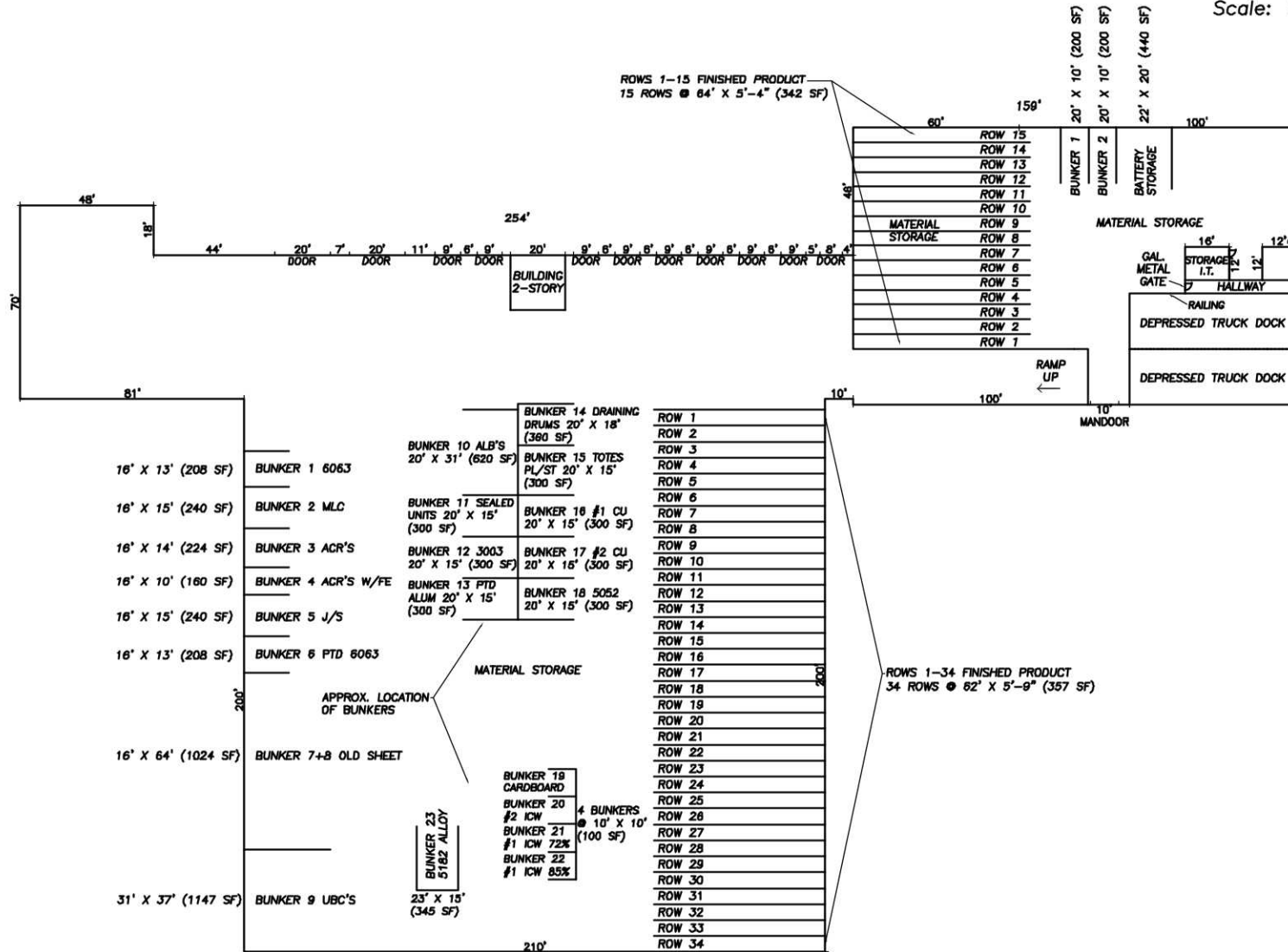
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Sheet Title:
**SHREDDER
 PARTS STORAGE
 BUILDING**

Sheet No:



Scale: 1"=60'



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**NON-FERROUS
 WAREHOUSE**

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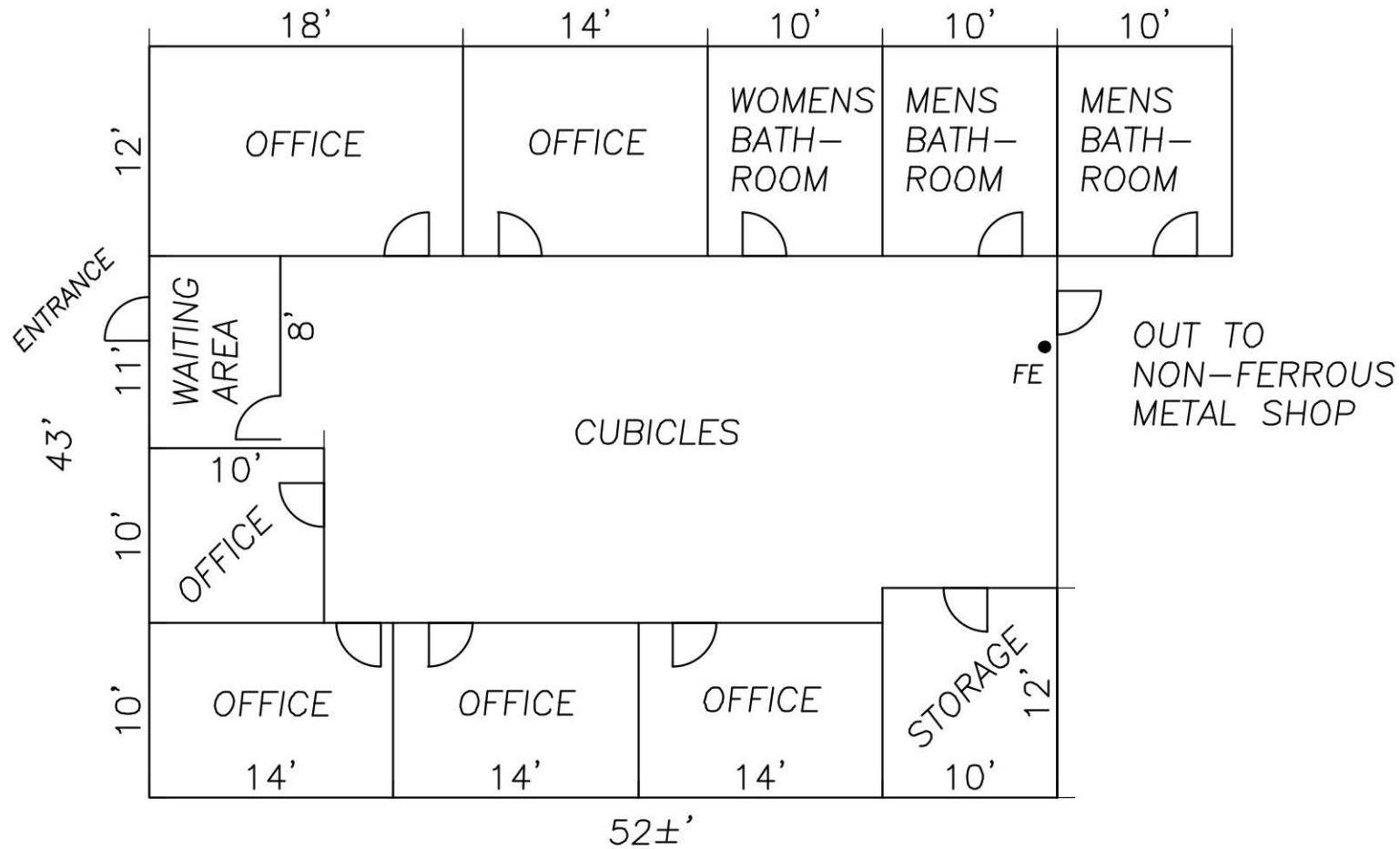


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MAIN OFFICE

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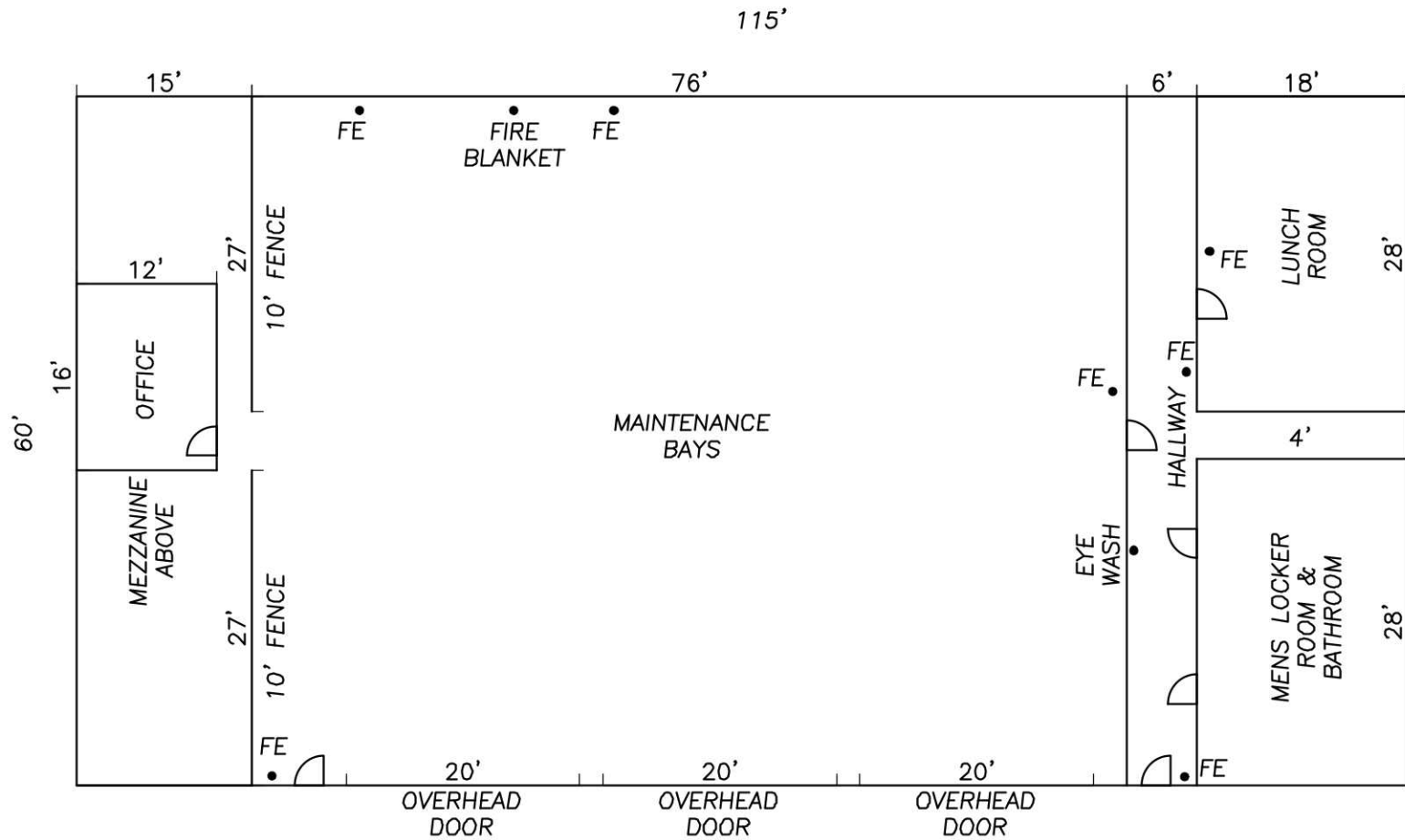
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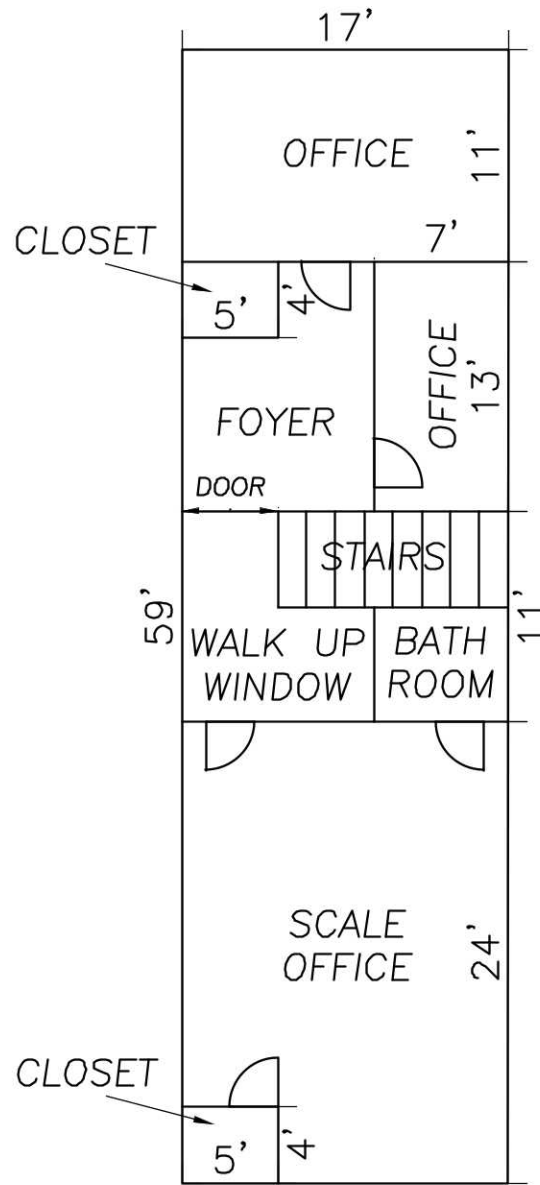
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**FIRST FLOOR
 FERROUS
 MAINTENANCE
 SHOP**

Sheet No:





Scale: 1"=10'



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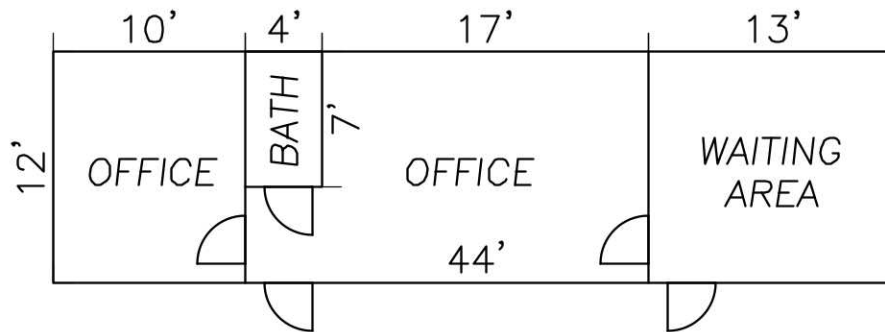
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**SECOND FLOOR
 MAINTENANCE
 SHOP
 (FERROUS SCALE)**

Sheet No:



Scale: 1"=10'



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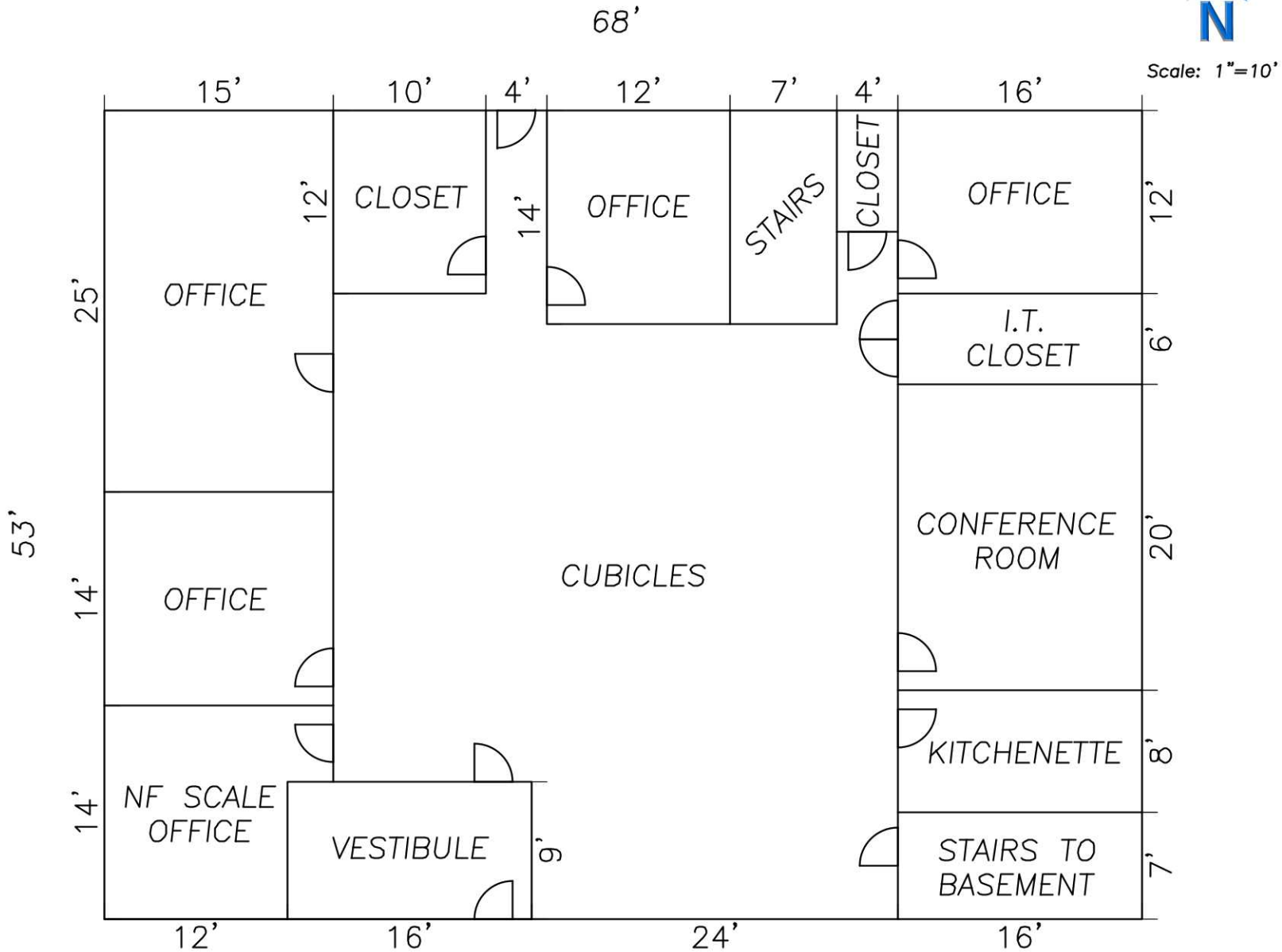
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**COMMERCIAL
 BUILDING**

Sheet No:

SECOND FLOOR EAST END

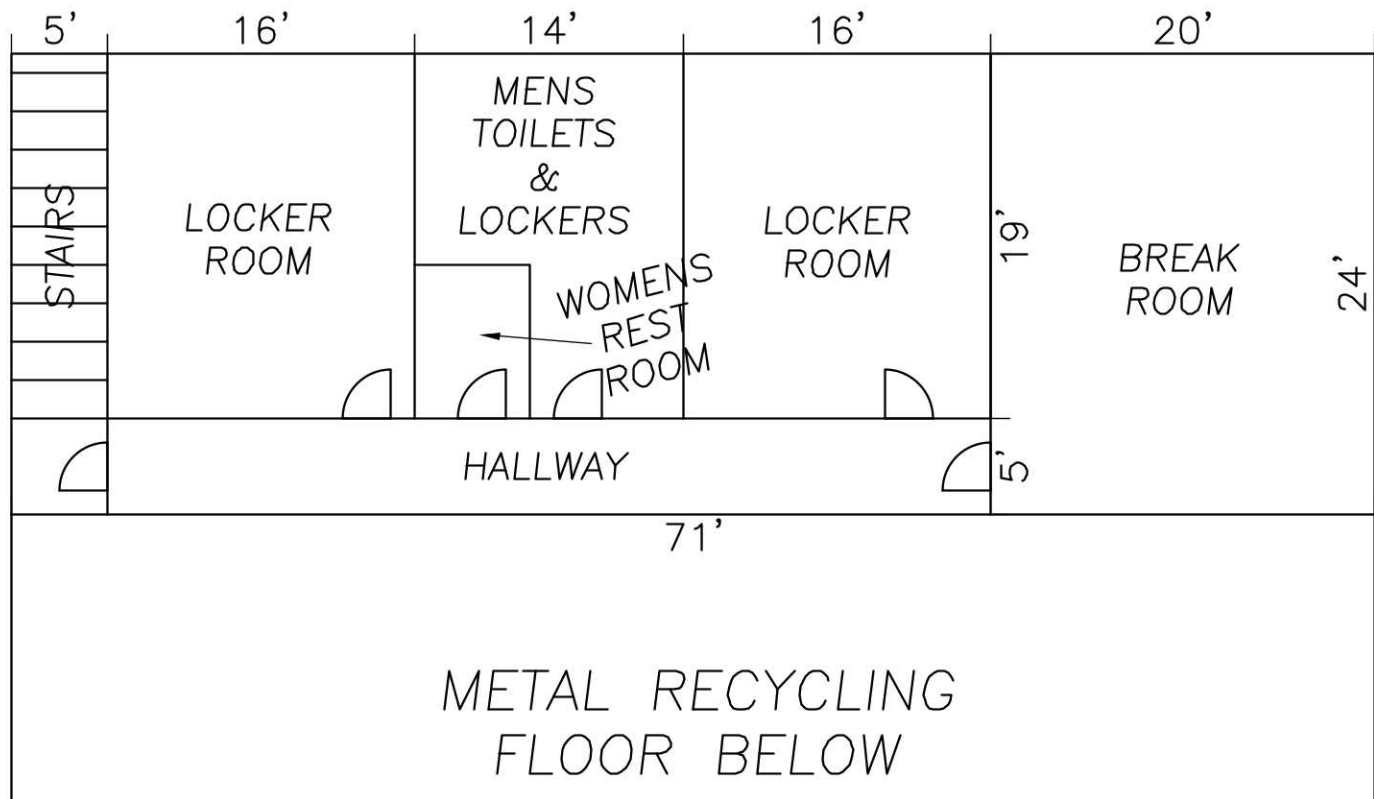


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METAL RECYCLING FLOOR BELOW

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MAINTENANCE
BUILDING**

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FIRST FLOOR EAST END

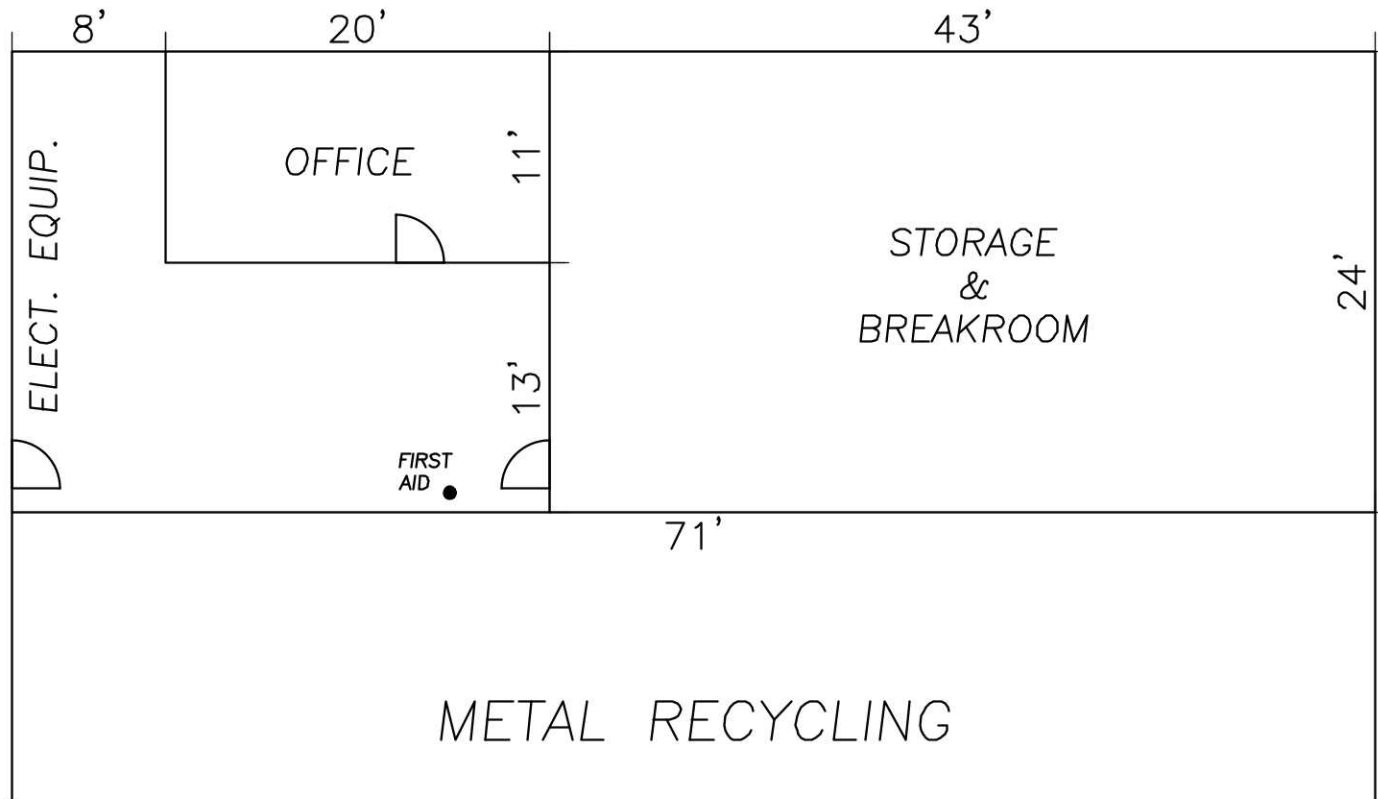


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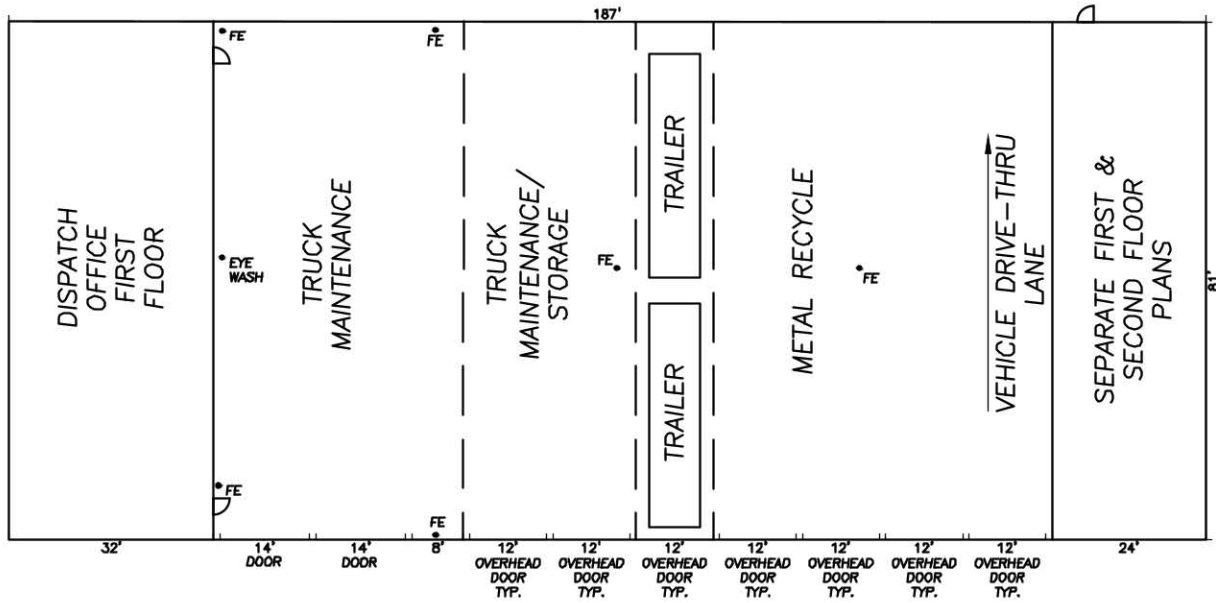


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Sheet Title:
**TRUCK
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BUILDING**

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Scale: 1"=30'



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BUILDING**

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FIRST FLOOR – WEST SIDE OF BUILDING

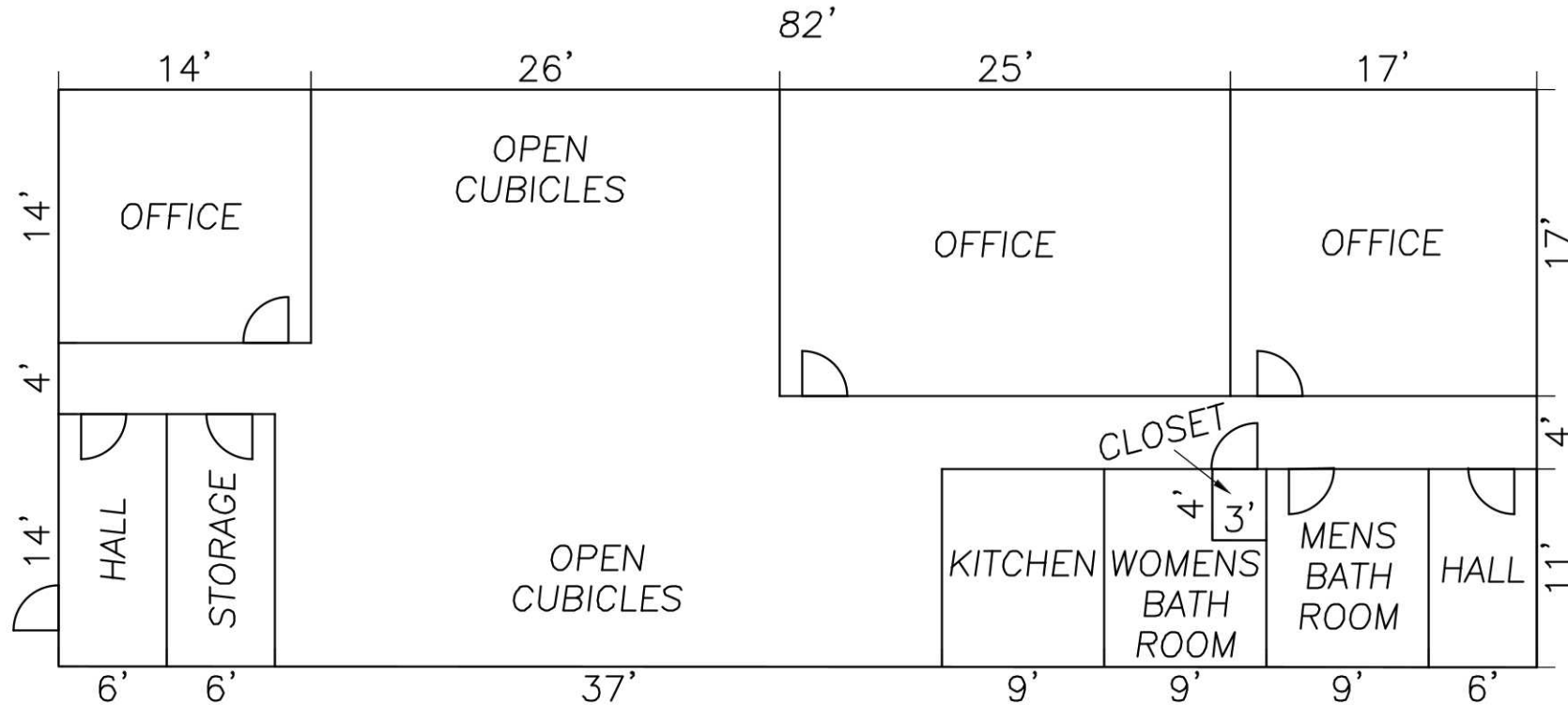


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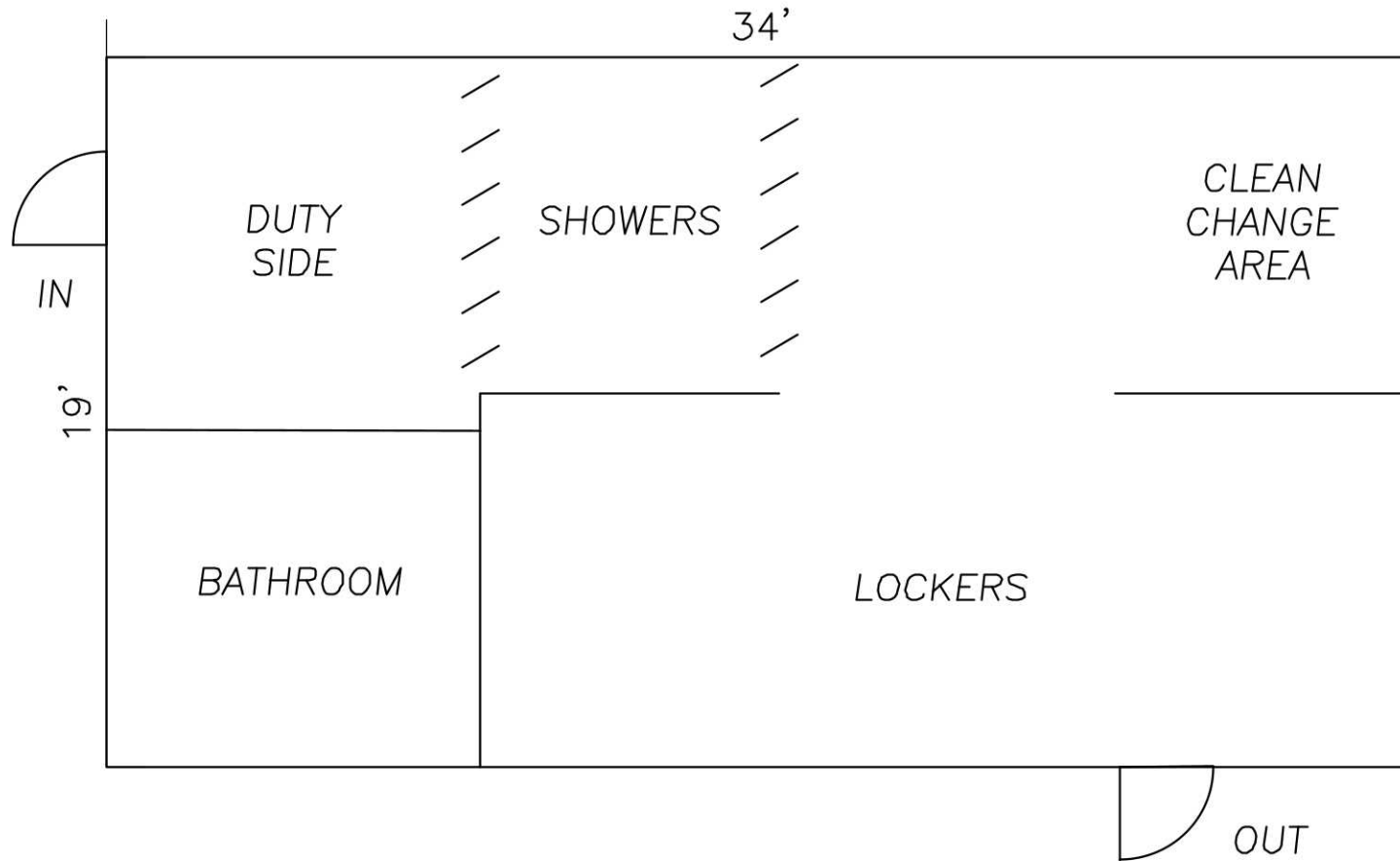


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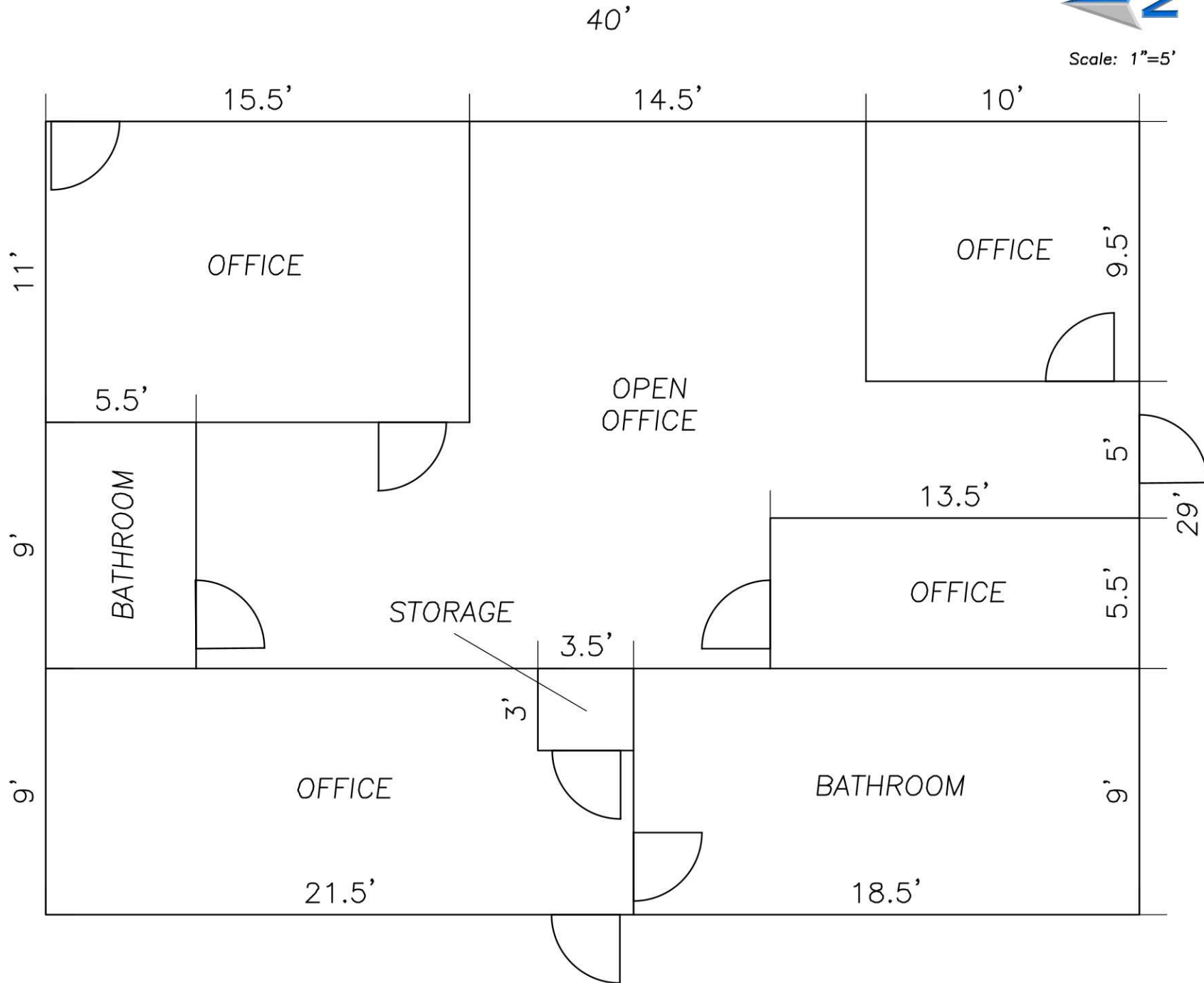


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Sheet Title:
**TORCHMAN
 CHANGE
 BUILDING**

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Sheet Title:
**SHREDDER
 SUPERVISOR
 BUILDING**

Sheet No:

APPENDIX F. FIRE PREVENTION PLANS



**SIMS
METAL
MANAGEMENT**

**SAFETY, HEALTH, ENVIRONMENTAL & COMMUNITY
(SHEC) MANAGEMENT**

Fire Prevention and Preparedness Plan Requirements - SHREDDER

MIDWEST REGION

January 2014 REV 2: 5/7/21

Page 1 of 20

Fire Prevention and Preparedness Plan Requirements – SHREDDER

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Fire Prevention and Preparedness Plan Requirements - SHREDDER

1.0 PURPOSE

The purposes of this plan are to:

- A. minimize the causes of fires, and prevent loss of life and property by fire;
- B. comply with the Occupational Safety and Health Administration's (OSHA) standard on Fire prevention, 29 C.F.R. 1910.39 and the SMM standard; and,
- C. provide employees with information and guidelines that will assist them in recognizing, reporting and controlling fire hazards.

2.0 DEFINITIONS

- D. **"Working Pile"** means
 - 1.D.1. For a Shredder Infeed stockpile, the Shredder Infeed material available to supply a shredder for processing, at industry standard, during a maximum scheduled shift.
 - 1.D.2. For a DNF stockpile, the material available to supply the DNF plant during daily scheduled operations.
- E. **"Non-Working Pile"** means a Shredder Infeed, DNF or ASR overflow or feeder yard stock piles.
- F. **"Shredder Infeed"** means car bodies and other light iron scrap material.
- G. **"DNF"** means debris non-ferrous material (e.g. unprocessed non-ferrous shredder residue).
- H. **"ASR"** means auto shredder residue designated for landfill or beneficial reuse (e.g. alternative daily landfill cover).
- I. **"Fire Watch Personnel"** means those personnel trained to (i) detect fires when Hot Work is being conducted, (ii) survey the stockpiles with the infrared sensor referenced in Exhibit E, and (iii) record readings from that infrared sensor.
- J. **"Hot Work"** means any activity that creates heat, flame, sparks, or smoke, and includes one or more of the following activities: (i) torch-cutting, (ii) welding (gas or arc), (iii) soldering, (iv) other cutting, and/or (v) hot tar operations.
- K. **"BMP"** means best management practice.

3.0 RELATED DOCUMENTS

No.	Name	Effective
1.	SMM Fire Response Plan Requirements	DRAFT
2.	Inbound Material Control Standard	October 2010
3.	Facility Stormwater Pollution Prevention Plan (SWPPP)	
4.	Spill Containment, Control and Countermeasure Plan	
5.	Hot Work Operations Procedure	March 2011



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4.0 RESPONSIBILITIES

Fire safety is everyone's responsibility.

- All employees should ensure that they receive training on how to prevent, prepare for and respond to fires (both what they can do and the limits of what they can do),
 - Upon hire; as an annual review; and whenever there is a change in the plan
 - Training should include
 - when an employee should call "911"
 - what type of fires are considered "incipient"
 - All employees are responsible for adhering to SMM requirements regarding fire prevention, preparedness, and response.
 - All employees should work to implement the company's Inbound Material Control Standard
- Regional management is responsible for:
- Ensuring that this facility has prepared a facility-specific Fire Prevention and Preparedness Plan that effectively identifies the fire risks and the procedures and equipment in place to reduce the risk of fires. This Standard sets forth the minimum requirements for those facility-specific plans.
 - Providing adequate resources and training for its employees to reduce the risk of fires, prepare for fires and engage in the safe response to fires.
- Facility Managers are responsible for
- Ensure compliance with the requirements of this plan,
 - Provide training on this plan and on the corporate Fire Prevention and Preparedness policy which requires this plan (See section 5.4 of this plan)
 - Implement the facility's Fire Prevention & Preparedness Plan,
 - Ensure that facility's fire control equipment and systems are properly maintained;
 - Ensure that the facility's fuel source hazards are controlled.
 - Develop a team of employees and clearly defining their responsibilities for:
 - (a) maintaining fire prevention and response equipment and systems,
 - (b) controlling potentially hazardous fuel sources, and
 - (c) the control and accumulation of flammable or combustible material;
- Each facility's SHEC representative is responsible for:
- Managing the facility's Fire Prevention & Preparedness Plan,
 - Ensuring that records pertaining to plan are being maintained,
 - Developing fire prevention and preparedness training programs, see section 5.4



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5.0 PLAN OUTLINE:

5.1 Recognizing and Reducing Hazards

Each facility will develop a plan that addresses potential fire hazards with buildings and operational areas of their site.

5.2 Fire Response

- It is the policy of SMM, and this facility, that fire-fighting by an employee is considered a voluntary activity and that by signing off on this plan you agree to the voluntary nature of this task.
- It is the policy of SMM and this facility that response to fires will be
 - limited to fires at incipient (early) stages and only with the use of fire extinguishers and hose systems, and only with properly trained personnel;
 - limited to participation on a strictly voluntary basis by employees, not as a condition of employment;
 - **when there is doubt about the facility's ability to safely extinguish an early, incipient stage fire – or whenever a fire goes beyond incipient stage - to call "911"** or the local Fire Department, from a landline phone if possible

5.3 Safety Inspections

- Managers must ensure that stockpiles and mobile and stationary equipment are inspected regularly to: (a) ensure smoldering does not occur, (b) detect buildup/release of oil and grease from hoses and engine compartments; and (c) ensure identified hazards are mitigated.
- See Appendix A for facility inspection points.

5.4 Training

Managers must ensure that operators and supervisors are properly trained in fire prevention and preparedness plan requirements that include:

- 5.4.1 Providing basic fire prevention training to all employees by facility management (with documentation of the training) –
 - 1. At their initial assignment;
 - 2. Annually through toolbox talks; and
 - 3. When changes in work processes necessitate additional training;
- 5.4.2 Review of 29 CFR 1910.38 (including how to obtain a copy);
- 5.4.3 The facility-specific Fire Prevention Plan (including where the plan is located);
- 5.4.4 housekeeping practices;
- 5.4.5 Proper response and notification in the event of a fire;



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- 5.4.6 instruction on proper use of portable fire extinguishers, hoses and water cannons (as applicable); and
- 5.4.7 Recognition of potential fire hazards associated with the specific materials and processes to which employees may be exposed.

5.5 Security

- 5.5.1 When a processing facility is shut down and employees absent, the security guard (if used by the facility) should:
 - 1. conduct a periodic fire watch on stockpiles and plant equipment;
 - 2. conduct hourly inspections of all areas of the facility that may be susceptible to fire (whenever feasible using designated security "rounds" verification stations); and
 - 3. be trained in appropriate response to any observed smoke or flame.

Confirm that the facility is fenced and gated, when applicable



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6.0 PLAN CONTENT

Fire Prevention Team

Name	Title	Responsibility
Debbie Hays	EHS Business Partner	See page 3
George Malamis	Regional Manager	See page 3
Sam Flores	Plant Manager	Coordinates Maintenance Activities on shredder Performs Plant Inspection Respond to corrective actions Inbound Material Periodic Inspections Review of Monthly Fire Extinguisher Check
Manuel Quintero	Supervisor	Performs Plant Inspection Respond to corrective action Signs off on Hot Work Permits Takes Thermal Images of Material Stock piles Tank and Dike Inspections
	Material Inspectors	Inbound Material Acceptance; Inbound Material Tear Down Inspection
	Mill Laborer	Monthly Fire Extinguisher Inspections
	Shredder Operator	Daily Water/Foam System Check
	Equipment Operators	Daily/Pre-Shift Equipment Inspections
	Equipment Operators	Fuels Equipment
	All Employees	Housekeeping
Ryan Wise	Maintenance	Mobile Equipment Maintenance issues
	Security Guards	After hours Thermal imaging of stockpiles
A. Reliable Fire	Third Party	Annual Fire Extinguisher Inspections
Calumet City Plumbing	Third Party	Quarterly Fire Hydrant testing/maintenance



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North End of Yard

Hazard Type	Fire or Explosion
Location of Hazard	Sheet Iron pile at Peddler Drop off area
Possible Ignition Source	Batteries/Compressed Gas cylinders/ordinance/cigarettes/
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Inspection of all inbound loads per Inbound Material Acceptance Policy. o Immediate segregation or return to customer of an unacceptable item; o Buckets in area for the collection of batteries; o "No smoking" signs o Housekeeping of area must be maintained; o Thermal imaging of the pile, looking for a rise in temperatures, occurs daily; o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Fighting equipment	Fire Extinguishers located at the inspectors station as well as the peddler scale house.
Location of FF equipment	The water truck is parked at the south end of this yard. Water Bombs are surrounding piles. Follow policy on fire breaks. Enforcer foam is available within the area.

Hazard Type	Fire or Explosion
Location of Hazard	Auto Depollution – ELV storage area and Depollution Rack
Possible Ignition Source	Fuel, Smoking, Sparks from tools
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Inbound Material Inspection for leaking gas or other petroleum product as tows of "wet" ELVs come into facility. o Tools used in Depollution area must be manufactured as "non-sparking" tools o No Smoking signs posted in area o Gasoline tanks must be grounded; o Storage tank levels must be monitored continuously during operation to prevent spills from overfilling; o Batteries must be removed from vehicles prior to removal of fluids; o Contaminated rags must be stored in covered metal containers; o Loaders operators must pick up and handle vehicles in a manner that prevents rupture of fuel tank; o Fuel spills must be cleaned up immediately; o Fluids built up under floor grates must be removed. o Periodic SHEC/Mgmt audits of compliance in this area



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	<ul style="list-style-type: none"> ○ Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers:	Fire Extinguishers are located at the depollution station; the storage shed to the west of the depollution rack, within the parts storage building, and at the operations office.
Other Fire Fighting Equipment	One 300 lb fire extinguishing system is located in this area Water truck is parked at the south end of the Shredder yard, Enforcer foam is available within the area.

Hazard Type	Fire
Location of Hazard	Part Storage Building (inside and outside for equipment plug in)
Possible Ignition Source	Faulty Electrical – smoking – flammable/combustible materials
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Ensure worn wires are replaced; ○ Never using extension cords as substitutes for wiring improvements; ○ Using only UL or FM approved extension cords; ○ Checking wiring in hazardous locations where risk of fire is high; ○ Checking that electrical equipment is properly grounded or double insulated; ○ Ensuring adequate spacing while performing work; ○ Ensuring that flammable or combustible materials is not on or around electrical equipment or space heaters; ○ Ensure space heaters are electrical and have tip over protection; ○ Ensuring “No Smoking” signs are posted throughout the building; ○ Storage of flammable liquids must be stored in a flammable storage cabinet; ○ Storage of flammable liquids must be away from ignition sources; ○ Storage of contaminated rags must be maintained in a covered metal container; ○ Limit the indoor storage of combustible materials such as cardboard boxes or pallets to 6 feet or less high; ○ Periodic SHEC/Mgmt audits of compliance in this area ○ Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire Extinguishers are located throughout this building.
Other Fire Fighting Equipment	Water Truck is located at the south end of the Shredder Yard. Enforcer foam is available within the area.



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Hazard Type	Fire - Explosion
Location of Hazard	Fuel and Oil Storage Area
Possible Ignition Source	Sparks; cigarettes; faulty grounding; faulty electrical
Means taken to reduce the hazard:	<ul style="list-style-type: none">o Special protections need to be put in place, as per Hot Work Permit, prior to any hot work being performed in area.o "No Smoking" signs must be posted in area;o Ensuring that flammable or combustible materials is not on or around electrical equipment;o Ensure nozzles provided are automatic shut off;o Ensure the operator remains with the equipment while it is being fueled;o Spills are to be cleaned up immediately;o Ensure worn wires are replaced;o Never using extension cords as substitutes for wiring improvements;o Using only UL or FM approved extension cords;o Checking wiring in hazardous locations where risk of fire is high;o Checking that electrical equipment is properly grounded or double insulated;o Grounding cables for fuel and oil tanks must be periodically inspected for integrity;o Periodic SHEC/Mgmt audits of compliance in this areao Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire extinguishers are located within the petroleum storage area as well as the operations office and inbound scale house.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Enforcer foam is available within the area.



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Shredder and Downstream

Hazard Type	Fire - Explosion
Location of Hazard	Sheet Iron and ELVs active piles
Possible Ignition Source	Sparks from Hot Work; cigarettes; compressed gas cylinders; batteries stored within materials; ordinance
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Inspection of all inbound loads per Inbound Material Acceptance Policy. o Follow detailed inspection protocol of inbound loads as outlined in Inbound Material Acceptance Policy o Immediate segregation or return to customer of an unacceptable item o Buckets in area for the collection of batteries; o "No smoking" signs o Strict adherence to Hot Work Policy and Permit; o Thermal imaging of the pile, looking for a rise in temperatures, occurs daily o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire extinguishers are located within the motor control building; within the guard station west of the sheet iron pile.
Other Fire Fighting Equipment	The water truck is parked at the south end of this yard. Water Bombs are surrounding piles. Misters should be on at all times wetting down piles. Follow policy on fire breaks. Enforcer foam is available within the area.

Hazard Type	Fire
Location of Hazard	Throughout the area of the Mill and Downstream
Possible Ignition Source	Faulty Electrical
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Ensure worn wires are replaced o Never using extension cords as substitutes for wiring improvements o Using only UL or FM approved extension cords o Checking wiring in hazardous locations where risk of fire is high o Checking that electrical equipment is properly grounded or double insulated o Ensuring adequate spacing while performing work o Ensuring that flammable or combustible materials is not on or around electrical equipment o Ensure space heaters are electrical and have tip over protection o Periodic SHEC/Mgmt audits of compliance in this area



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	<ul style="list-style-type: none">○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers can be found in the electrical trailer; storage trailers east of downstream; within the motor control building and on posts under picker station as well as within picker station.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Water Bombs are surrounding piles. Misters should be on at all times, when above 32°F, wetting down piles. Maintain fire breaks in accordance with standard. Enforcer foam is available within the area.

Hazard Type	Fire - Explosion
Location of Hazard	Throughout the area of the Mill and Downstream
Possible Ignition Source	Flammable/Explosion material being shredded
Means taken to reduce the hazard:	<ul style="list-style-type: none">○ High lighting in area so that operator has the chance to see material that might be flammable or explosive prior to it being placed on infeed conveyor.○ Double Inspection of material; one MH operator inspects material prior to second MH operator feeding to the mill.○ Fire Breaks between material storage piles on infeed side of mill (See Appendix E in Policy)○ Housekeeping of mill area maintained;○ Storage limitations of material over weekends and holidays (see Appendix E in policy).○ Periodic SHEC/Mgmt audits of compliance in this area○ Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Extinguishers can be found in the following nearby locations: electrical trailer; storage trailers east of downstream; within the motor control building and on posts under picker station as well as within picker station.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Water Bombs are surrounding piles. Misters should be on at all times, when above 32°F, wetting down piles. Maintain fire breaks in accordance with standard. Enforcer foam is available within the area.



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Hazard Type	Fire
Location of Hazard	DNF Storage Piles
Possible Ignition Source	Heat from process; undeployed air bags; cigarettes;
Means taken to reduce the hazard:	<ul style="list-style-type: none">○ Deploy air bags during depollution process;○ Perform Thermal imaging of the pile daily;○ Ensure Water misting of piles occurs when temperatures are above 40°F;○ Ensure visual inspection of piles is performed during the course of the shift○ Ensure that material piles are moved away from machinery during the operation;○ Ensure that material is moved off site, for further processing, within 24 hours.○ Ensure worn wires are replaced○ Never using extension cords as substitutes for wiring improvements○ Using only UL or FM approved extension cords○ Checking wiring in hazardous locations where risk of fire is high○ Checking that electrical equipment is properly grounded or double insulated○ Ensuring adequate spacing while performing work○ Ensuring that flammable or combustible materials is not on or around electrical equipment○ Ensure space heaters are electrical and have tip over protection○ Periodic SHEC/Mgmt audits of compliance in this area○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers can be found in the following nearby locations: electrical trailer; storage trailers east of downstream; within the motor control building and on posts under picker station as well as within picker station. Enforcer foam is available within the area.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Water Bombs are surrounding piles. Mistars should be on at all times, when above 32°F, wetting down piles. Maintain fire breaks in accordance with standard. Enforcer foam is available within the area.



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Hazard Type	Fire
Location of Hazard	Picking Station
Possible Ignition Source	Mill Explosion; Faulty Electrical; smoking
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Ensure deluge function is checked daily; o Ensure ease of access to fire extinguishers; o Ensure worn wires are replaced; o Never using extension cords as substitutes for wiring improvements; o Using only UL or FM approved extension cords; o Checking wiring in hazardous locations where risk of fire is high; o Checking that electrical equipment is properly grounded or double insulated; o Ensuring adequate spacing while performing work; o Ensuring that flammable or combustible materials is not on or around electrical equipment; o "No Smoking" signs on doors of picking station building; o Periodic SHEC/Mgmt audits of compliance in this area; and o Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Numerous fire extinguishers are maintained within the picking station as well as on support beams under the picking station.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Water Bombs are surrounding piles. Mistars should be on at all times, when above 32°F, wetting down piles. Maintain fire breaks in accordance with standard. Enforcer foam is available within the area.

Hazard Type	Fire
Location of Hazard	Hot Work
Possible Ignition Source	Torching/Welding
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Hot Work (excluding torch-cutting) must be performed under a Hot Work permit, authorized by a manager. o Hot Work permit conditions should require the use of Fire Watch Personnel: (a) whenever combustible materials cannot be safeguarded from potential ignition sources, and (b) to verify the area fire hazard-free for 30 minutes after Hot Work has ceased. o For torch-cutting work, (a) Fire Watch Personnel should verify the area fire hazard-free for 30 minutes after Hot Work has ceased and (b) the supervisor in charge of the torch-cut work area should inspect the area after the end-of-shift.



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	<ul style="list-style-type: none">○ Hot Work should not be performed within 25 ft of stockpiles containing combustible materials.○ Hot Work should only be done by authorized personnel in designated torch-cutting, cutting and welding areas whenever possible.○ Hot Work should be prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations.○ Cutting and welding should be prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering.○ Torches, regulators, pressure-reducing valves, and manifolds should be UL listed or FM approved.○ Oxygen-fuel gas systems should be equipped with listed and/or approved flash arrestors and pressure-relief devices.○ Pre-work inspection that should check that: (a) all fuel tanks, hoses and torches are in good condition; (b) scrap materials do not contain flammable, combustible or pressurized components; and (c) torch-cutting areas are free of combustible materials.○ Maintaining a safe distance or approved barrier between stored fuel and oxygen, in accordance with SHEC requirements – as provided by applicable SHEC documents or the SHEC representative.○ Ensuring that adequate fire extinguishing equipment is always available.○ Periodic SHEC/Mgmt audits of compliance in this area; and○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Numerous fire extinguishers are maintained within the work area
Other Fire Fighting Equipment	Water access at the downstream. The water truck is parked at the south end of the shredder yard. Enforcer foam is available within the area.



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General Areas of Concern

Hazard Type	Fire
Location of Hazard	Mobile Equipment – General
Possible Ignition Source	Spark or flame
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Follow a preventive maintenance program for the equipment; o Daily/Pre-shift inspections of equipment must be performed; <ul style="list-style-type: none"> o Leaks of fluids are addressed as soon as possible o Never leave a piece of equipment during fueling; o When equipment is not in use; the key should be removed o Equipment should be parked at least 25 feet (if feasible) from buildings, process equipment or stockpiles o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	A fire extinguisher is maintained within each piece of equipment
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Enforcer foam is available within the area.

Hazard Type	Fire
Location of Hazard	Office and Scale houses – General
Possible Ignition Source	Portable heaters; faulty Electrical; cigarettes
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Portable heaters must be approved by management o Fuel fired heaters are prohibited o Heaters must have tip over protection that automatically shuts off the unit o Adequate clearance of the heater from combustible materials or other materials must be maintained at all time; o Housekeeping must be maintained at all times in offices; o Overloading of circuits is prohibited o “No Smoking” signs posted at entrances to buildings; o Ensure worn wires are replaced o Never using extension cords as substitutes for wiring improvements o Using only UL or FM approved extension cords o Checking wiring in hazardous locations where risk of fire is high o Checking that electrical equipment is properly grounded or double insulated o Ensuring adequate spacing while performing work o Ensuring that flammable or combustible materials is not on or around electrical equipment



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	<ul style="list-style-type: none">○ Ensure space heaters are electrical and have tip over protection○ Periodic SHEC/Mgmt audits of compliance in this area○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Fire extinguishers are maintained within each scale house and office building.
Other Fire Fighting Equipment	The water truck is parked at the south end of the shredder yard. Enforcer foam is available within the area.



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Shredder – North End of Yard (Diagram)

Peddler Yard, Parts Storage Bldg, Auto Depollution Area, Offices, Fuel and Oil





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Shredder – Mill Area (Diagram) Sheet Iron Storage; ELV Storage, DNF Discharge Areas; Final Product Discharge Area





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**APPENDIX A – Fire Prevention Inspection Checklist
Operating Facilities**

Area	No.	Fire Prevention and Suppression: Processing Systems, Mobile Equipment and Stockpile Management	Activity
All	1	Confirm that the Inbound Material Control Standard is properly implemented, including the battery removal requirements for car bodies.	Inbound
All	2	Regularly conduct routine housekeeping: to remove debris and potentially combustible materials from around the facility, especially around the processing plants (e.g. Shredder and DNF Plants).	Housekeeping
All	3	Supervisors must verify that hot work areas are inspected and hosed down after hot work is performed.	Hot Work
S	4	Adjust shredder schedules to accommodate feed stock inventory.	Operations
S, DNF	5	Run material off in feed and downstream conveyors until all belts and equipment are empty or cleared at end of every shift.	Operations
S, DNF	6	Clean off DNF/ASR residue from operating equipment during shifts (excess residue build-up as needed) and after shifts.	Operations
DNF	7	Confirm that process outfall material (excluding shredded steel) is moved away from process drop points to designated stockpile area at end of shift.	Operations
DNF	8	At the end of every shift, the Supervisor should conduct a thorough DNF Plant walk-through and inspection.	Operations
DNF	9	DNF produced on the shift prior to a non-production day, weekend or holiday should be stockpiled separately from any backlog pile of DNF.	Operations
All	10	Confirm mobile equipment is parked at least 25 feet away from process buildings and stockpiles when not operating.	Operations
All	11	Maintain a 24-hr fire watch or security detail to patrol stockpiles (excluding finished ferrous products) during non-operating weekends and holidays.	Stockpiles
All	12	Confirm that fire lanes are maintained between stockpiles which are appropriate for the yard and that access roads are kept clear of objects that could impede traffic flow.	Stockpiles
All	13	Confirm access to a pressurized water system (eg, fire hydrant, pond and pump system, water truck with fire hose, etc.)	Preparation
All	14	Confirm hoses are stored properly for rapid access and connection to pressurized water supply.	Preparation
All	15	Confirm fittings match Fire Department equipment for trouble-free connection.	Preparation
All	16	Confirm water cannons, if installed, are in proper operating condition.	Preparation
All	17	Confirm all necessary personnel are trained on fire extinguisher/ water cannon use and know their locations.	Preparation
All	18	Confirm that fire extinguishers are full and in working order.	Preparation



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(SHEC) MANAGEMENT**

**Fire Prevention and Preparedness
Plan Requirements - SHREDDER**


MIDWEST REGION

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**APPENDIX A – Fire Prevention Inspection Checklist
Operating Facilities**

Area	No.	Fire Prevention and Suppression: Processing Systems, Mobile Equipment and Stockpile Management	Complete (Y/N)
All	1	Confirm that the Inbound Material Control Standard is properly implemented, including the battery removal requirements for car bodies.	
All	2	Regularly conduct routine housekeeping: to remove debris and potentially combustible materials from around the facility, especially around the processing plants (e.g. Shredder and DNF Plants).	
All	3	Supervisors must verify that hot work areas are inspected and hosed down after hot work is performed.	
S	4	Adjust shredder schedules to accommodate feed stock inventory.	
S, DNF	5	Run material off in feed and downstream conveyors until all belts and equipment are empty or cleared at end of every shift.	
S, DNF	6	Clean off DNF/ASR residue from operating equipment during shifts (excess residue build-up as needed) and after shifts.	
DNF	7	Confirm that process outfall material (excluding shredded steel) is moved away from process drop points to designated stockpile area at end of shift.	
DNF	8	At the end of every shift, the Supervisor should conduct a thorough DNF Plant walk-through and inspection.	
DNF	9	DNF produced on the shift prior to a non-production day, weekend or holiday should be stockpiled separately from any backlog pile of DNF.	
All	10	Confirm mobile equipment is parked at least 25 feet away from process buildings and stockpiles when not operating.	
All	11	Maintain a 24-hr fire watch or security detail to patrol stockpiles (excluding finished ferrous products) during non-operating weekends and holidays.	
All	12	Confirm that fire lanes are maintained between stockpiles which are appropriate for the yard and that access roads are kept clear of objects that could impede traffic flow.	
All	13	Confirm access to a pressurized water system (eg, fire hydrant, pond and pump system, water truck with fire hose, etc.)	
All	14	Confirm hoses are stored properly for rapid access and connection to pressurized water supply.	
All	15	Confirm fittings match Fire Department equipment for trouble-free connection.	
All	16	Confirm water cannons, if installed, are in proper operating condition.	
All	17	Confirm all necessary personnel are trained on fire extinguisher/ water cannon use and know their locations.	
All	18	Confirm that fire extinguishers are full and in working order.	

 SIMS METAL MANAGEMENT	SAFETY, HEALTH, ENVIRONMENTAL & COMMUNITY (SHEC) MANAGEMENT		
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Fire Prevention and Preparedness Plan Requirements – Paulina - Ferrous

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1.0 PURPOSE

The purposes of this plan are to:

- A. minimize the causes of fires, and prevent loss of life and property by fire;
- B. comply with the Occupational Safety and Health Administration's (OSHA) standard on Fire prevention, 29 C.F.R. 1910.39 and the SMM standard; and,
- C. provide employees with information and guidelines that will assist them in recognizing, reporting and controlling fire hazards.

2.0 DEFINITIONS

- A. **"Fire Watch Personnel"** means those personnel trained to (i) detect fires when Hot Work is being conducted, (ii) survey the stockpiles with the infrared sensor referenced in Exhibit E, and (iii) record readings from that infrared sensor.
- B. **"Hot Work"** means any activity that creates heat, flame, sparks, or smoke, and includes one or more of the following activities: (i) torch-cutting, (ii) welding (gas or arc), (iii) soldering, (iv) other cutting, and/or (v) hot tar operations.
- C. **"BMP"** means best management practice.

3.0 RELATED DOCUMENTS

No.	Name	Effective
1.	SMM Fire Response Plan Requirements	DRAFT
2.	Inbound Material Control Standard	October 2010
3.	Facility Stormwater Pollution Prevention Plan (SWPPP)	
4.	Spill Containment, Control and Countermeasure Plan	
5.	Hot Work Operations Procedure	March 2011



Fire Prevention and Preparedness Plan Requirements – Paulina - Ferrous

4.0 RESPONSIBILITIES

Fire safety is everyone's responsibility.

- All employees should ensure that they receive training on how to prevent, prepare for and respond to fires (both what they can do and the limits of what they can do),
 - Upon hire; as an annual review; and whenever there is a change in the plan
 - Training should include
 - when an employee should call “911”
 - what type of fires are considered “incipient”
 - All employees are responsible for adhering to SMM requirements regarding fire prevention, preparedness, and response.
 - All employees should work to implement the company’s Inbound Material Control Standard
- Regional management is responsible for:
 - Ensuring that this facility has prepared a facility-specific Fire Prevention and Preparedness Plan that effectively identifies the fire risks and the procedures and equipment in place to reduce the risk of fires. This Standard sets forth the minimum requirements for those facility-specific plans.
 - Providing adequate resources and training for its employees to reduce the risk of fires, prepare for fires and engage in the safe response to fires.
 - Facility Managers are responsible for
 - Ensure compliance with the requirements of this plan,
 - Provide training on this plan and on the corporate Fire Prevention and Preparedness policy which requires this plan (See section 5.4 of this plan)
 - Implement the facility’s Fire Prevention & Preparedness Plan,
 - Ensure that facility’s fire control equipment and systems are properly maintained;
 - Ensure that the facility’s fuel source hazards are controlled.
 - Develop a team of employees and clearly defining their responsibilities for:
 - (a) maintaining fire prevention and response equipment and systems,
 - (b) controlling potentially hazardous fuel sources, and
 - (c) the control and accumulation of flammable or combustible material;
 - Each facility’s SHEC representative is responsible for:
 - Managing the facility’s Fire Prevention & Preparedness Plan,
 - Ensuring that records pertaining to plan are being maintained,
 - Developing and administering fire prevention and preparedness training programs, see section 5.4
 - Conducting fire risk surveys as part of the monthly SHEC inspection
 - making recommendations for appropriate corrective measures



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5.0 PLAN OUTLINE:

5.1 Recognizing and Reducing Hazards

Each facility will develop an plan that addresses potential fire hazards with buildings and operational areas of their site.

5.2 Fire Response

- It is the policy of SMM, and this facility, that fire-fighting by an employee is considered a voluntary activity and that by signing off on this plan you agree to the voluntary nature of this task.
- It is the policy of SMM and this facility that response to fires will be
 - limited to fires at incipient (early) stages and only with the use of fire extinguishers and hose systems, and only with properly trained personnel;
 - limited to participation on a strictly voluntary basis by employees, not as a condition of employment;
 - **when there is doubt about the facility's ability to safely extinguish an early, incipient stage fire – or whenever a fire goes beyond incipient stage - to call "911" or the local Fire Department, from a landline phone if possible**

5.3 Safety Inspections

- Managers must ensure that stockpiles and mobile and stationary equipment are inspected regularly to: (a) ensure smoldering does not occur, (b) detect buildup/release of oil and grease from hoses and engine compartments; and (c) ensure identified hazards are mitigated.
- See Appendix A for facility inspection points.

5.4 Training

Managers must ensure that operators and supervisors are properly trained in fire prevention and preparedness plan requirements that include:

- 5.4.1 Providing basic fire prevention training to all employees by facility management (with documentation of the training) –
 1. At their initial assignment;
 2. Annually through toolbox talks; and
 3. When changes in work processes necessitate additional training;
- 5.4.2 Review of 29 CFR 1910.38 (including how to obtain a copy);



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- 5.4.3 The facility-specific Fire Prevention Plan (including where the plan is located);
- 5.4.4 housekeeping practices;
- 5.4.5 Proper response and notification in the event of a fire;
- 5.4.6 instruction on proper use of portable fire extinguishers, hoses and water cannons (as applicable); and
- 5.4.7 Recognition of potential fire hazards associated with the specific materials and processes to which employees may be exposed.

5.5 Security

- 5.5.1 When a processing facility is shut down and employees absent, the security guard (if used by the facility) should:
 - 1. conduct a periodic fire watch on stockpiles and plant equipment;
 - 2. conduct hourly inspections of all areas of the facility that may be susceptible to fire (whenever feasible using designated security “rounds” verification stations); and
 - 3. be trained in appropriate response to any observed smoke or flame.

Confirm that the facility is fenced and gated, when applicable



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6.0 PLAN CONTENT

Fire Prevention Team

Name	Title	Responsibility
Debbie Hays	EHS Business Partner	See page 3; Performs SHEC Inspections
Maria Medina	Management Trainee	See page 3; Performs various Plant Inspections Responds to corrective action requests Performs Plant Inspections Responds to corrective actions Coordinates Maintenance Activities
Bill Heath	Supervisor	Monthly Fire Extinguisher Inspection Acceptance of Fuel and oil Deliveries Inbound Material Inspection Responds to corrective actions
	Hourly Employee(s)	Monthly Fire Extinguisher checks Fueling Equipment Water Truck Operator
	Material Inspectors	Inbound Material Inspection
	All Employees	Report spills or leaks as found, immediately
	Mobile Equip Operators	Daily/Pre-Shift Equipment Inspections Equipment fueling
	Welder/Torchmen	Fire watch/ Inspect for combustibles prior to hot work Inspect area prior to leaving area for fire/smoldering materials
Ryan Wise/Maria Medina	Maintenance	Equipment Maintenance issues (non-shredder)
AAA Fire	Third Party	Annual Fire Extinguisher Inspections
Calumet City Plumbing	Third Party	Quarterly Hydrant testing/maintenance.



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Paulina – Ferrous- Yard 1

Crane Shop/Offices, Torch Field, Turnings, Material Storage, Oil Storage

Hazard Type	Fire - Explosion
Location of Hazard	Oil Storage –
Possible Ignition Source	Sparks; cigarettes; faulty grounding; faulty electrical
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Special protections need to be put in place, as per Hot Work Permit, prior to any hot work being performed in area. ○ “No Smoking” signs must be posted in area; ○ Ensuring that flammable or combustible materials is not on or around electrical equipment; ○ Spills are to be cleaned up immediately; ○ Ensure worn wires are replaced in bldg. housing oils; ○ Never using extension cords as substitutes for wiring improvements; ○ Using only UL or FM approved extension cords; ○ Checking wiring in hazardous locations where risk of fire is high; ○ Checking that electrical equipment is properly grounded or double insulated; ○ Periodic audits performed by managers and SHEC personnel ○ Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire Extinguishers are located in the crane shop
Other Fire Fighting Equipment	Water truck

Hazard Type	Fire
Location of Hazard	Crane Shop
Possible Ignition Source	Faulty Electrical – smoking – flammable/combustible materials
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Ensure worn wires are replaced; ○ Never using extension cords as substitutes for wiring improvements; ○ Using only UL or FM approved extension cords; ○ Checking wiring in hazardous locations where risk of fire is high;



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	<ul style="list-style-type: none"> o Checking that electrical equipment is properly grounded or double insulated; o Ensuring adequate spacing while performing work; o Ensuring that flammable or combustible materials is not on or around electrical equipment or space heaters; o Ensure space heaters are electrical and have tip over protection; o Ensuring “No Smoking” signs are posted throughout the building; o Storage of flammable liquids must be stored in a flammable storage cabinet; o Storage of flammable liquids must be away from ignition sources; o Storage of contaminated rags must be maintained in a covered metal container; o Limit the indoor storage of combustible materials such as cardboard boxes or pallets to 6 feet or less high; o Ensure Hot Work Permit in place when welding; o Ensure fire protection in place (extinguishers) when welding; o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire Extinguishers are located throughout this building.
Other Fire Fighting Equipment	Water Truck.

Hazard Type	Fire
Location of Hazard	Torch field – Crane Shop
Possible Ignition Source	Torching/Welding
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Hot Work must be performed under a Hot Work permit, authorized by a manager. o Hot Work permit conditions should require the use of Fire Watch Personnel: (a) whenever combustible materials cannot be safeguarded from potential ignition sources, and (b) to verify the area fire hazard-free for 30 minutes after Hot Work has ceased. o Hot Work should not be performed within 25 ft of stockpiles containing combustible materials. o Hot Work should only be done by authorized personnel in designated torch-cutting, cutting and welding areas whenever possible.



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	<ul style="list-style-type: none"> ○ Hot Work should be prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations. ○ Cutting and welding should be prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering. ○ Torches, regulators, pressure-reducing valves, and manifolds should be UL listed or FM approved. ○ Oxygen-fuel gas systems should be equipped with listed and/or approved flash arrestors and pressure-relief devices. ○ Pre-work inspection that should check that: (a) all fuel tanks, hoses and torches are in good condition; (b) scrap materials do not contain flammable, combustible or pressurized components; and (c) torch-cutting areas are free of combustible materials. ○ Maintaining a safe distance or approved barrier between stored fuel and oxygen, in accordance with SHEC requirements – as provided by applicable SHEC documents or the SHEC representative. ○ Ensuring that adequate fire extinguishing equipment is always available. ○ Periodic SHEC/Mgmt audits of compliance in this area ○ Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Extinguishing materials (fire extinguishers, water, shovels) are maintained within the torch field.
Other Fire Fighting Equipment	The water truck

Hazard Type	Fire
Location of Hazard	Material Storage Piles
Possible Ignition Source	Heat from process; grease/oil; cigarettes;
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Ensure visual inspection of piles is performed during the course of the shift ○ Ensure that material piles are moved away from machinery during the operation; ○ Ensuring adequate spacing while performing work ○ Ensuring that flammable or combustible materials is not on or around piles ○ Periodic SHEC/Mgmt audits of compliance in this area ○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers are maintained in Equipment, torchfield, office bldg., and crane shop..
Other Fire Fighting Equipment	The water truck.



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**Paulina – Ferrous – Yard 2
Material Processing Area - Sheet Iron Overflow Storage**

Hazard Type	Fire
Location of Hazard	Material Storage Piles
Possible Ignition Source	Heat from process; grease/oil; cigarettes;
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Ensure visual inspection of piles is performed during the course of the shift o Ensure that material piles are moved away from machinery during the operation; o Ensuring adequate spacing while performing work o Ensuring that flammable or combustible materials is not on or around piles o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers are maintained in each piece of equipment
Other Fire Fighting Equipment	The water truck.

Hazard Type	Fire
Location of Hazard	Sheet Iron Overflow Storage Area
Possible Ignition Source	Batteries/Compressed Gas cylinders/ordinance/cigarettes/
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Inspection of all inbound loads per Inbound Material Acceptance Policy. o Immediate segregation or return to customer of an unacceptable item; o Buckets in area for the collection of batteries; o “No smoking” signs o Housekeeping of area must be maintained; o Thermal imaging of the pile, looking for a rise in temperatures, occurs daily; o Periodic audits performed by managers and SHEC personnel o Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	A fire extinguisher is maintained within each piece of equipment
Other Fire Fighting Equipment	The water truck.



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General Areas of Concern

Hazard Type	Fire
Location of Hazard	Mobile Equipment – General
Possible Ignition Source	Spark or flame
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Follow a preventive maintenance program for the equipment; ○ Daily/Pre-shift inspections of equipment must be performed; <ul style="list-style-type: none"> ○ Leaks of fluids are addressed as soon as possible ○ Never leave a piece of equipment during fueling; ○ When equipment is not in use; the key should be removed ○ Equipment should be parked at least 25 feet (if feasible) from buildings, process equipment or stockpiles ○ Periodic audits performed by managers and SHEC personnel ○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	A fire extinguisher is maintained within each piece of equipment
Other Fire Fighting Equipment	Water Truck

Hazard Type	Fire
Location of Hazard	Office/Scale house – General
Possible Ignition Source	Portable heaters; faulty Electrical; cigarettes
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Portable heaters must be approved by management ○ Fuel fired heaters are prohibited ○ Heaters must have tip over protection that automatically shuts off the unit ○ Adequate clearance of the heater from combustible materials or other materials must be maintained at all time; ○ Housekeeping must be maintained at all times in offices; ○ Overloading of circuits is prohibited ○ “No Smoking” signs posted at entrances to buildings; ○ Ensure worn wires are replaced ○ Never using extension cords as substitutes for wiring improvements ○ Using only UL or FM approved extension cords ○ Checking wiring in hazardous locations where risk of fire is high ○ Checking that electrical equipment is properly grounded or double insulated



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	<ul style="list-style-type: none">○ Ensuring adequate spacing while performing work○ Ensuring that flammable or combustible materials is not on or around electrical equipment○ Ensure space heaters are electrical and have tip over protection○ Periodic audits performed by managers and SHEC personnel○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Fire extinguishers are maintained within each scale house and office building.
Other Fire Fighting Equipment	Water Truck



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Paulina – Ferrous – AOCs Yard 1

Torchfield, Crane Shop/offices, Turnings Storage, Storage Piles, Oil Storage, Shear





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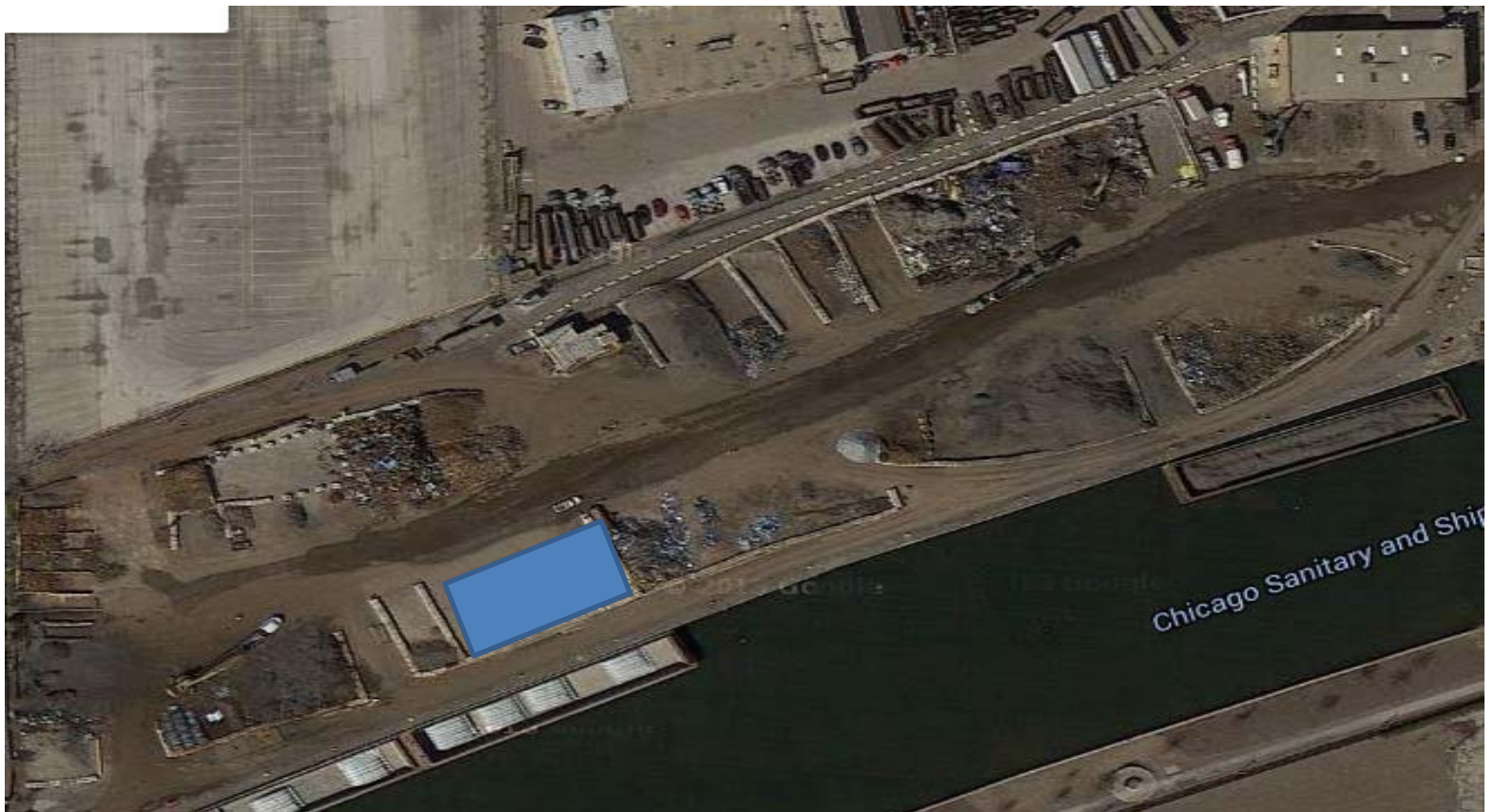
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Paulina – Ferrous – AOCs- Material Processing – Shredder Overflow (only during shredder outage)



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**APPENDIX A – Fire Prevention Inspection Checklist
Operating Facilities**

Area	No.	Fire Prevention and Suppression: Processing Systems, Mobile Equipment and Stockpile Management	Activity
All	1	Confirm that the Inbound Material Control Standard is properly implemented, including the battery removal requirements for car bodies.	Inbound
All	2	Regularly conduct routine housekeeping: to remove debris and potentially combustible materials from around the facility, especially around the processing plants (e.g. Shredder and DNF Plants).	Housekeeping
All	3	Supervisors must verify that hot work areas are inspected and hosed down after hot work is performed.	Hot Work
All	8	At the end of every shift, the Supervisor should conduct a thorough Plant walk-through and inspection.	Operations
All	10	Confirm mobile equipment is parked at least 25 feet away from process buildings and stockpiles when not operating.	Operations
All	11	Maintain a 24-hr fire watch or security detail to patrol stockpiles (excluding finished ferrous products) during non-operating weekends and holidays.	Stockpiles
All	12	Confirm that fire lanes are maintained between stockpiles which are appropriate for the yard and that access roads are kept clear of objects that could impede traffic flow.	Stockpiles
All	13	Confirm access to a pressurized water system (eg, fire hydrant, pond and pump system, water truck with fire hose, etc.)	Preparation
All	17	Confirm all necessary personnel are trained on fire extinguisher/ water cannon use and know their locations.	Preparation
All	18	Confirm that fire extinguishers are full and in working order.	Preparation



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1.0 PURPOSE

The purposes of this plan are to:

- A. minimize the causes of fires, and prevent loss of life and property by fire;
- B. comply with the Occupational Safety and Health Administration's (OSHA) standard on Fire prevention, 29 C.F.R. 1910.39 and the SMM standard; and,
- C. provide employees with information and guidelines that will assist them in recognizing, reporting and controlling fire hazards.

2.0 DEFINITIONS

- A. **"Fire Watch Personnel"** means those personnel trained to (i) detect fires when Hot Work is being conducted, (ii) survey the stockpiles with the infrared sensor referenced in Exhibit E, and (iii) record readings from that infrared sensor.
- B. **"Hot Work"** means any activity that creates heat, flame, sparks, or smoke, and includes one or more of the following activities: (i) torch-cutting, (ii) welding (gas or arc), (iii) soldering, (iv) other cutting, and/or (v) hot tar operations.
- C. **"BMP"** means best management practice.

3.0 RELATED DOCUMENTS

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3.	Facility Stormwater Pollution Prevention Plan (SWPPP)	
4.	Spill Containment, Control and Countermeasure Plan	
5.	Hot Work Operations Procedure	March 2011



Fire Prevention and Preparedness Plan Requirements – Paulina – NF & Admin

4.0 RESPONSIBILITIES

Fire safety is everyone's responsibility.

- All employees should ensure that they receive training on how to prevent, prepare for and respond to fires (both what they can do and the limits of what they can do),
 - Upon hire; as an annual review; and whenever there is a change in the plan
 - Training should include
 - when an employee should call “911”
 - what type of fires are considered “incipient”
 - All employees are responsible for adhering to SMM requirements regarding fire prevention, preparedness, and response.
 - All employees should work to implement the company’s Inbound Material Control Standard
- Regional management is responsible for:
- Ensuring that this facility has prepared a facility-specific Fire Prevention and Preparedness Plan that effectively identifies the fire risks and the procedures and equipment in place to reduce the risk of fires. This Standard sets forth the minimum requirements for those facility-specific plans.
 - Providing adequate resources and training for its employees to reduce the risk of fires, prepare for fires and engage in the safe response to fires.
- Facility Managers are responsible for
- Ensure compliance with the requirements of this plan,
 - Provide training on this plan and on the corporate Fire Prevention and Preparedness policy which requires this plan (See section 5.4 of this plan)
 - Implement the facility’s Fire Prevention & Preparedness Plan,
 - Ensure that facility’s fire control equipment and systems are properly maintained;
 - Ensure that the facility’s fuel source hazards are controlled.
 - Develop a team of employees and clearly defining their responsibilities for:
 - (a) maintaining fire prevention and response equipment and systems,
 - (b) controlling potentially hazardous fuel sources, and
 - (c) the control and accumulation of flammable or combustible material;
- Each facility’s SHEC representative is responsible for:
- Managing the facility’s Fire Prevention & Preparedness Plan,
 - Ensuring that records pertaining to plan are being maintained,
 - Developing fire prevention and preparedness training programs, see section 5.4
 - Conducting fire risk surveys as part of the monthly SHEC inspection
 - making recommendations for appropriate corrective measures



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5.0 PLAN OUTLINE:

5.1 Recognizing and Reducing Hazards

Each facility will develop an plan that addresses potential fire hazards with buildings and operational areas of their site.

5.2 Fire Response

- It is the policy of SMM, and this facility, that fire-fighting by an employee is considered a voluntary activity and that by signing off on this plan you agree to the voluntary nature of this task.
- It is the policy of SMM and this facility that response to fires will be
 - limited to fires at incipient (early) stages and only with the use of fire extinguishers and hose systems, and only with properly trained personnel;
 - limited to participation on a strictly voluntary basis by employees, not as a condition of employment;
 - **when there is doubt about the facility's ability to safely extinguish an early, incipient stage fire – or whenever a fire goes beyond incipient stage - to call "911" or the local Fire Department, from a landline phone if possible**

5.3 Safety Inspections

- Managers must ensure that stockpiles and mobile and stationary equipment are inspected regularly to: (a) ensure smoldering does not occur, (b) detect buildup/release of oil and grease from hoses and engine compartments; and (c) ensure identified hazards are mitigated.
- See Appendix A for facility inspection points.

5.4 Training

Managers must ensure that operators and supervisors are properly trained in fire prevention and preparedness plan requirements that include:

- 5.4.1 Providing basic fire prevention training to all employees by facility management (with documentation of the training) –
 - 1. At their initial assignment;
 - 2. Annually through toolbox talks; and
 - 3. When changes in work processes necessitate additional training;
- 5.4.2 Review of 29 CFR 1910.38 (including how to obtain a copy);



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- 5.4.3 The facility-specific Fire Prevention Plan (including where the plan is located);
- 5.4.4 housekeeping practices;
- 5.4.5 Proper response and notification in the event of a fire;
- 5.4.6 instruction on proper use of portable fire extinguishers, hoses and water cannons (as applicable); and
- 5.4.7 Recognition of potential fire hazards associated with the specific materials and processes to which employees may be exposed.

5.5 Security

- 5.5.1 When a processing facility is shut down and employees absent, the security guard (if used by the facility) should:
 - 1. conduct a periodic fire watch on stockpiles and plant equipment;
 - 2. conduct hourly inspections of all areas of the facility that may be susceptible to fire (whenever feasible using designated security “rounds” verification stations); and
 - 3. be trained in appropriate response to any observed smoke or flame.

Confirm that the facility is fenced and gated, when applicable



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6.0 PLAN CONTENT

Fire Prevention Team

Name	Title	Responsibility
Debbie Hays	SHEC Director	See page 3; performs SHEC Inspections
Ricky Jaime	Plant Manager	See page 3; performs Plant Inspections Respond to corrective action requests
Martin Avila	Supervisor	Performs Plant Inspections Respond to corrective action Monthly Fire Extinguisher Checks
	Material Inspector	Inbound Material Inspection Monthly Fire Extinguisher Inspection
	Equipment Operators	Daily/Pre-Shift Equipment Inspections
	Mobile Equip Operators	Equipment fueling
	All Employees	Report spills or leaks as found immediately
Ricky Jaime Ryan Wise	Maintenance	Equipment Maintenance issues (non-shredder)
	Office Admin	Notice of Emergencies to Office Personnel
AAA Fire	Third Party	Annual Fire Extinguisher Inspections
Calumet City Plumbing	Third Party	Quarterly Fire Hydrant inspections/maintenance



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Paulina – NonFerrous – Areas of Concern

Hazard Type	Fire - Explosion
Location of Hazard	Propane Storage
Possible Ignition Source	Sparks; cigarettes; secured
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Special protections need to be put in place, as per Hot Work Permit, prior to any hot work being performed in area. o “No Smoking” signs must be posted in area; o Ensuring that flammable or combustible materials is not on or around electrical equipment o Ensure that cylinders are stored properly and in a secure manner; o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be addressed immediately.
Fire Extinguishers	Fire extinguishers are located within the petroleum storage area as well as the within the maintenance building
Other Fire Fighting Equipment	The water truck.

Hazard Type	Fire
Location of Hazard	NF Warehouse
Possible Ignition Source	Faulty Electrical
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Inbound Material Control procedures followed for the acceptance of all materials o Building exits can never be blocked by material o Portable heaters must be approved by management o Fuel fired heaters are prohibited o Heaters must have tip over protection that automatically shuts off the unit o Adequate clearance of the heater from combustible materials or other materials must be maintained at all time; o Housekeeping must be maintained at all times in offices; o Overloading of circuits is prohibited o “No Smoking” signs posted at entrances to buildings; o Ensure worn wires are replaced



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	<ul style="list-style-type: none"> ○ Never using extension cords as substitutes for wiring improvements ○ Using only UL or FM approved extension cords ○ Checking wiring in hazardous locations where risk of fire is high ○ Checking that electrical equipment is properly grounded or double insulated ○ Ensuring adequate spacing while performing work ○ Ensuring that flammable or combustible materials is not on or around electrical equipment ○ Ensure space heaters are electrical and have tip over protection ○ Periodic SHEC/Mgmt audits of compliance in this area ○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers can be found throughout the warehouse.
Other Fire Fighting Equipment	Fire overhead fire door separating shipping and receiving areas The water truck

Hazard Type	Fire
Location of Hazard	Material Storage
Possible Ignition Source	Flammables, combustibles; grease/oil; cigarettes;
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Ensure visual inspection of materials is performed during the course of the shift ○ Ensure that material is moved away from machinery and buildings during the operation; ○ Ensuring adequate spacing while performing work ○ Ensuring that flammable or combustible materials is not on or around piles ○ Periodic SHEC/Mgmt audits of compliance in this area ○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Extinguishers are maintained in office bldg, scales, and NF warehouse
Other Fire Fighting Equipment	The water truck.



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Hazard Type	Fire
Location of Hazard	Hot Work
Possible Ignition Source	Torching/Welding
Means taken to reduce the hazard:	<ul style="list-style-type: none"> ○ Hot Work (excluding torch-cutting) must be performed under a Hot Work permit, authorized by a manager. ○ Hot Work permit conditions should require the use of Fire Watch Personnel: (a) whenever combustible materials cannot be safeguarded from potential ignition sources, and (b) to verify the area fire hazard-free for 30 minutes after Hot Work has ceased. ○ Hot Work should not be performed within 25 ft of stockpiles containing combustible materials. ○ Hot Work should only be done by authorized personnel in designated torch-cutting, cutting and welding areas whenever possible. ○ Hot Work should be prohibited in areas where explosive atmospheres of gases, vapors, or dusts could develop from residues or accumulations. ○ Cutting and welding should be prohibited on metal walls, ceilings, or roofs built of combustible sandwich-type panel construction or having combustible covering. ○ Torches, regulators, pressure-reducing valves, and manifolds should be UL listed or FM approved. ○ Oxygen-fuel gas systems should be equipped with listed and/or approved flash arrestors and pressure-relief devices. ○ Pre-work inspection that should check that: (a) all fuel tanks, hoses and torches are in good condition; (b) scrap materials do not contain flammable, combustible or pressurized components; and (c) torch-cutting areas are free of combustible materials. ○ Maintaining a safe distance or approved barrier between stored fuel and oxygen, in accordance with SHEC requirements – as provided by applicable SHEC documents or the SHEC representative. ○ Ensuring that adequate fire extinguishing equipment is always available. ○ Periodic SHEC/Mgmt audits of compliance in this area; and ○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Numerous fire extinguishers are maintained within the work area
Other Fire Fighting Equipment	The water truck



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General Areas of Concern

Hazard Type	Fire
Location of Hazard	Mobile Equipment – General
Possible Ignition Source	Spark or flame
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Follow a preventive maintenance program for the equipment; o Daily/Pre-shift inspections of equipment must be performed; <ul style="list-style-type: none"> o Leaks of fluids are addressed as soon as possible o Never leave a piece of equipment during fueling; o When equipment is not in use; the key should be removed o Equipment should be parked at least 25 feet (if feasible) from buildings, process equipment or stockpiles o Periodic SHEC/Mgmt audits of compliance in this area o Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	A fire extinguisher is maintained within each piece of equipment
Other Fire Fighting Equipment	The water truck.

Hazard Type	Fire
Location of Hazard	Offices, Scale– General
Possible Ignition Source	Portable heaters; faulty Electrical; cigarettes
Means taken to reduce the hazard:	<ul style="list-style-type: none"> o Portable heaters must be approved by management o Fuel fired heaters are prohibited o Space Heaters must have tip over protection that automatically shuts off the unit o Adequate clearance of the heater from combustible materials or other materials must be maintained at all time; o Housekeeping must be maintained at all times in offices; o Overloading of circuits is prohibited o “No Smoking” signs posted at entrances to buildings; o Ensure worn wires are replaced o Never using extension cords as substitutes for wiring improvements



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	<ul style="list-style-type: none">○ Using only UL or FM approved extension cords○ Checking wiring in hazardous locations where risk of fire is high○ Do not overload circuits○ Checking that electrical equipment is properly grounded or double insulated○ Ensuring adequate spacing while performing work○ Ensuring that flammable or combustible materials is not on or around electrical equipment○ Periodic SHEC/Mgmt audits of compliance in this area○ Audit findings, and related corrective actions, associated with areas of fire potential must be immediately addressed.
Fire Extinguishers	Fire extinguishers are maintained within each building.
Other Fire Fighting Equipment	The water truck



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Paulina – NF - AOCs
Office, NF Warehouse, Bulk Material Storage,
Propane Storage





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**APPENDIX A – Fire Prevention Inspection Checklist
Operating Facilities**

Area	No.	Fire Prevention and Suppression: Processing Systems, Mobile Equipment and Stockpile Management	Activity
All	1	Confirm that the Inbound Material Control Standard is properly implemented, including the battery removal requirements for car bodies.	Inbound
All	2	Regularly conduct routine housekeeping: to remove debris and potentially combustible materials from around the facility, especially around the processing equipment	Housekeeping
All	3	Supervisors must verify that hot work areas are inspected and hosed down after hot work is performed.	Hot Work
All	4	Clean off material from operating equipment during shifts (excess residue build-up as needed) and after shifts.	Operations
All	5	At the end of every shift, the Supervisor should conduct a thorough Plant walk-through and inspection.	Operations
All	6	Confirm mobile equipment is parked at least 25 feet away from process buildings and stockpiles when not operating.	Operations
All	12	Confirm that fire lanes are maintained between stockpiles which are appropriate for the yard and that access roads are kept clear of objects that could impede traffic flow.	Stockpiles
All	13	Confirm access to a pressurized water system (eg, fire hydrant, water truck with fire hose, etc.)	Preparation
All	17	Confirm all necessary personnel are trained on fire extinguisher/ water truck use and know their locations.	Preparation
All	18	Confirm that fire extinguishers are full and in working order.	Preparation

APPENDIX G. EMERGENCY ACTION PLANS

	<h1 style="text-align: center;">EMERGENCY ACTION PLAN</h1> <h2 style="text-align: center;">Paulina - Shredder</h2>	REVISION DATE 9-19-19	PAGE Page 1 of 12
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1.0 PURPOSE:

To detail the written and oral Emergency Action Plan (EAP) at the Paulina Shredder Facility located at **2500 S. Paulina St., Chicago, IL, 60608**. The purpose of an EAP is to facilitate and organize employer and employee actions and response during workplace emergencies.

2.0 TYPES OF EMERGENCIES

Emergencies include – but are not limited to:

- Fire
- First Aid and Medical situations
- Chemical spills and splashes
- Radioactive Material
- Severe weather such as tornados, heavy rain and lightning
- Guns, Ammunition and Weapons found in scrap
- Bomb Threat and Explosions
- Workplace Violence
- Electrical Emergencies
- Person overboard in water

3.0 RESPONSIBILITY:

An emergency action plan must be in writing, kept in the workplace, and available to employees for review.

4.0 PLAN COORDINATOR:

The Emergency action plan will be coordinated by SHEC DEPARTMENT, (773) 650-6495

5.0 SITE COORDINATOR

The Site Coordinator is the Yard Manager. In an emergency situation the Yard Manager will be responsible for the safety of the employees and visitors on the site. In the event of an emergency the duties of the Yard Manager are¹:

- Determine the action to be taken based on the type of emergency encountered.
- Determine if the facility should be evacuated and sound the alarm
- Make sure Emergency Services have been contacted, if deemed necessary
- Ensure to the extent possible that all employees have been evacuated from the area in which the emergency is occurring and that a headcount is taken at the rally location.
- Act as a liaison with Emergency Personnel

¹ Certain duties may be delegated to supervisory staff ensure that responsibilities are met



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If the Yard Manager is not here, or not able to perform his duties, the Alternate will take over.
For **YARD 10**:

- Sam Flores – Yard Manger – 312.502.7768
- Manuel Quintero – Supervisor– 312.343.4487
- George Malamis – General Manager – 773.551.0472

6.0 EMERGENCY REPORTING

In the event of an emergency, the employee should immediately report the emergency to his/her supervisor. If the emergency is critical, the contacts below should be used based on the emergency type. The Yard Manager should either contact Emergency Services personally or confirm that the call has already been placed.

Emergency	Contact
Fire, Medical, Bomb Threat, Violence	Your Supervisor
Security Coordinator	Pete Knefel 312-343-4430
Poison	1-800-222-1222
Chemical Spill or Release	EHS Business Partner –Debbie Hays 312-343-4549
Radioactive Material	SHEC Director 312-343-4549 Kelly Grahm – IEMA - (630) 293-6348 Nuclear Regulatory Commission 217-782-2700
Occupational Clinic	SHECS Department or HR Concentra 3145 S. Ashland Ave, Chicago, 773-254-5516

7.0 EMERGENCY CONTACTS

- Sam Flores – Yard Manager – 312.502.7768
- Manuel Quintero – Supervisor – 312.343.4487
- George Malamis – General Manager – 773.551.0472

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8.0 TYPES OF EMERGENCIES

Fire

See Fire Prevention and Preparation Plan as enclosed at the end of this plan.

The first employee aware of a fire in the facility is required to notify a supervisor immediately or Manager. Based on the severity of the event, the Yard Manager may deem fire containment procedures to begin immediately using the equipment at the facility. If in the Yard Manager's opinion there is a danger to any employee, emergency personnel will be called immediately. Activities are to prevent the spread of the fire until emergency services can arrive to extinguish the fire.

Based on the Yard Manager's or Professional Emergency Service Personnel's opinion of the severity of the event a partial or full evacuation could be ordered. In the event that an evacuation is ordered, employees should move safely and orderly to the Rally Location. See Appendix I - Facility Diagram for extinguishers, fire exits and rally locations.

The Yard Manager is responsible for ensuring that all employees are at the rally point. The primary rally point is located at: **EAST of the Personnel Office and a second rally point is located WEST of the Peddler Entrance (North of the Yard) (see page 6.** The Yard Manager, and/or his designee(s), is also responsible for locating customers or driver's on-site and moving them to the rally location based on the visitor sign in sheets at reception or the scale log. A head count must be performed. Unaccounted for employees, customers, or drivers, will be communicated to Emergency Response.

Medical Events

In the event that an employee or yard visitor suffers an injury or medical condition, while on our property, the Yard Manager will determine whether the condition requires outside emergency personnel (when in doubt call 911). Facility must have First Aid supplies and an AED available in a designated area. (See Appendix I - Facility Diagram for 1st aid cabinet locations)

Chemical Splashes and Spills

In the event that an employee suffers a chemical splash to his eyes or face, the operator must be able to access an Eye wash station. Wash stations must be clearly marked, free from obstacles. Medical treatment will be supplied as necessary. (See Appendix I - Facility Diagram for eye wash locations).



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If there is a chemical or toxic material spill or release, the spill - release may meet reporting requirements of the state; reporting and clean up procedures should be followed as outlined in the site's Spill Control and Countermeasure Plan. If the site does not have an SPCC, then the spill procedures in the SWPPP will apply.

Radioactive Material

In the event that a load or object sets off the scale radiation detectors, a supervisor or manager must be notified. The load must be re-run through the detectors. Screening the load with the handheld radiation detector is needed to isolate it in the load. The load should then be segregated. The SHEC department should be notified, and if necessary, the object should be reported to IEMA.

Severe Weather

In the event that severe weather occurs, such as a blizzard, tornado or lightning, certain operations in the yard may be stopped based on the Yard Manager's opinion of the severity of the event. Employees who have become aware of the approach of a tornado should immediately make their supervisor aware of the pending event. If a full or partial evacuation is ordered, employees and yard visitors will follow escape routes and meet in the designated shelter location(s) (see Appendix I - Facility Diagram for shelter locations).

Munitions found in scrap

In the event that munitions of any kind are found, it must be treated seriously and as if it is live or active. It must be report to Yard Manager who will initiate a response. If a full or partial evacuation is ordered employees and visitors will follow emergency escape routes to rally location. The Yard Manager, will contact the SHEC department when munitions are found in scrap who will in turn notify the appropriate law enforcement officials to conduct an investigation and removal. Employees should not touch or move the object. Keep all personnel and visitors out of the area until the Yard Managers receives an "all clear" from the authorities.

Personal Threats, Bomb Threats and Explosions

In the event that a person comes on site with a gun or other weapon, the first person aware of this threat must notify the Yard Manager. The Yard Manager will call 911 and attempt to remove as many people as possible from the area in which the person is located. No one is to attempt to remove the weapon from this person.

If a bomb or bomb threat is suspected, it must be treated seriously. All suspicious packages or things that seem out of place must be report them to Yard Manager to initiate responses to bomb threats. The person who receives the threat must fill out the checklist (see form), if possible. Evacuate the workplace and go to rally location. Have law enforcement officials conduct the search and investigation. No one is to ever look for bombs! Keep all staff out of the area of concern until the "all clear" is issued from the police or bomb squad.



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If a threat is received over the phone, the person getting the call must notify someone else in the office to call a Supervisor and 911; The person who received the call must keep the person calling in on the line for as long as possible asking any question possible noting any details, such as if the caller is male or female; if there is an accent; if there are background noises such as traffic or a train, etc. Never hang up the phone even if the caller hangs up.

Workplace Violence

In the event that workplace violence occurs involving the use of weapons, employees should evacuate the affected area and meet in the designated rally location. A member of management will place the call to 911, from a land line if at all possible.

Workplace violence such as acts of harassment and aggression, should be immediately brought to the Manager's attention. Please refer to HR's Workplace Violence Rules for more information on this subject.

Electrical or Mechanical Emergencies

In the event that an electrical or mechanical incident arises, such as downed high voltage wires, employees should evacuate the area and meet in the designated shelter location. If the downed lines fall on a vehicle or piece of mobile equipment the employees should remain in the vehicle unless a fire develops. If you must exit the vehicle, again only in the event of fire, as much as possible jump from vehicle without touching metal pieces.

Yard Manager will contact emergency and necessary service personnel.

Person Overboard into water

Personal flotation devices (PDF) and Life Rings with 100' of rope must be kept every 75 feet along the dock by rivers, canals and lake shores where and when barges are being loaded, or unloaded. Personal flotation devices and life rings should be readily available. All employees working on a barge must use company provided PDFs. Employees shall not work alone around water and will always work in pairs.

In the event that an employee falls overboard into the water, the life ring shall be thrown to employee in water. No other employee should enter the water to rescue a employee. If necessary deployment of rescue boat will occur to reach the employee. It is important to consider the risk of hypothermia when water is cold. Yard Manager will call ambulance as needed.

9.0 ELEMENTS OF AN EAP

a. Emergency Procedures



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In the event that an evacuation is required in response to an emergency, all employees must exit according to escape routes through designated walkways and congregate at rally location. No employee may leave the site until they have been accounted for by the Yard Manager or his/her designated personnel.

Facility Evacuation and Escape Routes

In the event that the building should need to be evacuated, all personnel should quickly and calmly follow the escape routes to the nearest exit. All exit paths, corridors, stairs and doors must be free from obstacles and clearly marked. Exit doors must have a closing mechanism that prevents them to be locked. Fire doors must be kept closed at all times. Once outside the building, employees should move safely and orderly to the Rally Location using each facility's designated escape routes and walkways detailed in the yard diagram. Vehicles should follow designated traffic flows. See Appendix I - Facility Diagram for exits and escape routes.

Rally Location

The Rally Location has been designated to **NORTH of the Personnel Office**. An auxiliary rally location has been designated **North of Scale 1** (see Appendix I - Facility Diagram). Employees should go to the rally location deemed appropriate by the Yard Manager based on the type and location of emergency.

Employees should remain clear of the gates to allow emergency vehicles entry. At the Rally Location an accounting of employees will be taken and any required basic first aid will be administered. Employees should remain in this location and not leave the premises and not return to the building. Whether employees are allowed to leave the property or should remain until an "All Clear" signal is given is the discretion of the Yard Manager and/or Emergency Personnel.

Sheltering in Place

Some emergencies (i.e. tornadoes) require that rather than exiting the building, employees take shelter in a windowless, interior room in a basement, if possible.. Should the Yard Manager determine it is necessary to take shelter; employees should meet in the **NF Office BUILDING** (see Appendix I - Facility Diagram for location).

Procedures to account for all employees, visitors and drivers during an evacuation;

Prior to an evacuation the Yard Manager must assign the duty of collecting the visitor log to an individual to be brought to the rally location. During an evacuation, employees must meet at the designated rally location for a head count. The Yard Manager will account for all employees based on who came to work that morning. No employee is allowed to leave the facility without the permission of the Yard manager.



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The Visitor Log will be used to account for contractors and other visitors at our facility. This log is maintained in reception areas; or, for yards without a reception area, at the scale.

To account for drivers in the yard: Within the SAI Scale program Scale Operators are to go to the Truck/Rail Scale Screen (8500 program) and create/print screen shot showing who is in the yard. The scale operator is to bring this listing to Yard Manager.

b. Procedures for assisting workers and visitors with disabilities

The Yard Manager or alternate will verify that all workers and visitors with disabilities are assisted during evacuation through a buddy system. It should be determined prior to an emergency who may need additional assistance in the event of an emergency. The person(s) assigned as a “buddy” will be apprised of his/her role through training prior to the evacuation.

c. Procedures to be followed by general employees and employees performing rescue or medical duties:

Employees not performing first aid should assist Emergency personnel into the facility by directing them to the area of emergency. Employees will do this by stationing themselves from Blue Island Avenue, to the facility’s front gate and to the area of emergency.

A first response team has been formed to assist in case of emergency. The following employees are trained in First Aid and CPR:

Shredder & MRP		Ferrous/NF/Trucking	
Sam Flores	Theodore Moore	Ricardo Jaime – NF	
Manuel Quintero	James Curry	Martin Avila – NF	Veronica Herrera-Off
Eloy Corral	Flavio Avila	Luis Loera – NF	Leticia Arellano-Off
Praxedis Ramirez			Alberto Gutierrez – Trk
Guadalupe Padilla		Bill Heath – Ferrous	Kevin Post – Trk
Valente Montenegro		David Bradley – Ferrous	
Benjamin Perez			
Cesar Escalante			

d. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate:

In the event of an evacuation, certain trained individuals may be required to remain behind to shut down critical equipment or insure everyone has exited the building.



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- **Operators** will perform a manual shutdown procedure before evacuating.
- The Yard Manager can designate a Person to be the last person out, making sure all other individuals have exited the building.

The Yard Manager should have a cell phone and/or radio to communicate with Safety Personnel, Management and Employees.

e. Procedures for special situations, such as precautions involved with certain chemicals and equipment

All fixed equipment and mobile equipment should be shut down and de-energized, if it is safe to do so.

- Shredder – Shut down and turn off
- Mobile Equipment – shut down and turn off

10.0 EMPLOYEE NOTIFICATION SYSTEM:

An employer must have and maintain an employee notification system. The employee notification can be accomplished by alarms or verbal communication systems. Notification methods must be reviewed with all employees.

The notification systems used for **YARD 10** Facility will be:

- 2 way radio communication
- Cell phone and email communication
- Verbal command

11.0 TRAINING:

An employer must designate and train employees to assist in a safe and orderly evacuation of other employees. Review of the plan will be conducted by Yard Manager. Records of such reviews will be kept with Human Resources as well as within the electronic training database.


All employees at this location will be trained on this Plan:

- a. Upon hiring in (within 30 days),
- b. After reassessments / changes in the Plan
- c. In changes of responsibility
- d. Annually

12.0 REVIEW & VERIFICATION:

An employer must review the emergency action plan with each employee covered by the plan:

- When the plan is developed or the employee is assigned initially to a job;

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- When the employee's responsibilities under the plan change;
- When the plan is changed.

13.0 COMMUNICATION WITH OUTSIDE SOURCES

In order to maintain a consistent response and release of information to either the media or investigators following an emergency, employees should have the questions directed to the President of the region.



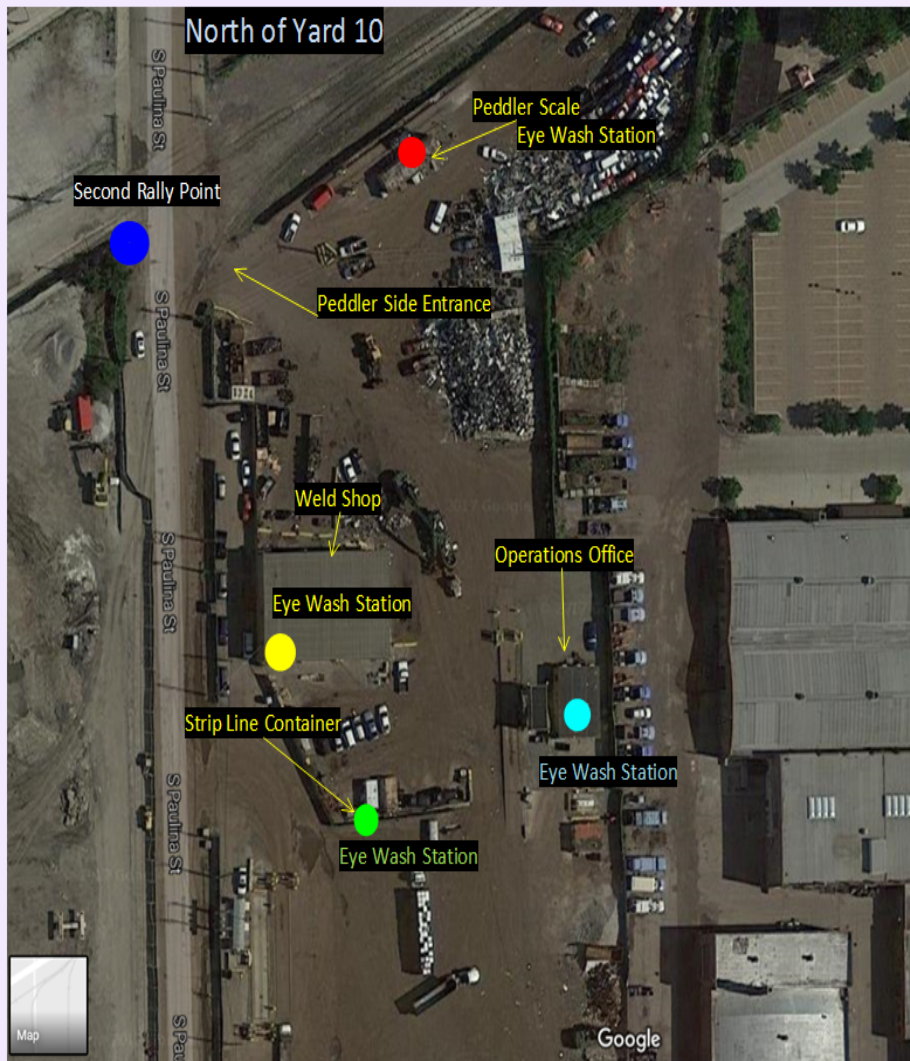
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- Blue dot: Second Rally Point - West of Peddler Side Entrance
- Yellow dot: Eye Wash Station located inside of the weld shop by the washroom entrance
- Green dot: Eye Wash Station located inside of the Strip Line Container
- Cyan dot: Eye Wash Station located inside of the lunch room by the operations office
- Red dot: Eye Wash Station located inside of the peddler scale



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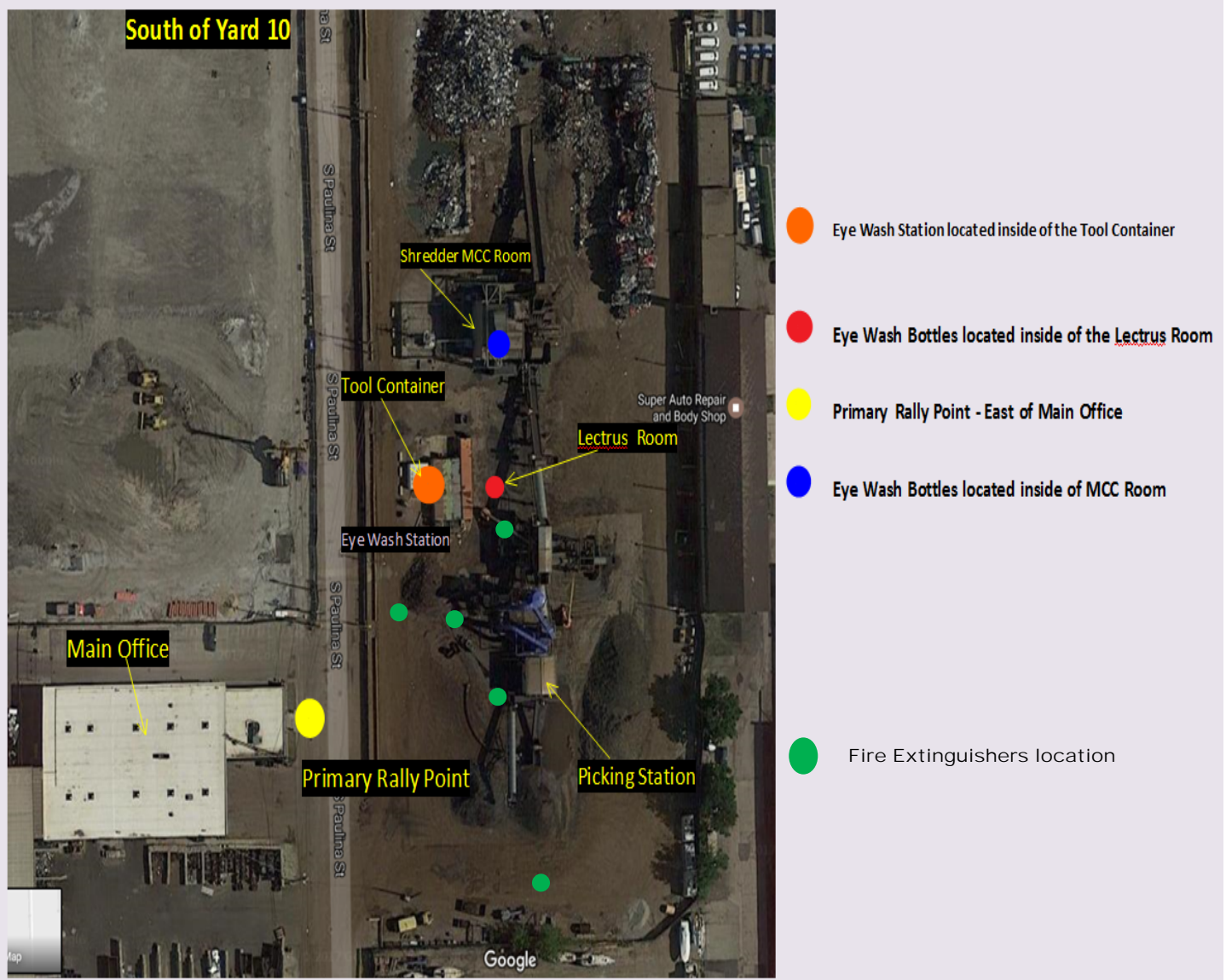
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Location of Eye Wash Stations and Fire Extinguishers on South end of Yard





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Rally Points, Fire Extinguishers, AED & First Aid Station-North End of Yard



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1.0 PURPOSE:

To detail the written and oral Emergency Action Plan (EAP) at **YARD 1 (Ferrous Yard)** Facility located at **2500 S. Paulina St., Chicago, IL, 60608**. The purpose of an EAP is to facilitate and organize employer and employee actions and response during workplace emergencies.

2.0 TYPES OF EMERGENCIES

Emergencies include – but are not limited to:

- Fire
- First Aid and Medical situations
- Chemical spills and splashes
- Radioactive Material
- Severe weather such as tornados, heavy rain and lightning
- Guns, Ammunition and Weapons found in scrap
- Bomb Threat and Explosions
- Workplace Violence
- Electrical Emergencies
- Person overboard in water

3.0 RESPONSIBILITY:

An emergency action plan must be in writing, kept in the workplace, and available to employees for review.

4.0 PLAN COORDINATOR:


The Emergency action plan will be coordinated by SHEC DEPARTMENT, (773) 927 - 6611

5.0 SITE COORDINATOR

The Site Coordinator is the Yard Manager. In an emergency situation the Yard Manager will be responsible for the safety of the employees and visitors on the site. In the event of an emergency the duties of the Yard Manager are¹:

- Determine the action to be taken based on the type of emergency encountered.
- Determine if the facility should be evacuated and sound the alarm
- Make sure Emergency Services have been contacted, if deemed necessary
- Ensure to the extent possible that all employees have been evacuated from the area in which the emergency is occurring and that a headcount is taken at the rally location.
- Act as a liaison with Emergency Personnel

¹ Certain duties may be delegated to supervisory staff ensure that responsibilities are met

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If the Yard Manager is not here, or not able to perform his duties, the Alternate will take over.
For **YARD 1**:

- George Malamis- General Manager- 773.551.0472
- Bill Heath – Supervisor – 773.410.6112
- Maria Medina- Management Trainee- 773.675.7647

6.0 EMERGENCY REPORTING

In the event of an emergency, the employee should immediately report the emergency to his/her supervisor. If the emergency is critical, the contacts below should be used based on the emergency type. The Yard Manager should either contact Emergency Services personally or confirm that the call has already been placed.

Emergency	Contact
Fire, Medical, Bomb Threat, Violence	911
Security Coordinator	Pete Knefel 312-343-4430
Poison	1-800-222-1222
Chemical Spill or Release	Debbie Hays – EHS Business Partner 312.343.4549
Radioactive Material	1. Debbie Hays 312.343.4549 2. Kelly Grahn – IEMA (630) 293-6348 3. IEMA office 630 293 8286 Nuclear Regulatory Commission 217-785-9900
Occupational Clinic	Concentra 3145 S. Ashland Ave, Chicago, 773-254-5516

7.0 EMERGENCY CONTACTS

- **Maria Medina- 773.675.7647**
- **Bill Heath – 773.410.6112**
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8.0 TYPES OF EMERGENCIES



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Fire

The first employee aware of a fire in the facility is required to notify a supervisor immediately or Manager. Based on the severity of the event, the Yard Manager may deem fire containment procedures to begin immediately using the equipment at the facility. If in the Yard Manager's opinion there is a danger to any employee, emergency personnel will be called immediately. Activities are to prevent the spread of the fire until emergency services can arrive to extinguish the fire. See Fire Prevention Plan.

Based on the Yard Manager's or Professional Emergency Service Personnel's opinion of the severity of the event a partial or full evacuation could be ordered. In the event that an evacuation is ordered, employees should move safely and orderly to the Rally Location. See Appendix I - Facility Diagram for extinguishers, fire exits and rally locations.

The Yard Manager is responsible for ensuring that all employees are at the rally point. The primary rally point is located at: **EAST of the Crane Shop Building** (see page 6). The Yard Manager, and/or his designee(s), is also responsible for locating customers or driver's on-site and moving them to the rally location based on the visitor sign in sheets at reception or the scale log. A head count must be performed. Unaccounted for employees, customers, or drivers, will be communicated to Emergency Response.

Medical Events

In the event that an employee or yard visitor suffers an injury or medical condition, while on our property, the Yard Manager will determine whether the condition requires outside emergency personnel (when in doubt call 911). Facility must have First Aid supplies and an AED available in a designated area. (See Appendix I - Facility Diagram for 1st aid cabinet locations)

Chemical Splashes and Spills

In the event that an employee suffers a chemical splash to his eyes or face, the operator must be able to access a Eye and Face wash station. Wash stations must be clearly marked, free from obstacles. Medical treatment will be supplied as necessary. (See Appendix I - Facility Diagram for eye wash locations).

If there is a chemical or toxic material spill or release, the spill - release may meet reporting requirements of the state; reporting and clean up procedures should be followed as outlined in the site's Spill Control and Countermeasure Plan. If the site does not have an SPCC, then the spill procedures in the SWPPP will apply.

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Radioactive Material

In the event that a load or object sets off the scale radiation detectors, a supervisor or manager must be notified. The load or object must be re-run through the detectors. Screening the load or object with the handheld radiation detector is needed to isolate the load. The object should then be segregated. The SHEC department should be notified, and if necessary, the object should be reported to IEMA.

Severe Weather

In the event that severe weather occurs, such as a blizzard, tornado or lightning, certain operations in the yard may be stopped based on the Yard Manager's opinion of the severity of the event. Employees who have become aware of the approach of a tornado should immediately make their supervisor aware of the pending event. If a full or partial evacuation is ordered, employees and yard visitors will follow escape routes and meet in the designated shelter location(s) (see Appendix I - Facility Diagram for shelter locations).

Munitions found in scrap


In the event that munitions of any kind are found, it must be treated seriously and as if it is live or active. It must be report to Yard Manager who will initiate a response. If a full or partial evacuation is ordered employees and visitors will follow emergency escape routes to rally location. The Yard Manager, will contact the SHEC department when munitions are found in scrap who will in turn notify the appropriate law enforcement officials to conduct an investigation and removal. Employees should not touch or move the object. Keep all personnel and visitors out of the area until the Yard Managers receives an "all clear" from the authorities.

Personal Threats, Bomb Threats and Explosions

In the event that a person comes on site with a gun or other weapon, the first person aware of this threat must notify the Yard Manager. The Yard Manager will call 911 and attempt to remove as many people as possible from the area in which the person is located. No one is to attempt to remove the weapon from this person.

If a bomb or bomb threat is suspected, it must be treated seriously. All suspicious packages or things that seem out of place must be report them to Yard Manager to initiate responses to bomb threats. The person who receives the threat must fill out the checklist (see form), if possible. Evacuate the workplace and go to rally location. Have law enforcement officials conduct the search and investigation. No one is to ever look for bombs! Keep all staff out of the area of concern until the "all clear" is issued from the police or bomb squad.

If a threat is received over the phone, the person getting the call must notify someone else in the office to call a Supervisor and 911; The person who received the call must keep the person calling in on the line for as long as possible asking any question possible noting any details, such as if the caller is male or female; if there is an accent; if there are

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background noises such as traffic or a train, etc. Never hang up the phone even if the caller hangs up.

Workplace Violence

In the event that workplace violence occurs, employees should evacuate the affected area and meet in the designated shelter location. Workplace violence can be acts of harassment and aggression, including the use of weapons. Yard Manager will contact authorities. Please refer to HR's Workplace Violence Rules.

Electrical or Mechanical Emergencies

In the event that an electrical or mechanical incident arises, such as downed high voltage wires, employees should evacuate the area and meet in the designated shelter location. If the downed lines fall on a vehicle or piece of mobile equipment the employees should remain in the vehicle unless a fire develops. If you must exit the vehicle, again only in the event of fire, as much as possible jump from vehicle without touching metal pieces. Yard Manager will contact service personnel.

Person Overboard into water

Personal flotation devices (PDF) such as Life Rings with 100' of rope must be kept in the area around river, canal and lake shores where and when barges are being loaded, unloaded or dismantled. Personal flotation devices such as life rings should be readily available. All employees working on a barge must use company provided life jackets. Employees shall not work alone around water and will always work in pairs.

In the event that an employee falls overboard into the water, the PDF shall be thrown to employee in water. Unless absolutely necessary (i.e., first employee is unconscious) no other employee should enter the water to rescue a employee. It is important to consider the risk of hypothermia when water is cold. Yard Manager will call ambulance as needed.


9.0 ELEMENTS OF AN EAP

a. **Emergency Procedures**

In the event that an evacuation is required in response to an emergency, all employees must exit according to escape routes through designated walkways and congregate at rally location. No employee may leave the site until they have been accounted for by the Yard Manager or his/her designated personnel.

Facility Evacuation and Escape Routes

In the event that the building should need to be evacuated, all personnel should quickly and calmly follow the escape routes to the nearest exit. All exit paths, corridors, stairs and doors must be free from obstacles and clearly marked. Exit doors must and have a closing mechanism that prevents them to be locked. Fire doors must

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be kept closed at all times. Once outside the building, employees should move safely and orderly to the Rally Location using each facility's designated escape routes and walkways detailed in the yard diagram. Vehicles should follow designated traffic flows. See Appendix I - Facility Diagram for exits and escape routes.

Rally Location

The Rally Location has been designated to **EAST of the Crane Shop Building**. An auxiliary rally location has been designated **West of facility by NF material** (see Appendix I - Facility Diagram). Employees should go to the rally location deemed appropriate by the Yard Manager based on the type and location of emergency.

Employees should remain clear of the gates to allow emergency vehicles entry. At the Rally Location an accounting of employees will be taken and any required basic first aid will be administered. Employees should remain in this location and not leave the premises and not return to the building. Whether employees are allowed to leave the property or should remain until an "All Clear" signal is given is the discretion of the Yard Manager and/or Emergency Personnel.

Sheltering in Place

Some emergencies (i.e. tornadoes) require that rather than exiting the building, employees take shelter in a windowless, interior room in a basement, if possible.. Should the Yard Manager determine it is necessary to take shelter; employees should meet in the **CRANE SHOP BUILDING** (see Appendix I - Facility Diagram for location).


Procedures to account for all employees after evacuation;

Prior to an evacuation the Yard Manager must assign the duty of collecting the visitor log to an individual to be brought to the rally location. During an evacuation, employees must meet at the designated rally location for a head count. The Yard Manager will account for all employees based on who came to work that morning; customers or visitors will be accounted for by using sign in sheets and scale records. No employee is allowed to leave the facility without the permission of the Yard manager.

b. Procedures for assisting workers and visitors with disabilities

The Yard Manager or alternate will verify that all workers and visitors with disabilities are assisted during evacuation through a buddy system. It should be determined prior to an emergency who may need additional assistance in the event of an emergency. The person(s) assigned as a "buddy" will be apprised of his/her role through training prior to the evacuation.

c. Procedures to be followed by employees performing rescue or medical duties;

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A first response team has been formed to assist in case of emergency. The following employees are trained in First Aid and CPR:

Shredder & MRP		Ferrous/NF/Trucking	
Sam Flores	Theodore Moore	Ricardo Jaime – NF	
Manuel Quintero	James Curry	Martin Avila – NF	Veronica Herrera-Off
Eloy Corral	Flavio Avila	Luis Loera – NF	Leticia Arellano-Off
Praxedis Ramirez			Alberto Gutierrez – Trk
Guadalupe Padilla		Bill Heath – Ferrous	Kevin Post – Trk
Valente Montenegro		David Bradley – Ferrous	
Benjamin Perez			
Cesar Escalante			

d. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;

In the event of an evacuation, certain trained individuals may be required to remain behind to shut down critical equipment or insure everyone has exited the building.


- **Operators** will perform a manual shutdown procedure before evacuating.
- The Yard Manager can designate a Person to be the last person out, making sure all other individuals have exited the building.

The Yard Manager should have a cell phone and/or radio to communicate with Safety Personnel, Management and Employees.

e. Procedures for special situations, such as precautions involved with certain chemicals and equipment

All fixed equipment and mobile equipment should be shut down and de-energized, if it is safe to do so.

- Shears & Balers – shut down and turn off
- Cranes – shut down and turn off
- All vehicles including locomotive, loaders and forklifts - shut down and turn off

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10.0 EMPLOYEE NOTIFICATION SYSTEM:

An employer must have and maintain an employee notification system. The employee notification can be accomplished by alarms or verbal communication systems. Notification methods must be reviewed with all employees.

The notification systems used for **YARD 1** Facility will be:

- 2 way radio communication
- Cell phone and email communication
- Verbal command

11.0 TRAINING:

An employer must designate and train employees to assist in a safe and orderly evacuation of other employees. Review of the plan will be conducted by Yard Manager. Records of such reviews will be kept with Human Resources as well as within the electronic training database.

All employees at this location will be trained on this Plan:

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1.0 PURPOSE:

To detail the written and oral Emergency Action Plan (EAP) at **YARD 1 (Ferrous Yard)** Facility located at **2500 S. Paulina St., Chicago, IL, 60608**. The purpose of an EAP is to facilitate and organize employer and employee actions and response during workplace emergencies.

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For **YARD 1**:

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8.0 TYPES OF EMERGENCIES



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Munitions found in scrap


In the event that munitions of any kind are found, it must be treated seriously and as if it is live or active. It must be report to Yard Manager who will initiate a response. If a full or partial evacuation is ordered employees and visitors will follow emergency escape routes to rally location. The Yard Manager, will contact the SHEC department when munitions are found in scrap who will in turn notify the appropriate law enforcement officials to conduct an investigation and removal. Employees should not touch or move the object. Keep all personnel and visitors out of the area until the Yard Managers receives an "all clear" from the authorities.

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9.0 ELEMENTS OF AN EAP

a. **Emergency Procedures**

In the event that an evacuation is required in response to an emergency, all employees must exit according to escape routes through designated walkways and congregate at rally location. No employee may leave the site until they have been accounted for by the Yard Manager or his/her designated personnel.

Facility Evacuation and Escape Routes

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Rally Location

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Employees should remain clear of the gates to allow emergency vehicles entry. At the Rally Location an accounting of employees will be taken and any required basic first aid will be administered. Employees should remain in this location and not leave the premises and not return to the building. Whether employees are allowed to leave the property or should remain until an "All Clear" signal is given is the discretion of the Yard Manager and/or Emergency Personnel.

Sheltering in Place

Some emergencies (i.e. tornadoes) require that rather than exiting the building, employees take shelter in a windowless, interior room in a basement, if possible.. Should the Yard Manager determine it is necessary to take shelter; employees should meet in the **CRANE SHOP BUILDING** (see Appendix I - Facility Diagram for location).


Procedures to account for all employees after evacuation;

Prior to an evacuation the Yard Manager must assign the duty of collecting the visitor log to an individual to be brought to the rally location. During an evacuation, employees must meet at the designated rally location for a head count. The Yard Manager will account for all employees based on who came to work that morning; customers or visitors will be accounted for by using sign in sheets and scale records. No employee is allowed to leave the facility without the permission of the Yard manager.

b. Procedures for assisting workers and visitors with disabilities

The Yard Manager or alternate will verify that all workers and visitors with disabilities are assisted during evacuation through a buddy system. It should be determined prior to an emergency who may need additional assistance in the event of an emergency. The person(s) assigned as a "buddy" will be apprised of his/her role through training prior to the evacuation.

c. Procedures to be followed by employees performing rescue or medical duties;

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A first response team has been formed to assist in case of emergency. The following employees are trained in First Aid and CPR:

Shredder & MRP		Ferrous/NF/Trucking	
Sam Flores	Theodore Moore	Ricardo Jaime – NF	
Manuel Quintero	James Curry	Martin Avila – NF	Veronica Herrera-Off
Eloy Corral	Flavio Avila	Luis Loera – NF	Leticia Arellano-Off
Praxedis Ramirez			Alberto Gutierrez – Trk
Guadalupe Padilla		Bill Heath – Ferrous	Kevin Post – Trk
Valente Montenegro		David Bradley – Ferrous	
Benjamin Perez			
Cesar Escalante			

d. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate;

In the event of an evacuation, certain trained individuals may be required to remain behind to shut down critical equipment or insure everyone has exited the building.


- **Operators** will perform a manual shutdown procedure before evacuating.
- The Yard Manager can designate a Person to be the last person out, making sure all other individuals have exited the building.

The Yard Manager should have a cell phone and/or radio to communicate with Safety Personnel, Management and Employees.

e. Procedures for special situations, such as precautions involved with certain chemicals and equipment

All fixed equipment and mobile equipment should be shut down and de-energized, if it is safe to do so.

- Shears & Balers – shut down and turn off
- Cranes – shut down and turn off
- All vehicles including locomotive, loaders and forklifts - shut down and turn off

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10.0 EMPLOYEE NOTIFICATION SYSTEM:

An employer must have and maintain an employee notification system. The employee notification can be accomplished by alarms or verbal communication systems. Notification methods must be reviewed with all employees.

The notification systems used for **YARD 1** Facility will be:

- 2 way radio communication
- Cell phone and email communication
- Verbal command

11.0 TRAINING:

An employer must designate and train employees to assist in a safe and orderly evacuation of other employees. Review of the plan will be conducted by Yard Manager. Records of such reviews will be kept with Human Resources as well as within the electronic training database.

All employees at this location will be trained on this Plan:

- a. Upon hiring in (within 30 days),
- b. After reassessments / changes in the Plan
- c. In changes of responsibility
- d. Annually


12.0 REVIEW & VERIFICATION:

An employer must review the emergency action plan with each employee covered by the plan:

- When the plan is developed or the employee is assigned initially to a job;
- When the employee's responsibilities under the plan change;
- When the plan is changed.

13.0 COMMUNICATION WITH OUTSIDE SOURCES

In order to maintain a consistent response and release of information to either the media or investigators following an emergency, employees should have the questions directed to the President of the region.

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1.0 PURPOSE:

To detail the written and oral Emergency Action Plan (EAP) for the **Transportation (Including truck shop) and Peddler Operation** located at **2599 S. Wood St., Chicago, IL, 60608**. The purpose of an EAP is to facilitate and organize employer and employee actions and response during workplace emergencies.

2.0 TYPES OF EMERGENCIES

Emergencies include – but are not limited to:

- Fire
- First Aid and Medical situations
- Chemical spills and splashes
- Radioactive Material
- Severe weather such as tornados, heavy rain and lightning
- Guns, Ammunition and Weapons found in scrap
- Bomb Threat and Explosions
- Workplace Violence
- Electrical Emergencies
- Person overboard in water

3.0 RESPONSIBILITY:

An emergency action plan must be in writing, kept in the workplace, and available to employees for review.

4.0 PLAN COORDINATOR:


The Emergency action plan will be coordinated by EHS DIRECTOR 312-343-4549.

5.0 SITE COORDINATOR

The Site Coordinators are the Transportation Manager and the Nonferrous Manager. In an emergency situation each Manager will be responsible for the safety of the employees and visitors in their departments. In the event of an emergency the duties of the Manager(s) are to¹:

- Determine the action to be taken based on the type of emergency encountered.
- Determine if the facility should be evacuated and sound the alarm
- Make sure Emergency Services have been contacted, if deemed necessary

¹ Certain duties may be delegated to supervisory staff ensure that responsibilities are met

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- Ensure to the extent possible that all employees have been evacuated from the area in which the emergency is occurring and that a headcount is taken at the rally location.
- Act as a liaison with Emergency Personnel

If the Manager is not here, or unable to perform his duties, the Alternate will take over.

- Martin Avila – Nonferrous Supervisor – 312-343-4489
- Diane Corrigan – Transportation Mgr – 312-405-4165

6.0 EMERGENCY REPORTING

In the event of an emergency, the employee should immediately report the emergency to his/her supervisor. If the emergency is critical, the contacts below should be used based on the emergency type. The Manager should either contact Emergency Services personally or confirm that the call has already been placed.

Emergency	Contact
Fire, Medical, Bomb Threat, Violence	911
Security Coordinator	Pete Knefel 312-343-4430
Poison	1-800-222-1222
Chemical Spill or Release	Debbie Hays 312-343-4549
Radioactive Material	#1: Debbie Hays 312-343-4549 #2: IEMA 630 293 8286 Nuclear Regulatory Commission 217-785-9900
Occupational Clinic	Concentra 3145 S. Ashland Ave, Chicago, 773-254-5516

7.0 EMERGENCY CONTACTS

- **Kevin Post – Transportation – 773-798-9012**
- **Ricardo Jaime – Nonferrous – 773-551-0450**

8.0 TYPES OF EMERGENCIES

Fire

The first employee aware of a fire in the facility is required to notify a the manager or dispatcher immediately. Based on the severity of the event, the Transportation and Accounting Managers may deem extinguishing procedures to begin immediately using the fire equipment at the facility. If in the Manager's opinion there is a danger to any



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employee, emergency personnel will be called immediately. Fire fighting activities will then switch to preventing the spread of the fire until emergency services can arrive to extinguish the fire.

Based on the Manager's or Professional Emergency Service Personnel's opinion of the severity of the event a partial or full evacuation could be ordered. In the event that an evacuation is ordered, employees should move safely and orderly to the Rally Location. See Appendix I - Facility Diagram for extinguishers, fire exits and rally locations.

The Transportation and Accounting Managers are responsible for ensuring that all employees are at the rally point. The primary rally point is located at: **northwest corner of office by flag** (see page 5), the secondary point is the Rally between transportation and the Ferrous Yard. The Transportation Manager, and/or his designee(s), is also responsible for locating driver's on-site and moving them to the rally location. A head count must be performed. Unaccounted for employees, customers, or drivers, will be communicated to Emergency Response.

Medical Events

In the event that an employee or yard visitor suffers an injury or medical condition, while on our property, the Manager will determine whether the condition requires outside emergency personnel (when in doubt call 911). Facility must have First Aid supplies and an AED available in a designated area. (See Appendix I - Facility Diagram for 1st aid cabinet locations)

Chemical Splashes and Spills

In the event that an employee suffers a chemical splash to his eyes or face, the operator must be able to access a Eye and Face wash station. Wash stations must be clearly marked, free from obstacles. Medical treatment will be supplied as necessary. (See Appendix I - Facility Diagram for eye wash locations).

If there is a chemical or toxic material spill or release, the spill - release may meet reporting requirements of the state; reporting and clean up procedures should be followed as outlined in the site's Spill Control and Countermeasure Plan. If the site does not have an SPCC, then the spill procedures in the SWPPP will apply.

Radioactive Material

In the event that a load or object sets off the scale radiation detectors and is one of our trucks, the transportation and EHS managers must be notified. The load or object must be re-run through the detectors 3 times to confirm. Screening the load or object with the handheld radiation detector is needed to isolate the load. The object should then be segregated. The EHS department should be notified, and if necessary, the object should be reported to IEMA.



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Severe Weather

In the event that severe weather occurs, such as a blizzard, tornado or lightning, certain operations in the yard may be stopped based on the Manager's opinion of the severity of the event. Employees who have become aware of the approach of a tornado should immediately make their manager or dispatcher aware of the pending event. If a full or partial evacuation is ordered, employees will follow escape routes and meet in the storage room behind the employee lunch room – see diagram.

Munitions found in scrap

In the event that munitions of any kind are found in scrap loads, it must be treated seriously and as if it is live or active. It must be report to the Transportation Manager who will initiate a response. If a full or partial evacuation is ordered employees will follow emergency procedure and report to the rally location on the northeast side of building by flag. The Transportation Manager, will contact the EHS department when munitions are found in scrap who will in turn notify the appropriate law enforcement officials to conduct an investigation and removal. Employees should not touch or move the object. Keep all personnel and visitors out of the area until the Managers receives an "all clear" from the authorities.

Personal Threats, Bomb Threats and Explosions

In the event that a person comes on site with a gun or other weapon, the first person aware of this threat must notify the Manager. The Manager will call 911 and attempt to remove as many people as possible from the area in which the person is located. No one is to attempt to remove the weapon from this person.

If a bomb or bomb threat is suspected, it must be treated seriously. All suspicious packages or things that seem out of place must be report them to Manager to initiate responses to bomb threats. The person who receives the threat must fill out the checklist (see form), if possible. Evacuate the workplace and go to rally location. Have law enforcement officials conduct the search and investigation. No one is to ever look for bombs! Keep all staff out of the area of concern until the "all clear" is issued from the police or bomb squad.

If a threat is received over the phone, the person getting the call must notify someone else in the office to call a Manager and 911; The person who received the call must keep the person calling in on the line for as long as possible asking any question possible noting any details, such as if the caller is male or female; if there is an accent; if there are background noises such as traffic or a train, etc. Never hang up the phone even if the caller hangs up.

Workplace Violence

In the event that workplace violence occurs, employees should evacuate the affected area and meet in the designated shelter location. Workplace violence can be acts of



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harassment and aggression, including the use of weapons. Manager will contact authorities. Please refer to HR's Workplace Violence Rules.

Electrical or Mechanical Emergencies

In the event that an electrical or mechanical incident arises, such as downed high voltage wires, employees should evacuate the area and meet in the designated rally location. If the downed lines fall on a vehicle or piece of mobile equipment the employees should remain in the vehicle unless a fire develops. If you must exit the vehicle, again only in the event of fire, as much as possible jump from vehicle without touching metal pieces. Manager will contact service personnel.

9.0 ELEMENTS OF AN EAP

a. Emergency Procedures

In the event that an evacuation is required in response to an emergency, all employees must exit according to escape routes through designated walkways and congregate at rally location. No employee may leave the site until they have been accounted for by the Manager or his/her designated personnel.


Facility Evacuation and Escape Routes

In the event that the building should need to be evacuated, all personnel should quickly and calmly follow the escape routes to the nearest exit. All exit paths, corridors, stairs and doors must be free from obstacles and clearly marked. Exit doors must and have a closing mechanism that prevents them to be locked. Fire doors must be kept closed at all times. Once outside the building, employees should move safely and orderly to the Rally Location using each facility's designated escape routes and walkways detailed in the yard diagram. Vehicles should follow designated traffic flows. See Appendix I - Facility Diagram for exits and escape routes.

Rally Location

The Rally Location has been designated to **NORTHWEST of the office by the flag**. An auxiliary rally location has been designated **the walkway between the Ferrous Yard and the Transportation Yard** (see Appendix I - Facility Diagram). Employees should go to the rally location deemed appropriate by the Manager based on the type and location of emergency. "Shelter in Place" rally point is the **storage room behind the TRANSPORTATION employee lunch room in truck shop**.

Employees should remain clear of the gates to allow emergency vehicles entry. At the Rally Location an accounting of employees will be taken and any required basic first aid will be administered. Employees should remain in this location and not leave the premises and not return to the building. Whether employees are allowed to leave

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the property or should remain until an “All Clear” signal is given is the discretion of the Manager and/or Emergency Personnel.

Sheltering in Place

Some emergencies (i.e. tornadoes) require that rather than exiting the building, employees take shelter in a windowless, interior room in a basement, if possible.. Should the Manager determine it is necessary to take shelter; employees should meet in the **STORAGE ROOM BEHIND TRANSPORTATION EMPLOYEE LUNCH ROOM** in truck shop (see Appendix I - Facility Diagram for location).

Procedures to account for all employees after evacuation;

Prior to an evacuation the Manager must assign the duty of collecting the visitor log to an individual to be brought to the rally location. During an evacuation, employees must meet at the designated rally location for a head count. The Manager will account for all employees based on who came to work that morning and through Dispatch records or visitor logs. No employee or visitor is allowed to leave the facility without the permission of the Manager.

b. Procedures for assisting workers and visitors with disabilities

The Manager or alternate will verify that all workers and visitors with disabilities are assisted during evacuation through a buddy system. It should be determined prior to an emergency who may need additional assistance in the event of an emergency. The person(s) assigned as a “buddy” will be apprised of his/her role through training prior to the evacuation.

c. Procedures to be followed by employees performing rescue or medical duties;

A first response team has been formed to assist in case of emergency. The following employees are trained in First Aid and CPR:

- Diane Corrigan – Transportation
- Alberto Guterrez – Transportation Garage
- Ramon Molina – Truck Shop
- Sarah Clinger – Business Partner
- Bill Heath – Ferrous Supervisor
- David Bradley – Ferrous Yard
- Leticia Arellano – Ferrous Scale
- Eloy Corral – Shredder Yard
- Valente Montenegro – Shredder Yard
- Manuel Quintero – Shredder Supervisor



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- Benjamin Perez – Shredder Yard
- Samuel Flores - Shredder Supervisor
- Praxedis Ramierez – Shredder Yard

d. Procedures to be followed by employees who remain to operate critical plant operations before they evacuate:

In the event of an evacuation, certain trained individuals may be required to remain behind to shut down critical equipment or insure everyone has exited the building.

- **The Transportation Manager and Nonferrous Manager, or designee,** will perform any manual shutdown procedure before evacuating.
- The Manager can designate a Person to be the last person out, making sure all other individuals have exited the building.

The Manager should have a cell phone and/or radio to communicate with Safety Personnel, Management and Employees.

e. Procedures for special situations, such as precautions involved with certain equipment


All trucks should be shut down and de-energized, if it is safe to do so.

10.0 EMPLOYEE NOTIFICATION SYSTEM:

An employer must have and maintain an employee notification system. The employee notification can be accomplished by alarms or verbal communication systems. Notification methods must be reviewed with all employees.

The notification systems used for **Transportation/Nonferrous Peddler area** will be:

- 2 way radio communication
- Cell phone and email communication
- Verbal command

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11.0 TRAINING:

An employer must designate and train employees to assist in a safe and orderly evacuation of other employees. Review of the plan will be conducted by Manager. Records of such reviews will be kept with Human Resources as well as within the electronic training database.

All employees at this location will be trained on this Plan:

- a. Upon hiring in (within 30 days),
- b. After reassessments / changes in the Plan
- c. In changes of responsibility
- d. Annually

12.0 REVIEW & VERIFICATION:

An employer must review the emergency action plan with each employee covered by the plan:

- When the plan is developed or the employee is assigned initially to a job;
- When the employee's responsibilities under the plan change;
- When the plan is changed.

13.0 COMMUNICATION WITH OUTSIDE SOURCES

In order to maintain a consistent response and release of information to either the media or investigators following an emergency, employees should have the questions directed to the General Manager of the region.

APPENDIX H. PAVEMENT MAINTENANCE PLAN



Metal Management Midwest, Inc.

2500 S. Paulina Street
Chicago, IL 6068

Pavement Maintenance Plan

Visual inspections, via the Weekly Plant Inspection, will be performed by the Plant Manager, Supervisor or designee. The purposed of the Weekly Plant Inspection is to ensure the integrity of numerous aspects of the facility, one such aspect are the paved roadways.

The Plant Manager will be notified, if he/she did not perform the inspection, of any paved areas that need to be addressed. Routine repairs will be scheduled as soon as possible and the area in question will be monitored closely until repairs can be made. Small potholes, or other minor deficiencies, can be cold patched until the area can be scheduled for more extensive repair.

Visual inspections of paved areas will also be performed by the sweeper and water truck operators and they will document on their log areas that may need a closer inspection outside of the weekly inspection performed.

APPENDIX I. PROCESSING AND EQUIPMENT OVERVIEW



Processing & Equipment Overview

2500 S. Paulina Street, Chicago, IL 60608

As of 10/20/2021

Shredder Yard			
General Information			
Shifts	2	6:00 a.m. – 4:00 p.m.	2 p.m. to 12:00 a.m.
# of Employees	Day Shift: 12	Night Shift: 6	Shredder operators on day shift
Processing Equipment			
1	Shredder	Processing Capability:	180 GT – 200 GT/Hr
In Process Equipment			
2	SEDA Depollution Racks	Removal of fluids from single tow ELV's	4 cars/hr
Mobile Equipment			
4	Material Handlers	Sennebogen Model 835	
2	Front End Loader	Volvo L150H/L150G	
2	Skid Steer	Caterpillar/Volvo	
1	Water Truck		
2	Forklift	Maximal/Caterpillar	
2	Aerial Lifts	JLG 80'/Genie 60'	
1	Cable Crane	Lorain Crane LRT 230E	
Material Recovery Plant (MRP)			
General Information			
Shifts	2	4:00 a.m. – 4:30 p.m.	4:30 p.m. – 4:00 a.m.
# of Employees	12		
Processing Equipment			
1	MRP	Processing Capability	32-35 tons/hr
Mobile Equipment			
1	Forklifts	Caterpillar	
1	Skidsteer	Caterpillar 262D	
2	Aerial	Genie Z60/Genie Z40	
2	Loaders	Volvo 150 (2)	
Ferrous Yard			
General Information			
Shifts	1	5:30 a.m. – 5:30 p.m.	
# of Employees	18		
Processing Equipment			
1	Bon Fig (Guillotine Shear)	Guillotine Shear	20 – 25 GT/Hr
2	Torching		
2	Mobile shears	Komatsu PC490/Cat 345 C	4-6 ton hr per unit



Mobile Equipment			
4	Material Handlers	Sennebogen (3) 835; (1) 840	
1	Loader	Cat 966 M	
1	Water Truck	Mac	
2	Sweeper	Elgin Pelican P -	1 sweeper del in Nov 2021
1	Skid Steer	Cat 263	
Non Ferrous Yard			
General Information			
Shifts	1	5:00 a.m. – 4:30 p.m.	
# of Employees	13		
Processing Equipment			
1	HRB – Baler	Processing Capability	10,000 – 15,000 lbs/hr
Mobile Equipment			
6	Forklifts	Caterpillar 6500 GP	
2	Skidsteer	Caterpillar – 252	

APPENDIX J. OPERATING AND MAINTENANCE PLANS

Daily Inspections

Date _____

Shredder Yard 10 Mill sec.

Inspected by: _____

CODES: **M = Maintenance** **S =Safety** **M/S = Both**
Ok? Y= Yes/ N: No **If No, write the issue down under comments**

Mill	Code	Ok	Comments
Missing or loose Bolts			
Worn Castings (need replacement)			
Missing Liners			
Water lines intact?			
Rotor/Bearings			
Rotor bearing RTD sensors in place?			
Any apparent leaks from the oil feed line?			
Is the rotor balanced?			
Any lose or broken tie rods ?			
Drive Shaft			
Any apparent damage?			
Any ball bearings in the floor?			
Any Lose coupling bolts?			
Coupling looks okay?			
DFR			
Bearings ok			
Drums shifted?			
Hagglunds drive visibly intact			
Worn hydraulic hoses			
Infeed			
Missing or damaged Flights			
Excessive debris, if yes where?			
Hagglunds drive visibly intact			
Any leaking pipes or hoses			
Excessive wire on head or tail shafts			
Bearing Lube Pump			
Oil Level			
Any visible leaks?			
Hydraulic Pumps			
Oil Level			
Any visible leaks, If so, which unit?			
Pressure Gauges intact			
Any filter sensors have red light?			
UMO			
Any apparent damage?			
Broken springs			
Broken spring bolts			
Drive cover in place?			
Stroke is good? Should be (.75)			
Exposed electrical wires			

Any other issues to report (Write on back of page if necessary):

Daily Inspections

Date _____

Shredder Yard 10
Downstream

Inspected by: _____

Conveyor # C001 C002L C002R C003 C004 C005 C006 C007
CODES: M = Maintenance S =Safety M/S = Both
Ok? Y= Yes/ N: No If No, write the issue down under comments

Conveyors	Code	OK	C00?	Comments
Belt tracked				
Belt ruptures				
Scrapers intact (C007 & C003)				
Damaged idlers				
Safety guards covers on drives				
Rubber wipers				
Stuck idlers				
Debris on tail or take up pulleys				
Belt in need or replacement				
Visible oil on reducer				
Magnets # 1 or 2				
Flights intact				
Drive sprocket, worn?				
Driven sprocket, worn?				
Overhead Mag OBM1 & OBM2				
Overhead mag belt off track?				
Missing SS angles on armor clad?				
Turnbuckles intact				
Vibrating tables (1 or 2)				
Rattling noise				
Broken support springs				
Cyclone (fan 1 or 2)				
Drive guards in place				
Excessive vibration noted				
Unusual noise noted from drives				
Rotary valve drive guard in place				
Hatches look intact				
Damaged duct work				
Suction noted in Picking conveyor ducts?				
Batch Feeder				
Rubber Springs look intact?				

Any other issues to report (Write on back of page if necessary):

Daily Inspections

Date _____

Shredder Yard 10
Mcc buildings

Inspected by: _____

CODES: **M = Maintenance** **S =Safety** **M/S = Both**
Ok? Y= Yes/ N: No **If No, write the issue down under comments**

Main Mcc building

- Housekeeping
- Electrical wires exposed
- Any open electrical panels?
- Any rain water accumulation in floor
- Exit Signs lit?
- Any lights bulbs need replacement?
- Main water lines intact?
- Fire extinguishers in place?

Code	Ok	Comments

Foam Injection system

- Any leakage noted?
- Any frozen or busted water lines?
- Foam Solution in tote? (empty?)
- Solution lines operational? (Mill/Chute)

Rheostat

- Is water level low?
- Any signs of spillage?

Small downstream MCC

- Any open electrical panels?
- Housekeeping?
- Fire extinguishers in place?
- All ceiling lights work?

Water Shed

- Pipes look intact?
- Any Water leaks?
- Heater on? (in winter months only)
- Water lines leading out of shed, intact?
- Water lines leading out of shed, any leaks?
- Indicator light lit on heat trace box?
- All ceiling lights work?

Engart Shed

- Any Water leaks?
- Any water on floor?
- All ceiling lights work?

Compressor Room

- Any oil noted around main compressor?
- Damaged pipes?

Any other issues to report (Write on back of page if necessary):

Plant Operator: _____

Date: _____

MRP Daily Equipment Check List

<u>EcoStar (E2)</u>	Ok	Not Okay
1. Drive chains top and bottom deck, any stretching, damage		
2. Bearings, grease or damage		
3. Interior disc, checking for stuck/wedged material, wrapped wire.		

Notes:

<u>Bivi-Tec (E3)</u>	OK	Not Okay
1. Screens damage or build up		
2. Oil level		
3. Motor and bearing condition, need to be greased build up of debris		

Notes:

<u>Windshifter (E5, E6, E7)</u>	OK	Not Okay
1. Zig Zag box condition - dirty, clean		
2. Fan, any buildup of material		
3. Structure, any noticeable wear on panles for wind shifter cones		
4. Rotary Air lock, any build up of material		

Notes:

<u>Tandem/Tomra Wire finders (E18, E19)</u>	OK	Not Okay
1. Rolling splitters clean		
2. Valve bars clean		
3. Conveyor condition		

Notes:

<u>Standard Conveyors/Vibratory Tables</u>	OK	Not Okay
1. Any issues found with conveyors, ruptures, bad bearings, skirting		

Notes/Conveyor #

2. Any issues with vibratory tables, springs, motors need greasing		
--	--	--

Notes/Table #:

<u>Wendt 3M Finders (E21, E22)</u>	Ok	Not Okay
1. Rolling splitters clean		
2. Valve bars clean		
3. Conveyor condition		
Notes:		

<u>Steinert ISS (E20)</u>	Ok	Not Okay
1. Rolling splitters clean		
2. Valve bars clean		
3. Conveyor condition		
Notes:		

<u>MCC Control Room</u>	Ok	Not Okay
1. Housekeeping		
2. Any open electrical panels		
3. Any water leaking in		
4. Exit sign working correctly		
5. Fire extinguisher in place		
6. Lighting, any lights out		
7. Any exposed wiring		
Notes:		

<u>Guarding</u>	OK	Not Okay
1. Any issues found with guards in place, please note below		
Notes:		

Plant Operator: _____

Date: _____

MRP Weekly Equipment Check List

<u>Wind shifters</u>	Ok	Not Okay
1. Check inside the plant for any material deposits or buildup. Remove if found.		
2. Clean sensors		
3. Check that the switches, button connectors and cables of the electrical system are in good order.		
4. Check the static discharge earth connection		
5. Check the plant component's air sealing		
6. Check the blades on the rotary gate valve. The gap btw the blades and the housing should not be more than 1.5 mm.		
7. Check bolt and clamp fixing for tightness; vibration motors, spring elements, vibration elements, rubber buffers.		
8. Check the vibration machine welded parts.		

Plant Operator: _____

Date: _____

MRP Monthly Equipment Check List

<u>EcoStar</u>	Ok	Not Okay
Check the following items		
1. 120V Safety Box and cabling		
2. Safety switches and cabling		
3. Zero-Speed Switches and cabling		
4. Hinged Guards and Locking Hatches		
5. Fixed Guards		
6. Rotating shafts, discs, free pipes and bearings		
7. Chains and Sprokets		
8. Drive Units and cabling		
9. 2 Bolt pillow block bearing mounting hardware		
10. Dust Cover		
11. Labeling of controls and warnings		

Plant Manager: _____

Date: _____

MRP Quarterly Equipment Check List

<u>3rd Party Services</u>	Ok	Not Okay
Air Compressor and Drier		
Quarterly service		
1 major		
1 miner		
1 miner		
1 miner		

Plant Operator: _____

Date: _____

MRP Annual Equipment Check List

<u>3rd Party Services</u>	Ok	Not Okay
MCC Room - check all electrical components		
EcoStar - In House		
Check the following items		
1. Shafts		
2. Disc		
3. Bearings		
4. Chains		
5. Dust covers		
6. Side Wipers		



EQUIPMENT INSPECTION FORM

HRB BALER, CONVEYOR & WIRE TIER

OPERATOR: _____

Date:	Shift: 1st 2nd 3rd	Time: _____ am/pm
Hours:	Machine:	Asset
# of Ties:	Make/Model:	No.

DAILY BALER INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Hydraulic oil tank level				Loose bolts clamps			
Hyd. hose connections				Cylinder mounts			
Pump and valve block				Safety guards			
Oil Cooler				Shear blades			
Combo door cylinder				Shear blade bolts			
Main Ram cylinder				Hopper bolts			
Ejector ram cylinder				Hold down bars			
Hydraulic pumps				Hold down bar bolts			
Audible Alarms				Control Switches			
Interlock Door							
Material Under Rams				Conveyor Pit			

DAILY WIRE TIER INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Clean Wire-Tier head				Clean / Check Track			
Clean feed wheels.				Inspect control panel			
Hydraulic systems				Inspect wire carrier			

DAILY CONVEYOR INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Oil tanks are full				Nuts,Bolts & Bearings			
Flights / Wings				Motor / Gear Box			
Jammed Objects				Safety Guards			

EQUIPMENT IS ACCEPTABLE FOR OPERATION?	YES	NO - REMOVE FROM SERVICE
	PRINTED NAME	SIGNATURE
OPERATOR		
IMMEDIATE SUPERVISOR		
MAINTENANCE SUPERVISOR		



EQUIPMENT INSPECTION FORM BALER, CONVEYOR & WIRE TIER

OPERATOR: _____

Date:		Shift: 1st 2nd 3rd			Time: _____ am/pm		
Hours:		Machine:			Asset		
# of Ties:		Make/Model:			No.		
MONTHLY INSPECTION ITEMS; PERFORM FIRST DAY OF THE MONTH							
INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Blow out motor vents				Floor Liners			
Check Pump Pressure				Oil Testing			
Hyd. breather element				Clean photo eyes			
Blow out oil cooler				Clean under main ram			
Shear blade condition				Clean tank magnets			
OPERATOR							
IMMEDIATE SUPERVISOR							
MAINTENANCE SUPERVISOR							
Work Order #:				W/O Title:			
ACTIONS TAKEN BY SUPERVISOR, IF ANY:							



**SIMS
METAL
MANAGEMENT**

EQUIPMENT INSPECTION FORM SKID STEER/FORKLIFT

###,###

OPERATOR: _____

Date: _____		Shift: 1 st 2 nd 3 rd		Time: _____ am/pm	
Meter Hours: _____		Machine Make/Model: _____		Asset No. _____	

DAILY INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Boom				Rotator			
Boom Pins				Tires & Lug Nuts			
Bucket				Steps/Handrails			
Bucket Cutting Edge				Horn			
Attachment Other				Exhaust System			
Hoses				Housekeeping			
Hoist/Lift Cylinders				Operator's Manuel			
Tilt Cylinders				Instrumentation/Cab			
<i>FORK LIFTS</i>				Radio Working			
Mast				<i>Fluid Levels</i>			<i>Quantity Added</i>
Carriage				Engine/Transmission Oil			
Roll Cage				Hydraulic Oil			
Rops				Grease/Auto Lube			
Fuel Tank/LPG				Antifreeze			

NOTES:

CRITICAL INSPECTION ITEMS

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Backup/Travel Alarm			If no do NOT run	Mirrors			
Strobe Light			If no do NOT run at night	Brakes			
Glass			If line of sight is affected do NOT run	Steering			
Headlights			If no do NOT run at night or when wipers are on	Leaks {where is leak}			If Excessive do NOT run
Wipers			If no and raining do NOT run	Seat Belts in Use			
Smoke			If no do NOT run	All OEM safety items working properly			If no describe in notes
Back-up Cameras			Mark 'N/A' if this does not apply	Inspect all guarding (windows, rails, lights, undercarriage, etc.)			If no, follow guarding addendum
Fire Extinguisher charged			If no operator must replace				

NOTES:

EQUIPMENT IS ACCEPTABLE FOR OPERATION?			YES	NO – REMOVE FROM SERVICE
		PRINTED NAME	SIGNATURE	
OPERATOR				
IMMEDIATE SUPERVISOR				
MAINTENANCE SUPERVISOR				
Work Order #:		W/O Title:		
ACTIONS TAKEN BY SUPERVISOR, IF ANY:				

Operator must turn in copy to Supervisor BEFORE OPERATING EQUIPMENT.

NOTE: IF MACHINE IS REMOVED FROM SERVICE, IT MUST BE RELEASED BACK TO SERVICE BY MAINTENANCE BEFORE USE.



EQUIPMENT INSPECTION FORM

MOBILE SHEARS

OPERATOR:

Date:		Shift: 1 st 2 nd 3 rd		Time: am/pm	
Excavator Hour Meter:		Shear Make/Model:		Asset No.	
DAILY VISUAL INSPECTION ITEMS – 8hr FREQUENCY					
Safety Devices:				OK	Not OK
All safety decals & guarding are in place and legible: seal decal/label maintenance section					
All cab protection in good condition and all excavator warning systems working					
Visually Inspect Shear for any Damage					
Connecting Pins and Pin Retaining Hardware:					
Boom pivot pin of mounting bracket					
Cylinder connection pin of mounting bracket					
Front/rear shear cylinder pin					
Pinheads and pinkeepers					
Inspect all Bolts and Replace any that are Loose or Damaged					
Refer to Manual if Gap Exceeds Recommendations for the Following:					
Slide Puck/Wear Plate Gap					
Guide Blade/Saber Tip Gap					
Cutting Blade Gap					
Ensure that Saber Tip Fits Squarely in Upper Jaw					
Inspect Cross Blade for Looseness or Damage					
Hydraulic System:					
Inspect hoses/connections for wear, potential failure and leaks					
Inspect cylinder for leaks					
DAILY VISUAL INSPECTION ITEMS FOR ROTATORS ONLY – 8hr FREQUENCY					
Rotation Hydraulics:				OK	Not OK
Inspect rotation hoses/connections for wear, potential failure and leaks					
Bolts:					
Check turntable bearing bolts and replace any that are loose or damaged					
Check all rotation assembly bolts					
NOTES:					
CRITICAL TASKS – 8hr FREQUENCY					
Grease the Following:				OK	Not OK
Main pivot groups (two each side)					
End of slide puck assemblies (each side)					
End of front/rear cylinder pin					
Boom pivot connection of mounting bracket					
Cylinder connection of mounting bracket					
Turntable bearing (for rotator only)					
Evaluate Performance of:					
Shearing/Cutting					
Material being sheared: (write under notes)				N/A	N/A
NOTES:					
EQUIPMENT IS ACCEPTABLE FOR OPERATION?				YES	NO – REMOVE FROM SERVICE
		PRINTED NAME		SIGNATURE	
OPERATOR					
IMMEDIATE SUPERVISOR					
MAINTENANCE SUPERVISOR					
Work Order #:				W/O Title:	
ACTIONS TAKEN BY SUPERVISOR, IF ANY:					

NOTE: IF MACHINE IS REMOVED FROM SERVICE, IT MUST BE RELEASED BY MAINTENANCE BEFORE IT IS PUT BACK IN SERVICE.



**SIMS
METAL
MANAGEMENT**

EQUIPMENT INSPECTION FORM MATERIAL HANDLERS AND EXCAVATORS

###,###

OPERATOR: _____

Date:	Shift: 1 st 2 nd 3 rd	Time: _____ am/pm
Meter Hours:	Machine Make/Model:	Asset No.

DAILY INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Boom				Ladders/Walkways			
Boom Cylinders				Horn			
Stick				Exhaust System			
Stick Cylinders				Tires/Lug Nuts			
Attachment				Radio Working			
Undercarriage				<u>Fluid Levels</u>			<u>Quantity Added</u>
Tracks				Engine/Transmission Oil			
Hoses				Hydraulic Oil			
Housekeeping				Grease/Auto Lube			
Instrumentation/Cab				Antifreeze			

NOTES:

CRITICAL INSPECTION ITEMS

INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Backup/Travel Alarm			If no do NOT run	Brakes			
Strobe Light			If no do NOT run at night	Steering			
Glass/ Mirrors			If line of sight is affected do NOT run	Seat Belts in Use			
Headlights			If no do NOT run at night or when wipers are on	Back-up Cameras			Mark 'N/A' if this does not apply
Wipers			If no and raining do NOT run	Magnet Chain/Cable/Pins			
Smoke			If no do NOT run	Grapple Cracks/Pins			
Leaks – {where is leak}			If Excessive do NOT run	Stick-Boom Limit Switch Working			
Outriggers & Pads				All OEM safety items working properly			If no describe in notes
Fire Extinguisher charged			If no operator must replace	Inspect all guarding (windows, rails, lights, undercarriage, etc.)			If no, follow guarding addendum

NOTES:

EQUIPMENT IS ACCEPTABLE FOR OPERATION?	YES	NO – REMOVE FROM SERVICE
	PRINTED NAME	SIGNATURE
OPERATOR		
IMMEDIATE SUPERVISOR		
MAINTENANCE SUPERVISOR		
Work Order #:	W/O Title:	
ACTIONS TAKEN BY SUPERVISOR, IF ANY:		

OPERATOR MUST TURN IN COPY TO SUPERVISOR BEFORE OPERATING EQUIPMENT.

NOTE: IF MACHINE IS REMOVED FROM SERVICE, IT MAY NOT BE USED UNTIL IT IS RELEASED BACK TO SERVICE BY MAINTENANCE.



EQUIPMENT INSPECTION FORM

LOADERS

###,###

OPERATOR: _____

Date:		Shift: 1 st 2 nd 3 rd		Time: _____ am/pm			
Meter	Machine		Asset				
Hours:	Make/Model:		No.				
DAILY INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION							
INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Boom				Tires & Lug Nuts			
Boom Pins				Ladders/Walkways			
Bucket/Tilt Cylinder				Horn			
Tilt Pins				Exhaust System			
Hoist cylinder				Housekeeping			
Undercarriage				Instrumentation/Cab			
Tracks				Radio Working			
Hoses				<u>Fluid Levels</u>			<u>Quantity Added</u>
Bucket				Engine/Transmission Oil			
Bucket Cutting Edge				Hydraulic Oil			
Attachment Other				Grease/Auto Lube			
Bucket Scale				Antifreeze			
NOTES:							
CRITICAL INSPECTION ITEMS							
INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Backup/Travel Alarm			If no do NOT run	Mirrors			
Strobe Light			If no do NOT run at night	Brakes			
Glass			If line of sight is affected do NOT run	Steering			
Headlights			If no do NOT run at night or when wipers are on	Leaks {where is leak}			If Excessive do NOT run
Wipers			If no and raining do NOT run	Seat Belts in Use			
Smoke			If no do NOT run	All OEM safety items working properly			If no describe in notes
Back-up Cameras			If no do NOT run <i>Mark 'N/A' if this does not apply</i>	Inspect all guarding (windows, rails, lights, undercarriage, etc.)			If no, follow guarding addendum
Fire Extinguisher charged			If no operator must replace				
NOTES:							
EQUIPMENT IS ACCEPTABLE FOR OPERATION?				YES	NO – REMOVE FROM SERVICE		
			PRINTED NAME	SIGNATURE			
OPERATOR							
IMMEDIATE SUPERVISOR							
MAINTENANCE SUPERVISOR							
Work Order #:				W/O Title:			
ACTIONS TAKEN BY SUPERVISOR, IF ANY:							

Operator must turn in copy to Supervisor BEFORE OPERATING EQUIPMENT.

NOTE: IF MACHINE IS REMOVED FROM SERVICE, IT MUST BE RELEASED BY MAINTENANCE BEFORE IT IS PUT BACK IN SERVICE.



EQUIPMENT INSPECTION FORM

AERIAL & SCISSOR LIFTS

Revision D

OPERATOR: _____

Date:		Shift: 1 st 2 nd 3 rd		Time: _____ am/pm			
Meter Hours:		Machine Make/Model:		Asset No.			
DAILY INSPECTION ITEMS THAT REQUIRE MAINTENANCE ATTENTION							
INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Batteries				Housekeeping			
Hoses				<u>Fluid Levels</u>			<u>Quantity Added</u>
Tires				Engine/Transmission Oil			
Steps/Handrails				Hydraulic Oil			
Exhaust System				Grease/Auto Lube			
Radio Working				Antifreeze			
NOTES:							
CRITICAL INSPECTION ITEMS							
INSPECTION OF:	OK	Not OK	Notes	INSPECTION OF:	OK	Not OK	Notes
Backup/Travel Alarm			If no do NOT run	Tie Down Points (not rails)			
Strobe Light			If no do NOT run at night	All Operating Controls Working Properly			If no do NOT run
Basket				Hydraulic Leaks			If no do NOT run
Boom				Leaks {where is leak}			If Excessive do NOT run
Lift Arms				Controls Clearly Labeled			
Smoke			If no do NOT run	All OEM safety items working properly			If no describe in notes
Manufacturer Annual Inspection Certificate in Cab				Secondary/Ground Level Descent system and/or Auxiliary Power system operates properly			If no do NOT run
Brakes			If no do NOT run	Steering			
Fire Extinguisher charged			If no operator must replace	Inspect all guarding (windows, rails, lights, undercarriage, etc.)			If no, follow guarding addendum
Horn			If no do NOT run				
NOTES:							
EQUIPMENT IS ACCEPTABLE FOR OPERATION?				YES	NO – REMOVE FROM SERVICE		
		PRINTED NAME		SIGNATURE			
OPERATOR							
IMMEDIATE SUPERVISOR							
MAINTENANCE SUPERVISOR							
Work Order #:			W/O Title:				
ACTIONS TAKEN BY SUPERVISOR, IF ANY:							

Operator must turn in copy to Supervisor BEFORE OPERATING EQUIPMENT.

NOTE: IF MACHINE IS REMOVED FROM SERVICE, IT MUST BE RELEASED BACK TO SERVICE BY MAINTENANCE BEFORE USE.

APPENDIX K. STORAGE VOLUMES

Paulina Facility Storage Capacity									
Yard Name	Material	L (ft)	W (ft)	H (ft)	Storage Area Size (yd ³)	Average Storage (yd ³)	Max Storage (yd ³)	Max Storage (gross tons)	Average Storage (gross tons)
Ferrous Yard	Clip	102	26	30	2,947	49.11	2,947	400	180
Ferrous Yard	Forklifts	93	67	30	6,923	51.28	6,923	1500	300
Ferrous Yard	UNP HMS/P&S	101	179	30	20,088	318.85	20,088	3500	1500
Ferrous Yard	Torch Field	45	62		-	-	-		
Ferrous Yard	Slitter	72	20	30	1,600	14.81	1,600	800	200
Ferrous Yard	Bush	72	145	30	11,600	223.41	11,600	2500	1300
Ferrous Yard	Auto Cast	50	65	30	3,611	66.87	3,611	500	250
Ferrous Yard	Shred/S. Clip	96	151	30	16,107	79.54	16,107	12000	1600
Ferrous Yard	HMS	166	107	30	19,736	292.38	19,736	3500	1400
Ferrous Yard	MST Pad	72	90	30	7,200	-	7,200		
Ferrous Yard	MST	60	122	30	8,133	130.53	8,133	3000	1300
Ferrous Yard	Overflow	68	145	30	10,956	13.53	10,956	3000	100
Ferrous Yard	P&S/HM	67	94	30	6,998	32.40	6,998	800	100
Ferrous Yard	TP Bush	63	44	30	3,080	50.19	3,080	500	220
Ferrous Yard	Mill Scale	94	41	30	4,282	79.30	4,282	4000	2000
Ferrous Yard	UNP HMS/P&S	112	87	30	10,827	160.40	10,827	1000	400
					-	-	-		
Shredder Yard	North Pile	55	80	30	4,889	18.11	4,889	700	70
Shredder Yard	Clip Pile	40	60	30	2,667	49.38	2,667	400	200
Shredder Yard	Car Pile	70	100	30	7,778	76.82	7,778	1500	400
Shredder Yard	SS Bgk Pile	60	60	30	4,000	14.81	4,000	500	50
Shredder Yard	DNF Overflow	70	100	30	7,778	96.02	7,778	3000	1000
Shredder Yard	DNF Pile	60	90	30	6,000	129.63	6,000	1200	700
Shredder Yard	Light Iron Pile	75	180		-	-	-	3000	1300
Shredder Yard	AL Bkge Pile	50	50	30	2,778	51.44	2,778	400	200
Shredder Yard	ASR Pile	30	30	30	1,000	12.35	1,000	300	100
Shredder Yard	Shred Pile	7411	1	30	8,234	174.27	8,234	1400	800
					-	-	-		
MRP	DNF (north)	70	135	30	10,500	233.33	10,500	2500	1500
MRP	DNF Breakage	30	80	30	2,667	59.26	2,667	1000	600
MRP	DNF (south)	60	120	30	8,000	177.78	8,000	2000	1200
MRP	Zorba	45	150	30	7,500	166.67	7,500	2500	1500
MRP	ASR Pile	60	120	30	8,000	177.78	8,000	2500	1500
							Ferrous Storage	54500	21970

Paulina Facility Storage Capacity									
Yard Name	Material	L (ft)	W (ft)	H (ft)	Storage Area Size (yd ³)	Average Storage (yd ³)	Max Storage (yd ³)	Max Storage (gross tons)	Average Storage (gross tons)
Peddler Yard	Sheet Iron	48	80	30	4,267	111.93	4,267	120	85
NF Warehouse	Bunker 1 - 6063	16	13	20	154	2.54	154	8.0	3.6
NF Warehouse	Bunker 2 - MLC	16	15	20	178	5.27	178	11.2	8.9
NF Warehouse	Bunker 3 - ACR	16	14	20	166	4.92	166	8.9	7.1
NF Warehouse	Bunker 4 - ACR w FE	16	10	20	119	35.12	119	8.9	71.4
NF Warehouse	Bunker 5 - J/S	16	15	20	178	5.27	178	6.7	5.4
NF Warehouse	Bunker 6 - PTD 6063	16	13	20	154	2.54	154	8.0	3.6
NF Warehouse	Bunker 7 +8 - Old Sheet	16	64	20	759	11.80	759	44.6	18.8
NF Warehouse	Bunker 9 - UBC	31	37	20	850	22.03	850	22.3	15.6
NF Warehouse	Bunker 10 - ALB	20	31	20	459	12.76	459	67.9	50.9
NF Warehouse	Bunker 11 - Sealed Units	20	15	20	222	4.39	222	53.6	28.6
NF Warehouse	Bunker 12 - 3003	20	15	20	222	5.99	222	19.6	14.3
NF Warehouse	Bunker 13 - PLTD Alum	20	15	20	222	6.17	222	10.7	8.0
NF Warehouse	Bunker 14 - Draining Drums	20	18	20	267	9.26	267	14.3	13.4
NF Warehouse	Bunker 15 - Totes PL/ST	20	18	20	267	-	267	0.0	0.0
NF Warehouse	Bunker 16 - #1 CU	20	18	20	267	5.72	267	17.0	9.8
NF Warehouse	Bunker 17 - #2 CU	20	18	20	267	6.91	267	22.3	15.6
NF Warehouse	Bunker 18 - 5052	20	18	20	267	6.58	267	26.8	17.9
NF Warehouse	Bunker 19 - Cardboard	10	10	20	74	2.06	74	3.6	2.7
NF Warehouse	Bunker 20 - #2 ICW	10	10	20	74	1.96	74	15.6	11.2
NF Warehouse	Bunker 21 - #1 ICW 72%	10	10	20	74	1.98	74	11.2	8.0
NF Warehouse	Bunker 22 - #1 ICW 85%	10	10	20	74	1.83	74	13.4	8.9
NF Warehouse	Bunker 23 - 5182 Alloy	23	15	20	256	6.63	256	17.9	12.5
NF Warehouse	Rows 1-34	62	196	20	9,001	139.67	9,001	660.7	276.8
					-	-	-		
NF Warehouse Old Building	Bunker 1	20	10	20	148	3.99	148	19.6	14.3
NF Warehouse Old Building	Bunker 2	20	10	20	148	3.99	148	19.6	14.3
NF Warehouse Old Building	Battery Storage	22	20	20	326	8.85	326	26.8	19.6
NF Warehouse Old Building	Rows 1-15	80	64	20	3,793	81.94	3,793	401.8	234.4
					-	-	-		
Wood St. - Outside	Bunker 1 - Old cast	24	20	30	533	9.88	533	53.6	26.8
Wood St. - Outside	Bunker 2 - Ptd Al	24	20	30	533	13.17	533	16.1	10.7
Wood St. - Outside	Bunker 3 - 6061	24	20	30	533	9.88	533	13.4	6.7
Wood St. - Outside	Bunker 4 - Old Sheet	24	20	30	533	13.74	533	10.3	7.1
Wood St. - Outside	Bunker 5 - Old Sheet	24	60	30	1,600	37.79	1,600	30.8	19.6
Wood St. - Outside	Bunker 6 - Alum Brkg	47	23	30	1,201	27.80	1,201	35.7	22.3
Wood St. - Outside	Bunker 7 - Misc Customer Spec Material	47	37	30	1,932	47.71	1,932	80.4	53.6
Wood St. - Outside	Bunker 8 - Alum Rims	47	50	30	2,611	66.49	2,611	42.9	29.5
Wood St. - Outside	Bunker 9 - Luggers	47	30	30	1,567	37.72	1,567	17.9	11.6
Wood St. - Outside	Bunker 10 - Motors	25	29	30	806	13.18	806	53.6	23.7
Wood St. - Outside	Bunker 11 - Oversize Al	25	20	30	556	12.35	556	13.4	8.0
Wood St. - Outside	Bunker 12 - 304 SS	25	20	30	556	14.79	556	14.3	10.3
Wood St. - Outside	Bunker 13 - OSS Brkg	25	25	30	694	17.86	694	16.1	11.2
Wood St. - Outside	Bunker 14 - Shredded Motors	25	13	30	361	10.15	361	25.9	19.6
Wood St. - Outside	Bunker 15 - Shredded Wire	21	18	30	420	15.56	420	19.6	19.6
						NonFerrous Storage:		2104.81	1260.91

APPENDIX L. TRAFFIC VOLUMES

Traffic By Month			
	Daily Avg	Daily Max	# of Days
2020-09	278	404	25
2020-10	200	401	27
2020-11	253	352	23
2020-12	243	394	25
2021-01	259	419	25
2021-02	195	381	25
2021-03	324	478	27
2021-04	312	392	26
2021-05	267	430	27
2021-06	273	353	26
2021-07	240	379	26
2021-08	241	354	26
Total 12 Month	257	478	308

Average Daily Traffic by Hour														
	2020-09	2020-10	2020-11	2020-12	2021-01	2021-02	2021-03	2021-04	2021-05	2021-06	2021-07	2021-08	Daily Avg	Daily Max
12:00am	-	-	-	-	-	-	-	-	-	-	0	-	0	0
3:00am	-	-	-	-	-	-	-	-	-	0	-	-	0	0
4:00am	2	2	1	0	-	-	-	1	2	3	1	1	1	3
5:00am	4	2	2	6	5	4	10	9	5	4	4	3	5	10
6:00am	21	14	20	21	24	16	31	29	23	25	23	22	22	31
7:00am	27	21	22	22	25	18	28	27	26	24	25	26	24	28
8:00am	29	20	27	30	26	22	36	36	33	29	28	28	29	36
9:00am	34	23	30	27	31	24	42	38	33	33	29	30	31	42
10:00am	31	25	31	30	33	22	38	39	33	31	28	29	31	39
11:00am	32	23	30	27	28	26	37	32	29	30	28	29	29	37
12:00pm	28	22	24	23	26	22	33	31	23	30	22	23	26	33
1:00pm	31	21	26	25	29	20	35	31	26	28	26	25	27	35
2:00pm	26	17	22	20	20	14	26	24	22	21	17	15	20	26
3:00pm	9	7	11	8	8	5	8	9	9	9	5	9	8	11
4:00pm	3	1	4	2	2	1	2	4	3	3	2	2	2	4
5:00pm	0	-	3	1	1	0	0	0	1	1	1	0	1	3
6:00pm	-	0	-	0	-	-	-	0	0	1	0	0	0	1
7:00pm	-	1	1	-	-	-	-	-	0	0	-	-	0	1
8:00pm	-	-	-	0	-	-	-	-	0	-	-	-	0	0
9:00pm	-	-	-	-	0	0	-	-	-	-	0	-	0	0
10:00pm	-	-	-	-	-	-	-	-	-	-	0	-	0	0
11:00pm	-	-	-	-	-	-	-	-	-	-	0	-	0	0
Total	278	200	253	243	259	195	324	311	267	272	240	241	257	340

APPENDIX M. STACKING PLAN



Stacking Plan

DATE: 06-01-2020
Rev: 0

PAGE
1 OF 1

1.0 PURPOSE:

The purpose of this plan is to ensure that any excess vehicular traffic remains within with Paulina or Wood Streets; and, does not block, delay or otherwise disturb traffic on Blue Island.

2.0 RESPONSIBILITY:

- 2.1 It is the responsibility of Plant Managers and Supervisors to ensure this plan is followed.
- 2.2 It is the responsibility of Dispatch Mgr. to inform 3rd party drivers where to queue if they cannot immediately get into a particular area of the facility.

3.0 PROCEDURE:

- 3.1 Trucks coming into the shredder yard may be required to queue along Paulina. When queueing is necessary, trucks will come in the shredder yard, get weighed and be directed to drive down the roadway on the east side of the shredder. They will then exit the shredder yard on the south end and line up, heading north, along Paulina.
 - 3.1.1 As a truck leaves the shredder yard, the next truck waiting in the queue can be directed in.
- 3.2 Trucks coming into the MRP will weigh at the scale at the shredder. Will then be directed to drive down the roadway on the east side of the shredder. They will then exit the shredder yard, turning south and will queue along the pedestrian walkway, heading south.
 - 3.2.1 As a truck leaves the MRP area, the next truck waiting in the queue can be directed in.
- 3.3 Trucks coming into the Nonferrous Yard, if required to queue, will line up along the east side of Wood Street ensuring they leave driveways to other businesses open.
 - 3.3.1 As a truck leaves the Nonferrous Scale, the next truck waiting in the queue can be directed in.
- 3.4 Trucks coming into the Ferrous Yard, if required to queue, will line up along the south end of Paulina Street at the scale.
 - 3.4.1 As a truck leaves the scale, the scale operator will call to the next truck to enter the scale. The driver will wait to enter scale for scale operators instruction.

APPENDIX N. IDLING REDUCTION PLAN



No Idling Plan

(Chicago Facilities)

DATE: 12/3/2019
Rev: 1

PAGE
1 OF 1

1.0 PURPOSE:

The purpose of this plan is the reduce diesel emission through unnecessary idling.

2.0 RESPONSIBILITY:

- 2.1 It is the responsibility of Plant Managers and Supervisors to ensure this plan is followed.
- 2.2 It is the responsibility of Plant Managers to ensure there is signage in their facility notifying 3rd party drivers of this plan.
- 2.3 It is the responsibility of Dispatch Mgr. to inform 3rd party drivers about this plan.
- 2.4 It is the responsibility of procurement to ensure that all new equipment purchased has automatic shut offs to prevent Sims Metal's equipment excessive idling.

3.0 PROCEDURE:

- 3.1 This procedure expands on the No Idling requirement found in Sims EHS Standard 003 – Traffic Management.
- 3.2 Chicago Ordinance 9-80-095 and Illinois State statute 625 ILCS 5/11-1429 prohibits diesel vehicles of more than 8,000 pounds (heavy-duty trucks and buses) from idling for more than ten minutes per hour when they are parked.
- 3.3 Chicago Ordinance 9-80-095 and Illinois State statute 625 ILCS 5/11-1429 has exceptions to this statute, exceptions that could apply to our operation are:
 - 3.3.1 The motor vehicle has a Gross Vehicle Weight Rating of less than 8,000 lbs.
 - 3.3.2 The motor vehicle idles while forced to remain motionless at the direction of law enforcement.
 - 3.3.3 The motor vehicle idles while operating defrosters, heater, air conditioners, or other equipment solely to prevent a safety or health emergency.
 - 3.3.4 A motor vehicle idles as part of a government inspection to verify that all equipment is in good working order.
- 3.4 Chicago Ordinance 9-80-095 states: It shall be unlawful for any person who owns or operates any motor vehicle which is powered by diesel fuel to stand such vehicle with the engine running for more than a total of three minutes within any sixty-minute period.
- 3.5 When the ambient temperature is above 80° or below 32°F, a truck is allowed to idle for more than three minutes.

STORMWATER POLLUTION PREVENTION PLAN

**Metal Management Midwest, Inc.
d/b/a Sims Metal Management
Paulina Facility
2500 South Paulina Street
Chicago, Illinois 60608**

May 2000
Rev-2: August 21, 2009
Rev-3: September 2010
Rev-4: June 2013 by MMMI
Rev-5: April 2018 by KPRG
Rev-6: October 2021 by MMMI

PREPARED BY: KPRG and Associates, Inc.
414 Plaza Drive, Suite 106
Westmont, Illinois 60559

KPRG Project No. 13917

Frank Santella, P.G.
Senior Project Manager

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- Appendix E. Employee Training Documentation
- Appendix F. Quarterly Routine Facility Inspection Forms
- Appendix G. Containment Inspection and Drainage Records
- Appendix H. Quarterly Visual Discharge Observation Logs
- Appendix I. IEPA Annual Facility Inspection Reports
- Appendix J. Corrective Action Forms
- Appendix K. SWPPP Revision History

STORMWATER POLLUTION PREVENTION PLAN

SWPPP AUTHORIZATION & CERTIFICATION

I certify under penalty of law that this document and all appendices were prepared under my direction or supervision in accordance with a system designed to ensure that qualified personnel properly gather and evaluate the information contained in this document. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information contained herein is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

George Malamis

General Manager

Name

Title

Signature

Date

11/1/21

STORMWATER POLLUTION PREVENTION PLAN

1.0 INTRODUCTION

Metal Management Midwest, Inc. (MMMI) d/b/a Sims Metal Management (SMM) retained KPRG and Associates, Inc. (KPRG) to prepare this revised Stormwater Pollution Prevention Plan (SWPPP). This SWPPP addresses stormwater pollution prevention at SMM's Paulina Facility located at 2500 South Paulina Street, Chicago, Cook County, Illinois (Facility).

The Illinois Environmental Protection Agency (IEPA) National Pollution Discharge Elimination System (NPDES) General Permit for stormwater discharges associated with industrial activity (included in Appendix A) requires this SWPPP. The purpose of the SWPPP is to:

- Identify potential sources of pollution that may be expected to affect the quality of stormwater discharges associated with industrial activity;
- Describe and ensure the implementation of practices that are to be used to reduce potential pollutants in stormwater discharges associated with industrial activity; and
- Assure compliance with terms and conditions of the stormwater General Permit.

SMM has day-to-day operational control of activities associated with the Facility necessary to assure compliance with the NPDES General Permit (e.g., SMM is authorized to direct workers at the Facility to carry out activities required by the General Permit and presented in this SWPPP).

This SWPPP is to be maintained at the Facility and made available for review by IEPA or their duly authorized representatives in the event of an on-site inspection. Furthermore, this SWPPP is to be submitted to the IEPA in electronic format as a condition of the General Permit.

2.0 FACILITY DESCRIPTION AND CONTACT INFORMATION**2.1 Facility Information**

Name of Facility: Metal Management Midwest, Inc. – Paulina Facility

Street: 2500 South Paulina Street

City: Chicago

State: IL *ZIP Code:* 60608

County or Similar Subdivision: Cook

NPDES ID (i.e., General Permit tracking number): ILR005935

Primary Industrial Activity SIC code, and Sector and Subsector (ILR00, Attachment 1 Subpart and Sector): 5093, Subpart N and Sector N

Co-located Industrial Activity(s) SIC code(s), Sector(s) and Subsector(s) (ILR00, Attachment 1):
Not Applicable

Latitude/Longitude

Latitude:

41.851325° N (decimal degrees)

Longitude:

-87.668470° W (decimal degrees)

Method for determining latitude/longitude (check one):

☐ USGS topographic map (specify scale:)

☐ GPS

☒ Other (please specify): Google Earth

Is the Facility located in Indian country? ☐ Yes ☒ No

If yes, name of Reservation, or if not part of a Reservation: Not Applicable

Estimated area of industrial activity at site exposed to stormwater: 28 acres

Discharge Information

Does this Facility discharge stormwater into a municipal separate storm sewer system (MS4)?

☐ Yes ☒ No

If yes, name of MS4 operator: Not Applicable

Name(s) of surface water(s) that receive stormwater from your Facility: No Direct or Indirect
Discharge of Stormwater Occurs. Facility is adjacent to the South Branch of the Chicago
River.

*Does this Facility discharge industrial stormwater directly or indirectly into any segment of an
"impaired water" (ILR00 Part C.1.a.)?* ☐ Yes ☒ No

If Yes, identify name of the impaired water(s) and segment(s), if applicable: Chicago Sanitary
Ship Canal / Segment GI-03

STORMWATER POLLUTION PREVENTION PLAN

Identify the pollutant(s) causing the impairment(s): Phosphorous, Oil & Grease, Dissolved Oxygen, Iron, Mercury & Polychlorinated Biphenyls (PCBs).

Which of the identified pollutants may be present in industrial stormwater discharges from this Facility: Oil & Grease, Dissolved Oxygen, Iron, Mercury and PCBs.

Has a Total Maximum Daily Load (TMDL) been completed for any of the identified pollutants: No

If yes, please list the TMDL pollutants: Not Applicable

Is there a Waste Load Allocation applicable to the Facility's stormwater discharge in the approved TMDL? ☐ Yes ☒ No

Are any of your stormwater discharges subject to effluent limitation guidelines (ILR00 Part B): ☐ Yes ☒ No

If Yes, which guidelines apply: Not Applicable

2.2 Contact Information / Responsible Party

Facility Owner/Operator(s):

Name: Metal Management Midwest, Inc.

Address: 2500 South Paulina Street

City, State, Zip Code: Chicago, Illinois, 60608

Telephone Number: 773-650-6440

Email address: george.malamis@simsmm.com

Fax number: 630-929-8543

SWPPP Contact(s):

SWPPP Contact Name (Primary): Debbie Hays

Telephone number: 773 650-6495

Email address: debbie.hays@simsmm.com

Fax number: 630-929-8543

SWPPP Contact Name (Backup): Maria Medina

Telephone number: 773-650-6405

Email address: maria.medina@simsmm.com

Fax number: 630-929-8543

STORMWATER POLLUTION PREVENTION PLAN

2.3 Stormwater Pollution Prevention Team

The following employees of Metal Management Midwest, Inc. will implement the SWPPP:

<u>Team Leaders</u>		
Name	Title	Phone Number
Sam Flores	Shredder Yard Mgr.	Work: (773) 890-4249 Cell: (312) 502-7768
Theodore Moore	MRP Yard Mgr.	Work: (773) 890-4249 Cell: (312) 502-8394
Maria Medina	Ferrous Yard Mgr.	Work: (773) 650-6405 Cell: (773) 675-7647
Ricardo Jaime	Nonferrous Yard Mgr.	Work: (773) 890-4212 Cell: (773) 551-0450
Kevin Post	Transportation Yard Mgr.	Work: (773) 650-1081 Cell: (773) 798-9012
Responsibilities: <ul style="list-style-type: none"> • Implement stormwater control measures • Train personnel in preventive maintenance, spill prevention and response, and material handling and storage • Assure record keeping requirements of SWPPP are completed • Assure good housekeeping, preventive maintenance, spill prevention and response, and materials handling and storage practices are followed by personnel on a daily basis • Recommend additional stormwater controls, as needed • Train personnel in preventive maintenance, spill prevention and response, and material handling and storage • Oversee the maintaining of required records • Perform inspections, quarterly visual stormwater discharge observations and stormwater sampling 		
Debbie Hays	SHEC Director	Work: (773) 650-6495 Cell: (312) 343-4549
Responsibilities: <ul style="list-style-type: none"> • Recommend SWPPP improvements or amendments • Update and edit SWPPP as needed or required • Perform annual compliance evaluation together with Yard Managers • Verify compliance with SWPPP and General Permit • Coordinate General Permit renewal 		

STORMWATER POLLUTION PREVENTION PLAN

George Malamis	General Manager	Work: (773) 254-1200
Responsibilities: <ul style="list-style-type: none">• Signatory authority for Notice of Intent, General Permits and plans• Authorize plan development and implementation• Commit corporation resources for SWPPP implementation and modifications		

2.4 Facility Description and Activities

SMM's Paulina Facility is an industrial operation that purchases, processes, and ships recyclable products (ferrous and nonferrous metals). The Facility occupies approximately 28 acres of which approximately 50 percent is covered by improved surfaces consisting of asphalt, concrete pavement, asphalt millings or buildings. The Facility is composed of the following component operations:

- The Ferrous Yard (Yard 1) is the ferrous storage and processing yard;
- Maintenance Facility includes both an equipment maintenance building and a maintenance building for SMM trucks. A truck parking area also is included;
- The Non Ferrous Yard (Yard 6) is the Nonferrous storage and processing yard which includes the nonferrous warehouse building,
- The Peddler Yard (Yard 6.5) is contained within the Maintenance Facility area and uses the east side of the maintenance building.
- The Metal Recovery Plant (MRP) is a DNF processing yard; and
- The Shredder Yard (Yard 10) is the shredder yard. The Shredder Yard has its own maintenance building which primarily houses spare parts.

The above operational components are necessary to allow for different processing techniques and to assure that product (recyclable metal) quality is maintained and meets customers' specifications. Recyclable metal product must be sorted according to chemistry and is carefully segregated and maintained in discrete storage piles throughout the Facility. A description of the many different types of ferrous metal products, by chemistry and/or size, has been developed by the Institute of Scrap Recycling Industries ("ISRI"). A copy of the ISRI metal products is maintained at the Facility.

A general location map for the Facility is provided on Figure 1 in Appendix B. This figure includes an excerpt from a topographic map extending more than one-quarter mile beyond the property

STORMWATER POLLUTION PREVENTION PLAN

boundaries of the Facility and nearby surface water bodies. As required by Part E.5.a of the General Permit, Figure 1 also includes the location of potable water supply wells within ¼-mile radius of the Facility. A general Facility Features Map is provided on Figure 2. The additional figure requirements, per the General Permit, are shown on Figure 3 through Figure 5 in Appendix B, as noted below.

Figure 3 through Figure 5 in Appendix B illustrates the following features, as applicable:

- Facility property boundaries
- Location of significant structures and impervious surfaces
- Location of stormwater control measures
- Stormwater conveyance and discharge structures
- Equipment and vehicle maintenance areas
- Location of existing or planned stormwater control measures
- Areas of existing and potential soil erosion
- Material loading, unloading, and access areas
- Material processing areas
- Surface water bodies
- Stormwater discharge monitoring points
- Material storage areas

2.4.1 The Ferrous Yard (Yard 1)

The Ferrous Yard functions as the ferrous processing, storing and barge loading operation for borings, clips, special ferrous products, shredded ferrous product, heavy melt steel (“HMS”), plate and structural steel (“P&S”), turnings, and busheling. The Crane Shop, used to service material handlers, loaders, and forklifts, is located in the northeastern corner of the Ferrous Yard. Significant features of the Ferrous Yard are illustrated on Figure 3.

Materials processed and stored in the Ferrous Yard are generally transported from customer accounts and other SMM operations to the Ferrous Yard via SMM trucks and contract haulers. Trucks entering the Ferrous Yard must first proceed to the truck scale equipped with radiation detector to be weighed and screened for radioactivity. The truck scale is located in the northeastern corner of the Ferrous Yard. Trucks are then directed by the scale operator to the appropriate unloading area or, in the case of experienced truck drivers, allowed to proceed to unloading areas without verbal instructions based on experienced drivers’ yard knowledge. Trucks must wait to

STORMWATER POLLUTION PREVENTION PLAN

unload until a qualified inspector designates an authorized unloading area. Qualified inspectors will inspect loads for unauthorized materials, as detailed in SMM's National Policy on the Inbound Material Control. Electronic versions of National Policies are stored in SMM's computer network which is available throughout the Facility. Acceptable loads are unloaded at appropriate storage areas throughout the Ferrous Yard. Unauthorized materials discovered during inspections will be grounds for rejection of the load in accordance with SMM's Inbound Material Control Program. After loads are inspected and unloaded, the truck driver will be issued an inspection ticket for loads found to be acceptable. The driver must then return to the truck scale located in the northeastern corner of the yard to submit the inspection ticket and receive a scale ticket the load brought into the yard. If the load is rejected by the inspector, an inspection ticket nor a scale ticket is not issued. Traffic is controlled by the yard supervisor and inspectors during the inspection and unloading process.

Unauthorized materials discovered in the Facility that have erroneously passed through Facility inspections will be subjected to a comprehensive and thorough investigation to determine the means by which the unauthorized materials were brought into the Facility and missed by the inspection process. Results of this investigation will be put in Velocity EHS, the facility's electronic EHS System.

Borings, special ferrous products, steel turnings, clips and shredded ferrous products are unloaded throughout the Facility generally from trucks and are stockpiled in the yard and shipped directly to the consumer via barge, truck, or rail. Steel turnings are initially delivered to a concrete containment pad, located near the western property boundary, where they are drained of cutting fluids as discussed in Section 4.1.1. After draining, steel turnings are transferred to a lined storage pad as discussed in Section 4.1.1. Clips are generally stored in piles on the asphalt millings surface. Special ferrous products, consisting of products to be sold for reuse (e.g., rail wheels), are stored generally in piles on an unimproved surface. Shred produced from the shredding plant located in the Shredder Yard is transferred to the Ferrous Yard to load onto barges. Shred products are stored in piles near the barge-loading area until loaded into barges.

When borings, special ferrous products, turnings, and shred ferrous products are loaded for outgoing deliveries, loading takes place adjacent to the stockpile area. Outgoing deliveries can be loaded into barges, trucks or rail via a material handler. Traffic is controlled by the Yard Supervisor and Inspectors during loading procedures.

HMS, P&S, and busheling are unloaded adjacent to their storage areas generally from trucks and are processed in the yard and shipped directly to the consumer via barge, truck, or rail. Coils and

STORMWATER POLLUTION PREVENTION PLAN

skeleton plate are at times processed via torch cutting. Prepared HMS, P&S, and busheling are loaded for outgoing deliveries adjacent to the prepared product storage areas. Outgoing deliveries can be loaded into barges, trucks or rail via material handler. Traffic is controlled by the Yard Supervisor and Inspectors during loading procedures.

The Crane Shop, located in the northeastern corner of the Ferrous Yard, services mobile equipment, which operate throughout the Facility. Mobile equipment may be brought to the concrete pad (apron) located adjacent and south of the shop, or a staff mechanic may go to the equipment located in the yard for repairs. Equipment fluids and parts cleaner are located inside the shop.

Storing and processing recyclable products in the Ferrous Yard have the potential to release cutting oils, lubricating oils and greases, particulate matter, and hydraulic oil to stormwater. Some ferrous materials such as clips, busheling, and turnings arrive at the Facility with incidental coatings of cutting oils. HMS, P&S, and special ferrous products have the potential to arrive at the Facility with incidental coatings of lubricating oils and greases if the materials include motor-related components, gearboxes, etc. Recyclable products brought into the Ferrous Yard can contain particulate matter that can be released to stormwater. Processing equipment has the potential to release hydraulic oil if hydraulic oil reservoirs or hydraulic lines leak or rupture.

Additional fluids used and stored in the Ferrous Yard include those stored in drums, in material handling equipment, and in the Crane Shop. Mobile equipment generally operated at the Ferrous Yard includes material handlers, loaders, forklifts, and trucks. Fluids involved in the operation of the Ferrous Yard equipment include diesel fuel, gasoline, hydraulic oil, lubricating greases, motor oils, and antifreeze, which have the potential to be released to stormwater through equipment leaks. The Crane Shop, located in the northeastern corner of the Ferrous Yard, services mobile equipment which operate throughout the Facility. Equipment fluids and parts cleaner fluids are stored inside the shop and have the potential to be released to stormwater during unloading into the shop and leaks into floor drains connected to the MWRD combined sewer system.

Ground surface conditions in the Ferrous Yard have been improved with the use of reinforced concrete slab underlain by sub-base aggregate, asphalt underlain by sub-base aggregate, gravel and asphalt millings. The primary driveway in the Ferrous Yard extends from vacated Paulina Street to near the western property boundary of the Ferrous Yard and is used by trucks bringing material into and out of the yard. This driveway is paved with asphalt underlain by sub-base aggregate. Reinforced concrete slabs underlain by sub-base aggregate are located at the western property

STORMWATER POLLUTION PREVENTION PLAN

boundary for turnings storage, busheling storage, an apron located south of the Crane Shop and in areas containing stormwater catch basins.

The Ferrous Yard is described as having been covered with approximately 18 to 36 inches of limestone gravel in the early 1980s when a vertical shaft to the MWRD Deep Tunnel System located at the southeast corner of the Ferrous Yard was constructed. Asphalt millings were placed over the limestone gravel across the yard and form the ground surface outside of the concrete pads and asphalt-paved access road. The asphalt millings provide support for substantial, discrete piles of recyclable metal being stored in the Ferrous Yard prior to shipping.

Particulate matter (e.g., soil) contained in stored materials has obscured the asphalt millings at the surface in many areas of the yard.

2.4.2 Fleet Maintenance Facility

The Fleet Maintenance Facility consists of the Maintenance Shop and truck parking lot. Tractors and/or trailers awaiting maintenance are parked along the perimeter of the Fleet Maintenance Facility during operating hours and non-operating hours. The majority of the Fleet Maintenance Facility is covered with asphalt pavement to facilitate parking of trucks; the remainder of the Maintenance Shop is occupied by building with a concrete floor and by concrete pads located at the east and west ends of the building. Significant features of the Maintenance Facility are illustrated in Figure 3.

The land surface at the Fleet Maintenance Facility is 85-percent covered with either asphalt underlain by sub-base aggregate, reinforced concrete slab underlain by sub-base aggregate, or building.

The Maintenance Shop services tractor trailers through preventive maintenance and repairs. New and used equipment fluids associated with servicing are stored in aboveground storage tanks (“ASTs”) and drums located inside the building. A non-hazardous parts washer is used in the building and serviced by Safety Kleen, an off-site vendor. Equipment fluids and parts cleaner fluids have the potential to be released through leaks and spills to the floor drains connected to the MWRD combined sanitary/stormwater sewer system.

Truck washing takes place in the dispatch truck parking lot and is performed in-house using water only, no detergents.

STORMWATER POLLUTION PREVENTION PLAN

Roads located throughout the Facility are swept and watered daily, as weather permits. Materials that are collected by the sweeper are deposited with the non-magnetic material, screened on-site, stockpiled with other material from grading activities, characterized (if required) and disposed off-site in a permitted solid waste disposal facility. When not in use the sweeper is stored inside the Crane Shop.

2.4.3 Peddler Yard (Yard 6.5)

All peddler vehicles enter the peddler yard from Wood St. They first proceed to the truck scale equipped with a radiation detector to be weighed and screened for radioactivity. Photographs are also taken of the vehicles and vehicle license plates. The truck scale is located to the north of the Transportation Maintenance Building. Once through the scales, the vehicles are directed for unloading based on their material type. Ferrous materials are unloaded in a stockpile on the east side of the yard. Non-Ferrous materials are unloaded inside the east end of the Maintenance Building in the Peddler Area. Non-Ferrous metals are sorted by type into bins and weighed. After unloading, vehicles pass through the truck scale a second time to determine the weight of ferrous materials delivered. Materials received in the Peddler Yard are transferred to other yards onsite for processing.

2.4.4 MRP Facility

The MRP separates nonferrous metals from Debris & Nonferrous (DNF) material generated by on-site shedding operations. Significant features of the Nonferrous Yard are illustrated in Figure 4.

DNF material from shredding operations is loaded into a truck and shuttled to the MRP where it is temporarily stockpiled. A front-end loader is used to place DNF material into the MRP batch feeder. The DNF material is then processed through a series of thirty-two conveyors, two screens, three zig-zag air separators, three shaker tables, five Eddy Current Systems (ECS) and three Induction Sorting Systems (ISS) to recover various metal products. The metal products generated from the MRP process are sold to customers and the non-metallic residue (fluff) will be transported off-site for disposal in a permitted solid waste disposal facility.

The entire southeastern corner of the yard has been laid with reinforced concrete slab underlain by sub-base aggregate and contains stormwater catch basins. Materials stored in the southeastern corner of the Nonferrous Yard generally are not oily but could release particulate matter to stormwater. Bobcats and forklifts are used to handle materials. Fluids that have the potential to

STORMWATER POLLUTION PREVENTION PLAN

be released to stormwater through SMM equipment leaks include diesel fuel, hydraulic oil, lubricating greases, motor oils, and antifreeze.

DNF material from shredding operations is loaded into a truck, transported to the MRP and temporarily stockpiled. A front-end loader is used to place DNF material into the MRP batch feeder. The DNF material is then processed through a series of thirty-two conveyors, two screens, three zig-zag air separators, three shaker tables, five Eddy Current Systems (ECS) and three Induction Sorting Systems (ISS) to recover various metal products. The metal products generated from the MRP process are sold to customers and the non-metallic residue (fluff) will be transported off-site for disposal in a permitted solid waste disposal facility.

The area of the MRP is entirely underlain by reinforced concrete and sub-base aggregate material. An underground stormwater detention system is in place to capture and detain stormwater from the improved surface around the MRP. Several catch basins and underground conveyance piping direct the stormwater to the underground detention system. During peak storm events, the underground detention system is designed to overflow into the MWRD combined sewer system.

Significant features of the MRP yard are illustrated in Figure 4.

2.4.5 Nonferrous Yard

The Nonferrous Yard is used to process and store nonferrous materials. Warehouse buildings occupy the majority of the yard. Outside storage and processing are conducted in the southeast corner of the yard. Significant features of the Nonferrous Yard and MRP yard are illustrated in Figure 4.

Trucks entering the Nonferrous Yard must first proceed to the truck scale equipped with a radiation detector to be weighed and screened for radioactivity. The truck scale for nonferrous materials is located in the northwestern corner of the Nonferrous Yard, along Wood Street. Trucks are then directed by the scale operator to the receiving supervisor who in turn directs to the appropriate unloading area. Trucks must wait to unload until a qualified inspector, consisting of a forklift operator, area lead man, or supervisor, is present at the truck. After loads are inspected and unloaded, the truck driver is issued an inspection ticket or a receiving ticket. Inspection procedures are the same as detailed in Section 2.4.1. The driver must then return to the truck scale located in the northwestern corner of the yard to submit the inspection or receiving ticket and receive a scale

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ticket for the load brought into the yard. If the load is rejected by the inspector, neither an inspection nor scale ticket is issued.

The southeast corner of the Nonferrous Yard is used to store and process aluminum and other nonferrous materials. Trucks are unloaded near the center of the area. Materials are handled via mobile equipment including forklifts and trucks, and are sorted. Materials in this area are stored according to chemistry in several large bins, steel boxes, steel drums, discrete piles, and large roll-off boxes. Aluminum breakage, cast aluminum, and sheet aluminum are stored in the large bins. Aluminum product to be sorted is stored in steel boxes and aluminum by-product is stored in steel drums. Materials to be baled (aluminum and stainless steel materials) are stored in discrete piles on the concrete or asphalt surface. Steel roll-off boxes are used to store die-cast aluminum, aluminum breakage, stainless steel, zinc, and insulated wire prior to being shipped.

The entire southeastern corner of the yard has been laid with reinforced concrete slab underlain by sub-base aggregate and contains stormwater catch basins. Materials stored in the southeastern corner of the Nonferrous Yard generally are not oily but could release particulate matter to stormwater. Sealed units which may contain residual oil are contained in a concrete bermed containment. Bobcats and forklifts are used to handle materials. Fluids that have the potential to be released to stormwater through SMM equipment leaks include diesel fuel, hydraulic oil, lubricating greases, motor oils, and antifreeze.

Warehouse space is divided into a metal-framed portion with approximately 52,000 square feet (New Warehouse) and an adjoining one-story brick portion with approximately 18,000 square feet (Old Warehouse). The new warehouse contains some office space. The majority of material entering the Warehouse Building enters via trucks at the docks located on the north side of the New Warehouse.

Nonferrous turnings are stored in numerous containment bins located in the western portion of the New Warehouse. The bins have been specially designed to contain turnings fluids that might be present. Nonferrous turnings and borings include aluminum borings, brass borings, yellow brass turnings, and copper-containing borings. Cutting oil from the turnings and borings drains to two concrete-lined sumps located near the turning storage bins. Turnings pad fluids are pumped by a licensed third party used oil recycler.

The New Warehouse is used for storing and processing additional nonferrous materials. Bins located adjacent to turnings bins are used to store painted and extruded aluminum, insulated wire,

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copper tubing, and aluminum clips. Boxed and drummed nonferrous materials are sorted and accumulated in the aisle located east of these storage bins. Some nonferrous materials, such as aluminum cans, are baled using the Harris HRB Baler located in the southwest corner of the New Warehouse. Materials which are ready to be shipped (e.g., bales, boxes, and drums) are stored along the eastern wall of the new warehouse.

The New Warehouse does not have floor drains, and thus little potential for the release of contaminants to stormwater exists. However, a spill kit with absorbents is located in a prominent area inside the warehouse to address any fluid spills and leaks from equipment.

The Old Warehouse is used to store prepared products, used batteries and stainless steel turnings. Additionally, product is shipped to customers via a truck dock. Used batteries are stored within a secondary containment area in the Old Warehouse along the north wall. Prepared nonferrous materials are stored along the west wall of the Old Warehouse. Product is shipped via trucks from the docks located on the eastern side of the Old Warehouse.

The Old Warehouse dock area contains drains connected to a sump that pumps overflow water from storms onto the ground via a pipe on the south wall of the Old Warehouse. There is a potential for oils cutting and equipment fluids from trucks to reach these drains. Should oil be noted or a spill occur in this area a dewatering bag will be employed at the outlet of the sump so that potentially contaminated water will be filtered prior to being discharged to the ground.

The surface in the Nonferrous Yard has been improved with either reinforced concrete slab underlain by sub-base aggregate or asphalt underlain by sub-base aggregate. The areas improved with asphalt underlain by sub-base aggregate include primary driveways located in the Nonferrous Yard. Within this area there are catch basins that are connected to the sewers that discharge to the MWRD combined sewer system. These drains are continuously protected from potential spills, either from equipment or material, by drain inserts designed for this purpose.

2.4.6 Shredder Yard

The Shredder Yard functions as the yard where end of life vehicles (“ELVs”), appliances (white goods), and miscellaneous sheet metal and nonferrous metals are handled with material handlers and front-end loaders and processed through the Newell Shredder. Materials are brought into the yard by a variety of sources including outside wreckers, salvage companies, and SMM trucks. Significant features of the Shredder Yard are illustrated on Figure 5.

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Material brought into the Facility by large trucks enter the Shredder Yard via the northwestern gate and proceed to the truck scale in the eastern portion of the Facility. Trucks at this scale are weighed and screened for radioactive materials. Trucks are then directed by the scale operator to the unloading area. In the case of experienced SMM truck drivers, trucks are allowed to proceed to unloading areas without verbal instructions based on experienced drivers' yard knowledge.

Trucks must wait to unload until a qualified inspector is present at the truck. Inspection procedures are detailed in SMM Inbound Material Acceptance Procedures, and vary based on the type of the material. After loads are inspected and unloaded, the truck driver is issued an inspection ticket. The driver must then return to the truck scale to submit the inspection ticket and receive a scale ticket for the load brought into the yard. If the load is fully rejected by the inspector, neither an inspection ticket nor a scale ticket is issued and the load must be removed from the Facility. Traffic is controlled by the Yard Supervisor and Inspectors during inspection and unloading procedures.

SMM requires that crushed or flattened ELVs be demanufactured prior to delivery into this Facility. The demanufacturing process includes the removal of mercury switches, Freon, batteries and fluids such as gasoline, oil and antifreeze. If the supplier is bringing in a whole, uncrushed ELV and does not have the ability to remove these materials, the ELV will be brought to a segregated location at the Facility which has the equipment and means to safely remove these materials. Suppliers of crushed and flattened ELVs will be required to sign certifications stating that batteries, fluids, mercury switches and Freon have been removed. These demanufactured ELVs are considered "dry". To the degree possible, visual inspections will be performed on loads of "dry" ELVs to ensure that all fluids and materials have indeed been removed. A percentage of each supplier's deliveries, in accordance with Inbound Material Inspections procedures, will be closely inspected to ensure that no listed unacceptable materials are concealed within the ELVs being delivered to the Facility. Vendors of crushed or "dry" vehicles are required to submit a certification that the mercury switches required to be removed, have been. Vendors may be banned from the Facility, if caught smuggling unacceptable materials into the Facility.

Incoming and processed materials in the Shredder Yard have the potential to release particulate matter and residual vehicle fluids to stormwater. Particulate matter typically is brought in with incoming loads, shredded with the ferrous materials, and accumulated in the nonferrous material transferred to the MRP. Vehicle fluids can be released to stormwater from incidental coatings of oils remaining in vehicles.

The shredding plant is inspected at the beginning of each operating shift and documented. If the inspection denotes the shredding plant in working order, the shredder is started and incoming

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material is loaded onto the in-feed conveyor. The hammermill processes incoming material via a rotor equipped with hammers that shred the raw material and drive it through sizing grates. The hammermill is operated via a hydraulic oil system, and hydraulic oil has the potential to be released to stormwater through equipment leaks, reservoir and drum leaks, and spills during transfer of oil into or out of drums. Water and a foam surfactant solution is sprayed in a controlled manner into the rotor housing to aid in the subsequent separation of material and as a means of controlling fugitive emissions that may be generated downstream of the rotor. Water and foam not consumed in the hammermill is transported with the shredded materials.

To segregate ferrous and nonferrous product, shredded material is processed by magnetic separation and hand sorting. The shredded steel and iron exit the sorting stations via stacking conveyor and are temporarily stored outside on a concrete pad south of the Shredder Building. Ferrous product is ultimately shipped by truck, rail, and barge to steel mills for remanufacturing and reuse.

The nonferrous residue (DNF) is a mixture of the remaining non-steel/iron components of the infeed, including non-ferrous metals (aluminum, zinc, copper, brass, and stainless steel) mixed with non-metallic components such as dirt, rubber, rocks, glass, plastic, foam and synthetic fiber. This second stream of material, is a saleable nonferrous product that is produced by the shredder operations.

Mobile equipment used in the Shredder Yard includes material handlers, front-end loaders, and trucks. Fluids involved in the operation of SMM equipment include diesel fuel, hydraulic oil, lubricating greases, motor oils, and antifreeze and have the potential to be released to stormwater through equipment leaks.

The ground surface at the Shredder Yard has been improved with reinforced concrete slab underlain by sub-base aggregate, asphalt underlain by sub-base aggregate, steel plate, and compacted gravel. Reinforced concrete is located around the Shredding Plant, along the north Facility property boundary, and at the recovered petroleum storage pad located adjacent to the ELV depolluting pad. Asphalt underlain by sub-base aggregate has been placed beneath feedstock piles, and on primary roadways. Approximately 65-percent of The Shredder Yard is covered with concrete or asphalt pavement.

The areas in the Shredder Yard that are covered with gravel are located away from scrap storage and processing, and are in the northeast and southeast corners of the yard. Those areas of gravel

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cover are used to store extra boxes and/or containers and miscellaneous material used by the operations.

2.4.7 Shredder Yard Parts and Maintenance Building

The Shredder Yard Parts and Maintenance Building is located in the northeastern corner of the Facility and is used as a parts storage and maintenance building for the shredder. Significant features are illustrated in Figure 5.

This building services the maintenance needs of the shredder in the Shredder Yard. Floor drains located throughout the building are connected to the MWRD combined sanitary/storm sewer lines to remove water (e.g., rainwater and snow melt) that may make its way into the building. These drains are continuously protected from potential spills, either from equipment or material, by drain inserts designed for this purpose. Secondary containment is also used in accordance with Spill Prevention Control and Countermeasures (SPCC) requirements. Spill kits are kept in the building to clean and remove liquid spills from the concrete floor.

Approximately 80-percent of the ground surface surrounding the Parts and Maintenance Building are covered with either asphalt underlain by sub-base aggregate, concrete or building. Primary driveways at the shop are paved with asphalt underlain by sub-base aggregate. Stormwater that falls on the shop currently drains to catch basins connected to the MWRD combined sanitary/storm sewer lines.

2.5 Facility Drainage

A portion of the Facility (The Ferrous Yard) is adjacent to the Chicago Sanitary and Ship Canal. A seawall berm has been constructed along the canal which prevents stormwater runoff from the Facility from entering the canal. Stormwater from the remainder of the Facility, except the MRP facility, is designed to enter into various catch basins that are part of the MWRD's combined sewer system. Drainage from the MRP operations also is designed to flow into catch basins, which is then conveyed through underground piping to an underground stormwater detention system with an approximate 30,000 cubic feet of storage capacity. Based on the presence of the seawall berm and the designed Facility drainage, there is no direct or indirect discharge of stormwater to the canal or waters of the State.

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3.0 POTENTIAL POLLUTANT SOURCES

3.1 Significant Materials and Potential Pollutant Sources

Significant materials that are handled or stored in a manner allowing potential exposure to stormwater include scrap metal materials and new and used maintenance fluids. Identified significant industrial activities and corresponding potential pollutants, along with structural and non-structural control measures that are in place to prevent stormwater impacts, are summarized below. The storage location of significant materials and activities are illustrated on Figure 3 through Figure 5 contained in Appendix B.

Significant Industrial Activity	Potential Pollutants	Controls
Loading/unloading and storing ferrous and non-ferrous scrap metal	Accumulated particulate matter, oil and grease, heavy metals, motor vehicle fuel (diesel and gasoline) and potentially PCBs and mercury	<u>Non-Structural</u> <ul style="list-style-type: none"> Inbound material source control and material inspection Consolidate piles to minimize the footprint exposed to stormwater Good housekeeping practices Maintain speed limit Dust control <u>Structural</u> <ul style="list-style-type: none"> Turnings stored on containment pad and associated underground stormwater holding tank. Sealed and covered boxes used for unloading and storing potentially oily scrap Seawall berm Catch basin inserts Maintain grading and contouring
Material Processing: Torch Cutting	Heavy metal fragments and fines	<u>Non-Structural</u> <ul style="list-style-type: none"> Good housekeeping practices <u>Structural</u> <ul style="list-style-type: none"> Maintain surface grade by periodic removal of built-up particulate Seawall berm Catch basin inserts
Material Processing: Mobile Shear	Accumulated particulate matter, oil/lubricants, diesel fuel, and antifreeze	<u>Non-Structural</u> <ul style="list-style-type: none"> Preventive maintenance Spill prevention and response Good housekeeping practices <u>Structural</u> <ul style="list-style-type: none"> Maintain surface grade by periodic removal of built-up particulate Seawall berm Catch basin insets

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Significant Industrial Activity	Potential Pollutants	Controls
Material Processing: Vehicle Depolluting Recovery Rack	Gasoline, motor oil, transmission fluid, antifreeze, lead/acid batteries and mercury	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Good housekeeping practices • Preventative maintenance <u>Structural</u> <ul style="list-style-type: none"> • Secondary containment for fluid recovery rack and ASTs • Impervious surface • Catch basin inserts
Material Processing Shredding	Particulate matter, PCBs, gasoline, diesel fuel, heavy metals, motor oil, transmission fluid, antifreeze, mercury and hydraulic oil	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Good housekeeping practices • Preventative maintenance <u>Structural</u> <ul style="list-style-type: none"> • Impervious surface • Catch basin inserts • Secondary containment for hydraulic oil
Material Processing MRP	Particulate matter	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Good housekeeping practices • Preventative maintenance <u>Structural</u> <ul style="list-style-type: none"> • Impervious surface • Catch basin inserts • Underground stormwater detention system
Vehicle and equipment maintenance	Diesel fuel, fuel additives, oil/lubricants, heavy metals, brake fluids, transmissions fluids and antifreeze	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Dry absorbents used to clean outdoor maintenance surface; prohibit wash down <u>Structural</u> <ul style="list-style-type: none"> • Waste containerized, labeled and stored inside building or on impervious surface or removed after servicing by contractor • Maintenance performed on impervious surface, if equipment not disabled • Secondary containment for stored fluids • Use of drip pans
Vehicle/mobile equipment fueling	Diesel fuel	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Preventive maintenance/tank inspection <u>Structural</u> <ul style="list-style-type: none"> • Secondary containment
Vehicle and equipment cleaning and washing	Particulate matter, oil and grease	<u>Non-Structural</u> <ul style="list-style-type: none"> • No detergents used when washing <u>Structural</u> <ul style="list-style-type: none"> • Washing performed on impervious surface • Wash water contained or discharged through filter bags

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Significant Industrial Activity	Potential Pollutants	Controls
Drum/tote and individual container storage and handling	New and used motor oil, antifreeze, hydraulic oil, petroleum lubricants	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Preventive maintenance/tank inspection program <u>Structural</u> <ul style="list-style-type: none"> • Containers stored inside building or on impervious surface within secondary containment structures
Storage tank operations	Diesel fuel, new and used motor oil, hydraulic oil, used gasoline and used antifreeze	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Preventive maintenance/tank inspection <u>Structural</u> <ul style="list-style-type: none"> • Secondary containment
Material handling equipment	Hydraulic fluids, oils, fuels and fuel additives, grease and other lubricants, antifreeze and accumulated particulate matter	<u>Non-Structural</u> <ul style="list-style-type: none"> • Spill prevention and response • Preventative maintenance/inspection <u>Structural</u> <ul style="list-style-type: none"> • Seawall berm • Catch basin inserts

3.2 Spills and Leaks

No significant spills, which include releases of oil and hazardous substances, in excess of reportable quantities under the Clean Water Act or Section 102 of CERCLA, or that drained to a stormwater conveyance, have occurred within the last five years.

A description of the potential spills and leaks that could occur at the Facility and could contribute pollutants to stormwater discharge are presented below. Given that there are no direct or indirect outfalls to the adjacent Chicago Sanitary and Ship Canal, spills and releases from the below identified areas are not likely to affect surface water bodies.

Potential Spill and Leak Areas

Location	Discharge Point
Inbound Material Examination & Unloading	Catch Basins
Mobile and Processing Equipment Leaks throughout Facility	
Liquids Unloading/Loading/Transfer Areas	
Empty Container Storage	
Storage Pads and Containment Areas	Catch Basins
Aboveground Storage Tanks	

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The appropriate prevention and response actions for spills that may occur in the above locations are further described as a Best Management Practice (“BMP”) in Section 4.5.

3.3 Sampling Data

No quantitative stormwater discharge sampling data have been collected to date for the Facility. Quantitative benchmark monitoring is required on a quarterly basis beginning no later than October 2, 2017. However, given that there is no direct or indirect discharge of stormwater, benchmark monitoring is not applicable to the Facility. If stormwater discharge is discovered, i.e. breach in seawall berm, sampling and analytical testing will be performed. The methods and procedures for performing the stormwater sampling and benchmark monitoring are presented in Section 6.4. Supporting documentation of benchmark monitoring, including laboratory analytical reports, summary of analytical results, and comparison of analytical results to applicable benchmark levels, etc., if collected, will be maintained in Appendix C.

3.4 Non-Stormwater Discharges

No non-allowable non-stormwater discharges occur from Facility operations as verified by dry-weather inspection. Documentation of assessment and certification of dry-weather inspection for non-allowable non-stormwater discharges is provided in Appendix D. Below is a summary of allowable non-stormwater discharges.

Summary of Allowable Non-Stormwater Discharges

Allowable Non-Stormwater Discharge Description	Does/May Occur	Controls
Fire-fighting activities	Yes	Contain water onsite to the extent practical where water was exposed to significant material(s)
Fire-hydrant flushing	No	N/A
Waters to wash vehicles/equipment without detergents	Yes	Perform washing on pervious surface or impervious. If detergent required, contain wash water. Direct wash water flow toward stormwater collection area for treatment.
Waters without added chemicals used for dust control	Yes	Limit application to control dust and minimize runoff
Potable water sources including waterline flushing	No	N/A
Irrigation drainage	No	N/A
Lawn/landscape watering	No	N/A

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Allowable Non-Stormwater Discharge Description	Does/May Occur	Controls
Routine external building washdown which does not include detergents	Yes	Direct runoff away from significant materials
Pavement wash waters where spills of leaks of toxic or hazardous materials have occurred and where detergents are not used	Yes	Inspect pavement for spills and leaks prior to washing; if spills or leaks are evident, contain wash water and either evaporate or dispose off-site; if discharged, direct runoff away from significant materials.
Uncontaminated air conditioning condensate and condensate from refrigerants	Yes	Direct runoff away from significant materials
Uncontaminated springs or groundwater	No	N/A
Foundation drains where flows are not are not contaminated by process materials	No	N/A
Incidental windblown mist from cooling towers	No	N/A

3.5 Bulk Storage Containment Areas

Bulk storage containment subject to stormwater accumulation at the Facility is limited to the secondary containment for the turnings storage pad, and secondary containment structures for ELV fluid recovery racks and ASTs/totes associated with vehicle depolluting. These containment areas are subject to stormwater accumulation and containment drainage procedures outlined in Section 4.9 and inspection requirements outlined in Section 6.2.

4.0 STORMWATER CONTROL MEASURES

This section describes the approach implemented by the Facility to comply with the applicable numeric effluent limits specified within the General Permit. In general, the goal of stormwater Best Management Practices (“BMPs”) at the Facility are to manage and divert stormwater so that an uncontrolled discharge does not occur. The BMPs that have been implemented at the Facility are sufficient for managing such uncontrolled discharges and to achieve applicable numeric benchmark monitoring levels. These BMPs are summarized in the following sections. The use of additional BMPs, or modification to existing BMPs, shall be evaluated and employed at the Facility based on results of routine Facility inspections and benchmark monitoring data.

4.1 Stormwater Control Plan

Traditional stormwater controls are practices other than those that control the source of pollutants and include stormwater diversion, infiltration, or other management of stormwater. Existing stormwater controls together with stormwater treatment systems are described in the following sections:

4.1.1 *The Ferrous Yard*

Stormwater is controlled across the Ferrous Yard through grading, the use of a berm along the seawall on the south side of the yard, and a series of catch basins and corresponding conveyance pipe along the center of the yard. Contaminants that may possibly be present in stormwater from the steel turnings pad in the Ferrous Yard are controlled through the use of a stormwater holding tank adjacent to the pad. The fluids are periodically pumped via a third party vacuum truck and hauled off-site for recycling at a permitted facility. Other measures employed on an as needed basis include the use of dewatering bags when areas of secondary containment or water collection spots need to be drained; stormwater drain inserts for catch basins that may be close to processes that may contain stormwater contaminants, or for those basins located in roadways to control sediment from entering stormwater drains.

Periodic inspection and grading are performed to assure that proper elevation and stormwater controls are maintained. Grading serves to control depressions caused by crane movement and material unloading. Particulate matter, debris and other material that is observed to accumulate above adjacent roadways and on improved surfaces are periodically graded and the excess material properly disposed of off-site. Build-up of particulate matter and other debris is managed to promote controlled drainage of stormwater runoff. Material removed during grading activities

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may be processed through a screening plant or grizzly screen to remove metal prior to disposal of the residue off-site at an authorized facility.

Areas of identified soil staining are removed and properly disposed of, or managed by alternative means, in accordance with applicable regulations and guidance established by the IEPA, such as the Tiered Approach to Corrective Action Objectives (“TACO”). Soil management will not be conducted under any current IEPA structured program. A Facility inspection shall be conducted to identify such areas that need soil management. Managers of each department are required to ensure that a daily inspection is performed to identify any areas that may have become stained. Identified stained areas are managed in a timely manner.

Improved surfaces in the Ferrous Yard include concrete, asphalt, and asphalt millings as described in Section 2.4.1. The improved surfaces are maintained and deteriorated surfaces are repaired and/or replaced within a reasonable time frame in order to maintain stormwater runoff control. Improved surfaces at receiving areas are inspected daily and regraded as needed to maintain stormwater runoff control.

Seawall Berm

A seawall berm exists along the seawall to prevent the direct or indirect discharge of stormwater from the Facility into the adjacent Chicago Sanitary and Ship Canal. The seawall consists of a two-foot-thick clay core berm along the southern the southern the Ferrous Yard boundary. The seawall is constructed of steel sheet piling. The clay core berm extends from the eastern end near the MWRD vault to the western Facility property boundary. Near the western end of the seawall, asphalt millings have been used to increase ground surface elevation and control drainage.

The seawall berm is constructed of dense, compacted clay with one-to-one slopes to an elevation of approximately 8.0 feet, approximately two feet above the adjacent land surface. The base of the seawall berm is approximately three feet wide and the top of the berm is approximately one foot wide. The berm follows the line of bollards and is one-foot from the seawall. Storage of scrap metal awaiting shipping is kept a minimum of twenty feet north of the seawall. Stormwater along the seawall is either diverted to stormwater conveyance structures and directed to the combined MWRD sanitary/storm sewer system or is allowed to perk into the ground.

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Barge Loading

Operating procedures have been developed for barge loading that prevent material from falling into the canal. SMM has developed a system using deflection panels that allow barges to be loaded without allowing material falling into the canal.

The minimum setback distance from the canal to material storage piles is twenty feet.

Turnings Pad

Steel turnings may arrive with incidental amounts of cutting fluids that consist of either phased or emulsified oil or coolants that result from the source manufacturing processes. A turnings containment pad, located at the western end of The Ferrous Yard, is constructed of concrete with a sloped floor to prevent fluids from flowing off the pad. The concrete turnings containment pad is used to drain and store turnings; turnings may be received with incidental cutting fluid. Additional storage is located south of the turnings containment pad at the western end of the Ferrous Yard. This area is used to provide subsequent turnings storage after turnings are drained at the concrete turnings containment pad. The additional storage area has a sloped, semi-permeable protective layer. The semi-permeable protective layer is composed of a heavy-duty synthetic liner installed over and covered by engineered material to provide a protective containment system.

The concrete turnings containment pad and the liner-pad system allow collection of stormwater that comes into contact with the turnings. Stormwater that comes into contact with turnings is diverted to a stormwater holding area. The holding area along the west end of the concrete turnings containment pad eliminates phased oil from leaving the concrete containment pad area. The holding area connects to the concrete turnings containment pad through a subsurface drainpipe. Phased oil and water are periodically removed from the holding tank by a third party vacuum truck vendor and are hauled off-site for recycling.

Crane Shop Area

Stormwater contact is minimized at the Crane Shop by storing equipment fluids and nonhazardous parts cleaner inside the shop, but floor drains connected to MWRD combined sanitary/storm sewer lines are located inside the building. The floor drains are protected from fluid leaks and spills by curbs around fluid containers or secondary containment placed around or at fluid container areas within the shop. Absorbents are kept in the shop to clean and remove liquid spills from the concrete floor. A filtered triple-trap grit control system exists along the drainage pipe from the

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building to the MWRD combined sewer line to remove grit and dirt. The triple-trap is serviced as needed according to the manufacture's specifications.

A mobile diesel fuel truck pumps fuel directly to equipment in the yard daily. Fluid storage is further described in Section 4.5.

Stormwater Conveyance

Stormwater is collected from across the Ferrous Yard through a series of surface catch basins and subsurface conveyance piping. Based on the use of a berm along the seawall and catch basins throughout the Facility, stormwater discharges from The Ferrous Yard at the eastern end into the MWRD combined sewer system.

4.1.2 Fleet Maintenance Facility

Stormwater is controlled at the Fleet Maintenance Facility by current ground surface contours and catch basins connected to the MWRD combined sewer system. Stormwater is protected from leaks and spills inside the Maintenance Building by curbs and secondary containment as described in the following subsections.

Grading and Contouring

Grading and contouring at the Fleet Maintenance Facility is controlled by the existence of improved (concrete and asphalt) surfaces and building structures. The improved surfaces are sloped to catch basins for stormwater drainage into the MWRD combined sewer system.

Periodic inspections are performed to assure that stormwater controls are maintained. Particulate matter, debris and other material that is observed to accumulate above improved surfaces, asphalt or concrete, is removed and excess material properly disposed of off-site. Build-up of particulate matter and other debris is managed to promote controlled drainage of stormwater runoff. Material removed during improved surface cleaning activities is processed through the screening or separations plants and non-metal residue is disposed off-site at an authorized facility.

The improved surfaces at the Maintenance Facility shall be maintained and deteriorated surfaces will be repaired and/or replaced within reasonable time in order to maintain stormwater runoff control. Improved surfaces shall be inspected daily and cleaned of particulate matter and/or repaired as needed to maintain stormwater runoff control.

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Fleet Maintenance Building

The Fleet Maintenance Building services tractor trucks through preventive maintenance and repairs. New and used equipment fluids associated with servicing are stored in drums and permitted ASTs located inside the building. A nonhazardous parts washer is used in the building and serviced by an off-site vendor. A portion of the building is used as a Weld Shop for servicing trailers through a preventive maintenance and repair program.

Stormwater contact is minimized at the Fleet Maintenance Shop by storing equipment fluids and the parts washer inside the building, but floor drains connected to the MWRD combined sewer system are located inside the building. Floor drains are used to remove water (e.g., rainwater and snow melt) from incoming trucks and are protected from fluid leaks and spills by curbs or secondary containment placed around or at fluid container areas. Floor drains are further protected from oil spills that may occur during oil changes by a pressurized line system that removes motor oil from the trucks and transports it directly into a used oil AST via overhead lines. Absorbents are maintained in the Fleet Maintenance Building to clean and remove liquid spills from the concrete floor. A triple-trap grit control system exists along the drainage pipe that leads from the floor drains in order to remove grit and dirt, prior to entering the MWRD combined sewer system.

Fluid management is further described in Section 4.5.

Truck Washing

Truck washing is performed in-house using no detergents only water.

4.1.3 Non-Ferrous

Stormwater at the Non-Ferrous facility is controlled by ground surface contours, and catch basins as described in the following subsections.

Grading and Contouring

Stormwater in the Non-Ferrous facility is contained within the yard boundaries. Due to the heavy material delivered to the Non-Ferrous Facility, the surfaces between roadways consist of asphalt millings and other material that accommodate unloading heavy non-ferrous material. Stormwater in the Non-Ferrous facility is directed to catch basins in order to provide adequate drainage for the yard. The catch basins are connected to the MWRD combined sanitary/storm sewer system.

STORMWATER POLLUTION PREVENTION PLAN

Periodic inspections are performed to assure that proper elevation and stormwater controls are maintained. The inspections serve to control damage caused by mobile equipment movement and material unloading. Filling of areas higher than adjacent roadways or that changes the direction of stormwater flow is not implemented.

Particulate matter, debris and other material that is observed to accumulate across improved surfaces, paved or unpaved, are graded and excess material is properly disposed off-site. Build-up of particulate matter and other debris is managed to promote controlled drainage of stormwater runoff. Material removed during any future grading activities will be processed through a screening plant or grizzly screen and non-metal residue will be disposed off-site at an authorized facility.

Areas of identified soil staining are removed and properly disposed of, or managed by alternative means, in accordance with applicable regulations and guidance established by the IEPA, such as the TACO. Soil management will not be conducted under any current IEPA structured program. A Facility inspection is conducted to identify such areas that need soil management. Managers of various processing areas are required to conduct daily visual inspections to identify any areas that may have become stained. Stained areas identified in the future shall be managed in a timely manner. Improved surfaces in NF include concrete, asphalt, and asphalt millings as described in Section 2.4.3. The improved surfaces are maintained and deteriorated surfaces are repaired and/or replaced within reasonable time in order to maintain stormwater runoff control. Improved surfaces at receiving areas shall be inspected daily and regraded as needed to maintain stormwater runoff control.

4.1.4 MRP Yard

Stormwater at the Nonferrous Yard is controlled by current ground surface contours and catch basins. Most of the yard is improved with concrete surface and the catch basins are connected to the underground stormwater detention system prior to entering the MWRD combined system.

Grading and Contouring

Stormwater run-off in the southwest corner of the Nonferrous Yard collects in catch basins and is conveyed either directly to the stormwater sewer system along vacated South Paulina Street, which is part of the MWRD combined sanitary/storm sewer system or to the underground stormwater detention system prior to entering into the MWRD combined sewer along vacated Paulina Street.

STORMWATER POLLUTION PREVENTION PLAN

Based on the present improved surface in the Nonferrous Yard, no grading or filling to control stormwater flow is necessary. The improved surfaces are contoured to direct stormwater flow into the catch basins.

Periodic inspections are performed to assure that stormwater controls are maintained. Particulate matter, debris and other material that is observed to accumulate on improved surfaces, asphalt or concrete, is removed and excess material properly disposed off-site. Build-up of particulate matter and other debris is managed to promote controlled drainage of stormwater runoff. Material removed during future cleaning activities may be processed through the separations plants and non-metal residue will be disposed off-site at an authorized facility.

The improved surfaces at the Nonferrous Yard shall be maintained and deteriorated surfaces shall be repaired and/or replaced within reasonable time in order to maintain stormwater runoff control. Improved surfaces at receiving areas shall be inspected daily and cleaned as needed to maintain stormwater runoff control.

Nonferrous-Processing Baler

The Harris Baler is located in the New Warehouse in the southwest corner of the building. The baler functions by using a high-pressure hydraulic system, which includes a large hydraulic oil tank. Due to the use of an elevated oil-pressure system, the baler has the potential to release hydraulic oil to the concrete pad on which the system is operating. To prevent these releases from entering the stormwater system, the pad surrounding the baling unit has a four-inch high concrete curb. Should oil be observed on the concrete within the curbed area, absorbents will be applied, or the oil fluid will be pumped and stored in a suitable container for subsequent off-site disposal.

Floor drains located throughout the building are connected to sewer lines to remove water (e.g., rainwater and snow melt) from incoming trucks. Floor drains will be protected from fluid leaks and spills by curbs or secondary containment of fluid containers or covering of floor drains.

4.1.5 Shredder Yard

Stormwater is controlled across the Shredder Yard through the use of surface contouring, curbing and catch basins. Wet and “dry” ELVs are accepted by SMM. Dry ELVs are accompanied with documentation provided that demonstrates unauthorized material (CFC, mercury switches, gasoline, motor oil, etc.) have been removed. Additionally, a visual check will be made to ensure

STORMWATER POLLUTION PREVENTION PLAN

the gas tank is empty and lead acid battery is removed. If this documentation is not provide, or fluids found, the ELV will be considered wet and segregated from the other cars and will be processed to remove these items in the depollution area. Contaminants that may possibly be present in stormwater at the Shredder Yard are controlled through consolidating activities and storage areas and as described in the following subsections.

Grading and Contouring

A berm, which includes asphalt millings, is located in the southeast corner of the Shredder Yard and prevents stormwater flow from exiting the property in that area. Stormwater flow in the southeast corner will instead be directed to asphalt-covered areas and catch basins connected to the MWRD combined sanitary/storm sewer system.

Periodic inspections and grading as needed is performed to assure that proper elevation and stormwater controls are maintained. Depressions caused by mobile equipment movement and material unloading are filled to ensure proper flow of stormwater to yard catch basin is achieved.

Particulate matter, debris and other material that is observed to accumulate on improved surfaces, paved or unpaved, is graded and excess material is properly disposed off-site. Build-up of particulate matter and other debris shall be managed to promote controlled drainage of stormwater runoff. Material removed during grading activities may be processed through the screenin and/or separations plants and non-metal residue will be disposed off-site at an authorized facility.

Areas of identified soil staining are removed and properly disposed of, or managed by alternative means, in accordance with applicable regulations and guidance established by the IEPA, such as the TACO. Soil management will not be conducted under any current IEPA structured program. A Facility inspection shall be conducted to identify such areas that need soil management. Managers of various processing areas are required to conduct daily visual inspections to identify any areas that may have become stained. Identified stained areas are managed in a timely manner.

Improved surfaces in the Shredder Yard include concrete, asphalt, and compacted gravel described in Section 2.4.5 and include asphalt millings as described in this section. The improved surfaces are maintained and deteriorated surfaces are repaired and/or replaced within reasonable time in order to maintain stormwater runoff control. Improved surfaces at receiving areas are inspected daily and cleaned as needed to maintain stormwater runoff control.

Shredder and Separation System

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The shredding plant and surrounding surface contours are designed to ensure the flow of stormwater to area catch basins.

4.1.6 Shredder Yard Parts & Maintenance Building

Stormwater is controlled at the Shredder Yard Parts and Maintenance building through the use of catch basins. Each catch basin is protected from leaks and spills inside the Maintenance Building by curbs and secondary containment as described in the following subsections.

Grading and Contouring

Approximately 50-percent of ground surface at the Shredder Yard is covered with either asphalt paving, concrete or building. Stormwater that falls on the Parts and Maintenance Building currently drains to catch basins connected to the MWRD combined sewer system.

The Shredder Yard discharges stormwater into on-site catch basins as well as to catch basins along vacated Paulina Street. These catch basins are associated with the MWRD combined sanitary/storm sewer system. Asphalt millings are present along specific sections of the northern and northeastern fence line to prevent stormwater from accumulating in depressed areas and from potentially leaving the Facility beneath the fence.

Periodic inspection and grading as needed is performed to assure that proper elevation and stormwater controls are maintained.

Particulate matter, debris and other material that is observed to accumulate above the improved surfaces, paved or unpaved, is graded and excess material is properly disposed off-site. Build-up of particulate matter and other debris is managed to promote controlled drainage of stormwater runoff. Material removed during future grading activities will be processed through a screening plant or grizzly screen and non-metal residue will be disposed off-site at an authorized facility.

Areas of identified soil staining shall be removed and properly disposed of, or managed by alternative means, in accordance with applicable regulations and guidance established by the IEPA, such as the TACO. Soil management will not be conducted under any current IEPA structured program. An inspection shall be conducted to identify such areas that need soil management. Managers of various processing areas are required to conduct daily visual inspections to identify any areas that may have become stained. Identified stained areas are managed in a timely manner.

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Improved surfaces in the Maintenance Building and peddler material acceptance area include asphalt and compacted gravel as described in Section 2.4.6 and include asphalt millings as described in this section. The improved surfaces shall be maintained and deteriorated surfaces shall be repaired and/or replaced within reasonable time in order to maintain stormwater runoff control.

4.2 Inbound Material Management

The potential for significant materials or other unauthorized potential pollutants sources to enter the Facility and be discharged to stormwater is minimized through the implementation of SMM's National Policy on Inbound Material Control. That policy subjects incoming loads of recyclable materials to inspection for non-conforming and prohibited items, and rejection of such non-conforming and prohibited items/loads. The following inbound material management procedures are observed:

- Suppliers are notified of materials that will not be accepted at the Facility.
- Large warning signs listing materials that will not be accepted are placed at the entrance to each yard.
- "Important Notice" bulletin boards are placed at the scale window for each yard notifying customers and others in Spanish and English regarding inspection for and rejection of unauthorized materials associated with incoming loads.
- Notices are posted at the scale window of each yard notifying customers that chlorofluorocarbons must be removed from all appliances prior to acceptance by SMM, and requiring each supplier to certify that all refrigerant (including chlorofluorocarbons and hydrochlorofluorocarbons) was removed from equipment prior to delivery to SMM.
- Inbound materials will be visually examined by trained employees at the scales prior to materials proceeding to the Ferrous Yard.
- Material entering the Facility will be scanned with radiation detectors prior to being unloaded
- Inbound materials will be visually examined by trained employees before and during unloading.
- Training of employees is perform to recognize unacceptable materials.
- If materials are identified as containing fluids, material will be reviewed and managed in accordance with SMM Inbound Material Acceptance policy.

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- Visually examine inbound materials when unloading at outside storage areas or inside buildings.
- Address leaks and spills immediately. Follow spill response procedures detailed in Section 4.5.

4.3 Minimize Exposure

To the extent possible, the Facility seeks to minimize the exposure of industrial activities to rain, snow, snowmelt, and runoff. Materials are stored indoors, under cover and, if necessary, will be placed within containment areas to the extent feasibly possible. In minimizing exposure, the Facility pays close attention to the following:

- Maintaining grade to prevent runoff of contaminated flows and divert run-on away from material storage areas.
- Clean up small spills and leaks promptly using dry methods (e.g., absorbents) to prevent the discharge of pollutants.
- Use drip pans and absorbents under or around leaky vehicles and equipment or store these items indoors or on impervious surface where feasible.
- Use spill/overflow protection equipment.
- Perform all cleaning operations indoors, under cover, or on impervious surface that prevent runoff and run-on and also that capture any overspray.

4.4 Good Housekeeping

Good housekeeping practices are designed to maintain a clean and orderly work environment, which reduces the possibility of accidental spills caused by mishandling fluids and equipment. Good housekeeping practices help to ensure that the Facility is neat, clean, free from unnecessary debris, organized and properly managed. It also ensures that treatment of items not specifically addressed in housekeeping policies are managed according to common sense. Good housekeeping is reflected in material storage practices, material inventory controls, routine cleanups, and maintenance of well-organized work areas. Inspections of operating and processing areas are performed and serve to review good housekeeping practices on a daily basis.

The Facility keeps exposed areas that are potential sources of pollutants, including trash containers and adjacent areas, material storage areas, vehicle and equipment maintenance areas, and loading/unloading areas clean. Pickup and disposal of garbage and waste materials and inspections of drums, tanks, and containers for leaks and structural conditions are conducted on a routine basis.

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Specifically, the Facility has implemented the following general practices to maintain a clean and orderly work environment:

- Personnel are instructed to dispose of their garbage in trash cans or dumpsters and to pick up any wind-blown trash or debris and place it in the appropriate container.
- Empty containers and trash are disposed of promptly and properly.
- All materials are stored in a manner that minimizes the potential for contact with stormwater (e.g., on pallets, under cover, or within specified storage areas) to the extent practical.
- Supplies and waste are to be stored only in designated areas.
- Personnel are instructed to visually inspect loading/unloading areas after use and to clean up any spilled material.
- All oil, chemical and waste containers are properly closed at all times except when in use and are labeled to indicate the contents of the container.
- In order to minimize dust generation and vehicle tracking of industrial materials, roadways within the Facility may be sprayed with water periodically.
- Roadways and improved surfaces are kept as clean and free of mud and dirt as possible. Except for periods when impracticable due to inclement weather, the facilities uses sweepers, bobcats, loaders or other equipment on a daily basis to clean all improved surfaces of the yards.
- All leaks and spills are to be addressed as soon as discovered in accordance with Section 4.5 and the Facility's SPCC Plan.
- Integrity of and appearance of fencing is to be maintained in good condition.
- Impervious surfaces are to be maintained free from excessive sediment and debris accumulation.
- Mobile equipment is to be kept free of excessive oil and sediment accumulation.
- Used absorbent materials are to be cleaned up promptly and stored in covered, leak-proof containers and are to be disposed of regularly.
- Drip pans and other temporary maintenance fluid (e.g., oil, antifreeze) receptacles are to be promptly emptied into appropriate accumulation containers, drums and/or tanks, and stored inside or on containment areas when not in use.
- Unused new maintenance fluids are to be promptly returned to bulk storage container from which dispensed.
- Operational buffer zones (i.e., areas where no materials are to be stored or operations performed) are to be established at Facility entrance, fence line, property boundaries and along the Chicago Sanitary and Ship Canal.

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- Scrap metal and other material storage stockpiles are to be maintained in a consolidated manner.
- Accumulated sediment and debris at scrap metal storage and material stockpiles are to be routinely removed and properly disposed.
- Lead-acid batteries are to be stored indoors in a neat and orderly fashion on wooden pallets.
- Installations no longer needed (e.g., used machinery, railroad tracks, etc.) and debris (e.g., tires) is removed from yards to minimize the potential for contamination and to ensure proper draining.
- Rubbish and debris materials (e.g., cardboard boxes, wood, plastic, concrete or other non-recyclable material) that are inadvertently received in incoming loads are collected on a daily basis and placed in on-site receptacles specifically labeled “Rubbish” or “Debris.” Rubbish and debris is disposed of at a licensed landfill on a regular basis. A customer who delivers a load containing such material shall have their load rejected. A customer’s failure to comply may result in termination of business relations.
- Wooden pallets are sold for recycling on a regular basis, and accumulation of wooden pallets only occurs in connection with recycling operations.
- Needed repairs to the property fence and surface grades are implemented in a timely manner.

Section 4.4.1 through 4.4.6 describe specific housekeeping practices for each component of Facility operations.

4.4.1 The Ferrous Yard

Turnings Storage

- Turnings that have incidental coatings of cutting fluids, oil and/or coolants are initially stored on the concrete pad located at the western end of the Ferrous Yard to allow for the collection of any cutting fluids before being stored in lined secondary storage area in the yard.
- Turnings are removed from the concrete pad and placed on an additional storage area having a sloped, semi-permeable layer.
- The concrete turnings pad, stormwater holding tank, and additional storage area are inspected daily for proper operation and fluid accumulation levels.
- Spill kits are available in the immediate vicinity of the stormwater holding tank. Records are kept regarding quantities of oily water generated at the stormwater holding tank.

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- A preventative maintenance and repair program for the stormwater holding tank is established.

Seawall Berm

- The berm is inspected daily for structural integrity, and the inspection will be documented on the appropriate inspection form.
- Repairs to the berm will be conducted as soon as possible with City of Chicago Department of Environment-approved material.

Crane Shop

- Area is inspected daily for housekeeping issues.
- Fluid-containing drums are stored in bermed areas or within secondary containment. Spill kit is available in the Crane Shop.
- Spills will be contained and cleaned up immediately. Spill response procedures in Section 4.5 will be followed in the event of a release.
- Floors are swept as needed.
- Fluid containers are labeled with container contents.
- Drip pans are used to contain leaks while repairing equipment.
- Work with equipment fluids is conducted away from floor drains when possible.
- Floor drains will be protected from probable fluid spill and leaks (e.g., hydraulic line disconnections) by temporarily covering the drains when work must be conducted nearby.
- Proper handling and storage procedures for liquids are posted in the Crane Shop.

4.4.2 Fleet Maintenance Facility

Truck Washing

- Is performed in-house, no detergents only hot water is used.

Maintenance Building

- Area is inspected daily for housekeeping issues, and the inspection is documented on the appropriate inspection form.
- Fluid-containing drums are stored in bermed areas or in secondary containment.
- Spill kit is available in the Maintenance Building.
- Spills will be contained and cleaned up immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Floors are swept as needed.
- Fluid containers are labeled with container contents.
- Drip pans are used to contain leaks while repairing equipment.
- Work with equipment fluids is conducted away from floor drains when possible.
- Floor drains will be protected from probable fluid spill and leaks (e.g., hydraulic line disconnections) by temporarily covering the drains when work must be conducted near floor drains.
- Proper handling and storage procedures for liquids are posted in the Maintenance Building.

4.4.3 Non-Ferrous Yard

Unloading Nonferrous Materials

- Material will be visually examined before and during unloading
- If materials are identified as containing fluids, material will be reviewed as described in SMM Inbound Material Acceptance Policy.
- If materials are leaking fluids, leaks will be contained, and material will be rejected and reloaded, or the material will be containerized or stored appropriately.
- Leaks and spills are immediately addressed. Spill response procedures detailed in Section 4.5 and in accordance with the Facility's SPCC Plan are followed in the event of a release.
- Spill kits with absorbents are accessible to unloading areas.

Equipment Fluids Unloading/Loading Areas

- Unloading and loading will take place inside buildings or in covered locations to the extent possible. Bulky non-ferrous material will be unloaded and loaded outside on the finished surfaces.

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- Floor drains are covered when loading and unloading of fluids takes place in close proximity to floor drains.
- Fluids are stored with primary and secondary containment, e.g. drums stored in curbed areas and fluids stored in double-walled AST.
- Spill kits with absorbents are stored in unloading/loading areas.
- Drip pans are used if minor leaks and drips are observed.
- Leaks and spills are immediately addressed. Spill response procedures detailed in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Fluid containers in storage areas will be properly labeled.

Mobile and Processing Equipment

- Significant leaks and spills from equipment are contained and cleaned up immediately.
- Malfunctioning equipment causing leaks or spills are moved inside to the extent possible and repaired as soon as possible.
- Drip pans are placed under leaks to collect leaking fluids until equipment can be repaired.
- Spill kits with absorbents are accessible to high traffic areas and in processing control buildings.
- Fluid containers stored in equipment control buildings (e.g., drums of hydraulic oil) are properly labeled and sealed.
- Proper handling and storage procedures for liquids are posted in the equipment control buildings.

Fueling of Mobile Equipment

- Contractor will be instructed not to "top off" fuel tanks and to park fueling truck close to equipment to ease fueling. Fuel nozzle will be kept upright when not used and secured at the fueling truck.
- Spills will be controlled, contained and cleaned up immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Drip pans will be used if minor leaks are anticipated during filling operations.
- Filling areas are kept free of clutter. Drip pans and buckets are stored in covered area when not in use.

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- Contractor is instructed to pay strict attention to filling operations to avoid overfilling and spilling of product.

4.4.4 Nonferrous Warehouse

- Building is inspected daily and the inspection is documented on the appropriate inspection form.
- Fluid-containing drums are stored in bermed areas or in secondary containment.
- Spill kits are available in both the Old Warehouse and the New Warehouse.
- Spills will be contained and cleaned up immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Floors are swept as needed.
- Fluid containers are labeled with container contents.
- Equipment fluids are kept away from floor drains when possible.
- Floor drains will be protected from fluid spill and leaks during loading and unloading of fluids by temporarily covering floor and dock drains.
- Proper handling and storage procedures for liquids are posted
- Accumulated cutting oils in sumps will be pumped out by a licensed used oil recycling company.
- Spills will be cleaned up immediately.
- Equipment Fluid Storage Area:
 - Drums are stored within the curb area
 - Drums are kept sealed
 - Area is kept free of clutter
 - Spill kit is available in the drum storage area
 - Spills will be contained and cleaned up immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
 - Drums are labeled as required.
 - Proper handling and storage procedures for liquids are posted in the drum storage area.
 - Adequate aisle space is provided between drums to facilitate drum transfer.

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MRP

- Plant will be inspected daily for housekeeping issues and integrity, and the inspection will be documented on the appropriate inspection form.
- Remove excess particulate matter from improved surfaces and equipment on routine basis.
- Dispose of fluff at an approved disposal facility on routine basis.
- Store DNF to be processed in segregated bin on improved surface.
- Keep DNF transfer area from Shredder yard free of debris.
- Inspect and maintain catch basin inserts on a regular basis to ensure underground stormwater detention system operates as designed.

4.4.5 Shredder Yard

ELV Depolluting Area

- Pad will be inspected daily for housekeeping issues and integrity, and the inspection will be documented on the appropriate inspection form.
- Fluids from vehicles will be removed only on the pad.
- Pad will be kept free of clutter. Equipment will be kept in an organized manner.
- Proper handling and storage procedures for equipment fluids will be posted at the Automobile Stripping Pad.

Used Fluid ASTs

- AST area will be examined daily for faulty equipment, and the inspection will be documented on the appropriate inspection form.
- Spill kit will be available at the AST area.
- Spills will be controlled immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Drip pans will be used during filling and dispensing operations.
- Area will be kept free of clutter. Drip pans and buckets will be stored in covered area when not in use.
- Personnel will be instructed to pay strict attention to filling and dispensing operations to avoid overfilling and spilling of product.
- When secondary containment reservoirs accumulate stormwater, reservoirs will be visually inspected for contaminants, per Section 4.9. The accumulated stormwater will be pumped out through a dewatering bag to capture any potential oily sheen or floating product. Valves on secondary containment reservoirs will be kept closed except to drain

of visually inspected stormwater. Containment drainage to be documented as described in Section 6.2.

4.4.6 *Shredder Yard Parts and Maintenance Building*

- Area is inspected daily for housekeeping issues, and the inspection is documented on the appropriate inspection form.
- Fluid-containing drums are stored in curbed areas or within secondary containment.
- Spill kit is available in the shop.
- Spills will be contained and cleaned up immediately. Spill response procedures in Section 4.5 and in accordance with the Facility's SPCC Plan will be followed in the event of a release.
- Floors are swept as needed.
- Fluid containers are labeled with container contents.
- Drip pans are used to contain leaks while repairing equipment.
- Work with equipment fluids is conducted away from floor drains when possible.
- Floor drains will be protected from probable fluid spill and leaks (e.g. hydraulic line disconnections) by temporarily covering the drains when work must be conducted near floor drains.
- Proper handling and storage procedures for liquids are posted in the shop.

4.5 Spill Prevention and Response

An SPCC Plan is in place and being implemented at the Facility. The main purpose of the SPCC Plan is to prevent the discharge of oil into navigable water, which includes stormwater sewers. The SPCC Plan requires and describes secondary containment for petroleum products stored at the Facility including ASTs, processing equipment, and areas where draining of petroleum products occurs. Calculations are provided in the SPCC Plan to demonstrate that secondary containment structures have been adequately sized to contain at least one hundred percent of the capacity of the largest fluid container present in inside areas and at least one hundred ten percent of the capacity of the largest fluid container present in outside areas. As stated in the SPCC Plan, secondary containment structures are inspected daily for the presence of spills and/or accumulated stormwater. Corrective action that is needed, and that are described in the SPCC Plan, are conducted promptly, including cleaning up spills, repairing equipment and removing accumulated stormwater from secondary containment. A complete listing of the oil and other petroleum products stored at the Facility is contained in the SPCC Plan.

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To ensure releases of any quantity are promptly responded to and properly managed, the following control measures are employed at the Facility:

- Tanks filled with petroleum products have double-wall containment or secondary containment.
- Secondary containment is provided for drums and other containers that are stored inside buildings.
- Only containers and drums in good condition are used for the storage of materials.
- An operator or supplier is present during all liquid transfers.
- Tanks and containers of petroleum products and associated secondary containment areas are inspected as required per the Facility's SPCC Plan.
- Personnel regularly inspect the Facility for any spills or leaks as part of their routine duties and cleanup discovered spills/leaks as soon as possible per the Facility's SPCC Plan.
- Assure employees are properly trained to respond to all types of spills.
- Keep spill control equipment/absorbent material (spill kits) easily accessible to employees in areas prone to spills/leaks and assure adequate materials are available for responding to spills.
- Do not use water to dilute or wash spills.
- Post spill response procedures and emergency response numbers at accessible locations within areas prone to spills.
- Report releases/spills in accordance with the Facility's SPCC plan.
- Update SWPPP and revise selected stormwater control procedures as necessary to avoid spill of similar nature/cause, if existing control(s) proved inadequate in preventing incident.

Minor spills that are confined to small areas will be cleaned up as part of the Facility's ordinary operating practices and any wastes generated will be disposed in accordance with applicable local, state, and federal regulations. In cases where a larger spill has occurred, but is confined to the Facility property, the SWPPP Contact will be notified immediately to determine the proper response. The SWPPP Contact will determine which outside agencies, if any, need to be notified in the event of a spill or release. Internal and external contact information is included on the table below:

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Contact Name	Contact Telephone Number
SWPPP Contacts	Office: 773-890-4249
• Sam Flores – Shredder Yard Mgr.	Mobile: 312-502-7768
• Maria Medina – Ferrous Yard Mgr.	Office: 773-650-6405
	Mobile: 773-675-7647
• Ricardo Jaime – Nonferrous Yard Mgr.	Office: 773-890-4212
	Mobile: 773-551-0450
• Theodore Moore - MRP	Office:
	Mobile: 312-502-8394
• Kevin Post – Transportation Mgr.	Office: 773-650-1081
	Mobile: 773-789-9012
• Debbie Hays – SHECS Director	Office: 773-650-6495
	Mobile: 312-343-4549
Federal Agency Contact:	
• National Response Center (NRC)	911 / non-emergency: 847-377-7100
State Agency Contacts:	
• IEPA	800-728-7860
• Illinois Emergency Management Agency (IEMA)	217-782-7860
Local Agency Contacts:	
• Cook County Department of Homeland Security and Emergency Management	911 / non-emergency: 312-603-8180

Detailed spill response procedures are outlined in the Facility's SPCC plan.

The Facility uses and/or stores the following fluids as part of operations:

Hydraulic Oil

Hydraulic oil is stored as new product in 55-gallon drums or tanks for future use, used in processing and transportation equipment, and stored as used product in 55-gallon drums for recycling. Drums and tanks are stored within secondary containment to prevent potential leaks and spills.

Large processing equipment using a hydraulic system typically has an oil reservoir of approximately 1,500 - 2,000 gallons. The following hydraulically operated processing equipment is located within the Facility: Harris HRB Baler (inside Nonferrous Warehouse), and Newell 98104 shredder (Shredder Yard). In addition to hydraulic oil reservoirs, lines carrying hydraulic oil typically are located throughout the equipment. Concrete curbs designed to surround hydraulic oil reservoirs and areas underlying hydraulic oil lines will eliminate uncontrolled releases of hydraulic oil to stormwater. Concrete containment curbs may have slight variations in design from unit to unit based on equipment-specific pad designs, but all function to contain oil releases.

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Transportation equipment, such as dump trucks, lugger trucks, and operational equipment such as endloaders, material handlers and cranes, typically operate hydraulic cylinders. Releases of hydraulic oil may occur as leaks from damaged equipment and from disconnected lines, e.g. removing trailers from trucks for welding repairs. Uncontrolled releases of hydraulic oil to stormwater are minimized through measures identified in Sections 4.5 and 4.6.

Used hydraulic oil is often drummed from processing equipment during equipment maintenance. A licensed oil recycler vendor picks up the used hydraulic oil for recycling. Storage of drums inside a curbed or secondarily contained area eliminates uncontrolled releases of used hydraulic oil to stormwater.

Equipment Fluids

New equipment fluids stored and used at the Facility include diesel fuel, gasoline, hydraulic oil, motor oil, transmission fluid and antifreeze. The Shredder Yard has a 1,000-gallon diesel AST for use with mobile equipment within that yard. Yards 1, 2 and 6 have their equipment fueled nightly by an outside vendor. Gasoline is stored in portable metal containers in fire proof cabinets inside Facility structures.

New motor oil, transmission fluid, and antifreeze are stored in various locations throughout the Facility. In the Shredder Yard these fluids are stored within two trailers stationed on the east side of the yard; in the Crane Shop for and in the Truck Maintenance Building. A combination of these fluids is stored in these locations at any given time.

In the Shredder yard, and the Truck Maintenance Building these fluids are stored in or on secondary containment structures to ensure that floor drains are protected from inadvertent spills and leaks.

Storing and dispensing of fuel and oil is in compliance with applicable local, state, and federal laws, rules and regulations.

Used equipment fluids stored on the Facility generally consist of used motor oil. Used oil is collected, containerized, and recycled by a licensed oil recycling company. Used oils are stored in labeled and sealed drums or ASTs/totes on secondary containment and/or an improved surface or under roof in secondary containment. Other used fluids generated at the Facility include antifreeze and gasoline from the ELV depollution area. These fluids also are stored in appropriate ASTs that are labeled and within secondary containment structures on an improved surface.

STORMWATER POLLUTION PREVENTION PLAN

Cutting Oil Storage

Nonferrous turnings, including aluminum borings, brass borings, yellow brass borings, and copper-containing borings, are stored in concrete-lined bins located in the New Warehouse. Each bin is sloped to a grate-covered area through which cutting fluids drain into a common concrete-lined sump accessible through two manways. Stainless steel turnings are stored in a bin located in the Old Warehouse. The bin is similarly designed as the bins located in the New Warehouse, and cutting fluids drain to a concrete-lined sump accessible through a manway. Cutting fluids drained from the nonferrous turnings and borings are pumped and removed by a licensed oil recycling vendor.

Ferrous turnings are drained on a concrete pad located at the western end of the Ferrous Yard. The pad is designed so that fluids from turnings drain into a concrete-lined sump connected to an stormwater holding area. The holding area is inspected daily and periodically pumped via a third-party vacuum truck and the contents are transported off-site by a licensed oil recycling vendor.

Parts Washers

Parts washers containing nonhazardous cleaning fluids, are located in the Maintenance Building, Crane Shop and the Weld Shop and serviced by an off-site vendor.

The following are areas where the potential for stormwater pollution exists from spills and leaks. The appropriate prevention and response procedures for each area are identified. If Facility operations change such that other areas may present the potential for spills or leaks to impact stormwater, they will be added.

1. *Area/Location:* Inbound Material Examination and Unloading Throughout Facility

Materials: Oils, variable

Container Type: Variable

Surface Type: Variable

Drains to: Stormwater Catch Basins throughout the Facility

Spill Prevention:

1. Qualified inspectors inspect loads for unauthorized materials, as detailed in SMM Inbound Material Control Program.
2. Reject material and send back to supplier if residual fluids observed or properly containerize or store material on pad.

STORMWATER POLLUTION PREVENTION PLAN

2. *Area/Location:* Mobile and Processing Equipment Leaks
Materials: Hydraulic oil, fuel, other vehicle fluids *Container*
Type: Mobile and Processing Equipment
Surface Type: Variable
Drains to: Stormwater Catch Basins throughout the Facility
Spill Prevention:
 1. Check vehicles and equipment for leaks during each operating shift.
 2. Perform maintenance checks on vehicles and equipment on a regular basis.
 3. Use drip pans to contain leaks until leaks can be corrected.

3. *Area/Location:* Liquids unloading/loading/transfer areas
Materials: Hydraulic oil, used oil, motor oil, other vehicle fluids
Container Type: Variable
Surface Type: Variable
Drains to: Stormwater Catch Basins throughout the Facility
Spill Prevention:
 1. Unload/load fluids inside building when possible.
 2. Temporarily cover floor drains or catch basins when unloading, loading, or transferring liquids in the immediate vicinity of floor or catch basins.
 3. Use drip pans to contain leaks.
 4. SMM personnel perform or observe unloading/loading activities to ensure that proper spill prevention procedures are implemented.

4. *Area/Location:* Empty Container Storage
Materials: Oils associated with scrap material
Container Type: Variable
Surface Type: Variable
Drains to: Stormwater Catch Basins throughout the Facility
Spill Prevention:
 1. Store container in warehouse, if residual liquids present in container.
 2. Keep container closed and sealed from exposure to stormwater.
 3. Remove residual liquids from container if container cannot be sealed and is to be stored outside.

5. *Area/Location:* Storage Pads
Materials: Hydraulic oil, used oil, motor oil, gasoline, other vehicle fluids

STORMWATER POLLUTION PREVENTION PLAN

Container Type: Variable

Surface Type: Concrete or asphalt

Drains to: Stormwater Catch Basins throughout the Facility

Spill Prevention:

1. Inspect pads daily for scrap material accumulation on pad.
2. Maintain absorbents in close proximity to pad for easy cleanup at the pad.

6. *Area/Location:* ASTs

Materials: Used oil, motor oil, gasoline, other vehicle fluids

Container Type: Tanks

Surface Type: Asphalt or concrete

Drains to: Stormwater Catch Basins throughout the Facility

Spill Prevention:

1. Visually examine ASTs daily.
2. Monitor inventory in ASTs.
3. Label tanks clearly with tank contents.
4. Post warning signs prohibiting smoking and open flames around flammable liquids.
5. Review guidelines on proper fueling procedures in training sessions.
6. SMM personnel perform or observe liquid transfers to ensure that proper spill prevention procedures are implemented.

4.6 Preventive Maintenance

Preventive maintenance is conducted on Facility equipment to minimize the occurrence of drips and leaks and to reduce the potential for uncontrolled releases or stormwater exposure to other potential pollutant sources. Mobile equipment used at the Facility consists of trucks, loaders, cranes, forklifts, and bobcats. Processing equipment consists of a shredder, MRP and baler. An extensive preventive maintenance and repair program for SMM equipment is established and is based on equipment type, manufacturer's recommendations, and where applicable, transportation regulations. Preventive maintenance and repairs may be conducted by SMM personnel or by contractors. Copies of preventive maintenance and service records are kept at the Facility.

The following preventative maintenance practices are employed at the Facility:

- Equipment is inspected daily prior to startup to detect faulty equipment. Any drips, leaks or other noted issues are to be promptly corrected. Daily inspection for processing

STORMWATER POLLUTION PREVENTION PLAN

equipment includes examination of containment berms for integrity, per the Facility's SPCC Plan. Daily inspections are documented on appropriate checklists and kept at the Facility.

- Malfunctioning equipment causing leaks or spills is moved inside to the extent possible and repaired as soon as possible. Repairs are documented, and copies of repair documentation are kept at the Facility.
- Maintenance personnel or contracted mechanics are to conduct routine manufacturer's recommended maintenance on Facility equipment and in accordance with the preventative maintenance program.
- The following are to be visually inspected for signs of deterioration or potential integrity issues, which are to be promptly corrected:
 - o Tanks, containers, drums and other fluid storage containers (Inspections are to be performed per the Facility's SPCC Plan).
 - o Secondary containment (Inspections are to be performed per the Facility's SPCC Plan).

4.7 Erosion and Sediment Controls

Due to the relatively flat gradient of the Facility, the potential for erosion is minimal. The need to establish erosion and sediment controls will be evaluated on an ongoing basis and control measures will be implemented as warranted to comply with the General Permit requirements.

The following practices are to be employed to minimize soil erosion and sediment accumulations:

- Areas of soil erosion are to be addressed through removal of sediments, re-vegetation and installation of concrete or rip-rap.
- Paved areas are to be maintained free of excessive accumulated sediment.
- Accumulated sediment at scrap storage areas is to be routinely removed and disposed.
- Speed limit of five miles per hour is to be observed and enforced on Facility access roads.
- Expand hard surfaces in material handling and scrap loading/unloading areas.

4.8 Management of Runoff

The Facility has implemented controls to divert, detain, infiltrate and/or otherwise reduce stormwater runoff in accordance with the BMPs described in this section. In general, stormwater runoff is managed so as to drain into the MWRD's combined sewer system, and to a lesser extent, infiltrate/evaporate. There is no direct or indirect stormwater discharge outfalls at the Facility. A seawall berm along southern Facility operational boundary prohibits stormwater discharge into the

STORMWATER POLLUTION PREVENTION PLAN

adjacent Chicago Sanitary and Ship Canal. In addition, an underground stormwater detention system is present in the Nonferrous Yard beneath the MRP, where collected stormwater is detained prior to entering into the MWRD's combined sewer system.

4.9 Bulk Storage Containment Area Drainage

The General Permit does not authorize stormwater collected in containment areas where the stormwater becomes contaminated by direct contact with a spill or release of stored materials into the containment area unless treated. Currently, the only bulk storage containment at the Facility subject to stormwater accumulation are the secondary containment structures for the ASTs and totes associated with the vehicle depolluting and fluid recovery area and the turnings storage containment pad located in the western portion of The Ferrous Yard. Where a spill or a release to a containment structure occurs, the spill is to be cleaned up to prevent contamination of stormwater. The following procedures are to be followed to address spills in containment areas:

1. Spills shall be cleaned up and any contaminated water or solids shall be disposed of in accordance with Section 4.5 and the Facility's SPCC Plan.
2. Stormwater is to be treated prior to discharge. Accumulated stormwater will be drained through oil absorbent sock/drainage bag prior to release.
3. If the above procedures are followed, collected stormwater may be discharged following visual inspection and documentation in accordance with Section 6.2 to assure that stormwater contains no unnatural color, oil films, foams, settleable solids or deposits.
4. Stormwater from the turnings storage containment pad will be inspected on a routine basis and pumped out by a licensed used oil recycling vendor on an as needed basis.

5.0 EMPLOYEE TRAINING

To successfully implement this SWPPP, personnel are to be trained to conduct Facility operations according to the selected BMPs outlined in Section 4.0. The following is to be performed to inform personnel at all levels of responsibility of the components and goals of the SWPPP. At a minimum, training is to be conducted for all employees on an annual basis. A record of the annual training sessions will be maintained in the SWPPP (Appendix E) and must include content covered for each session.

Who is to receive training?

- All on-site personnel, including supervisory personnel, laborers and equipment operators.

When is training to be performed?

- During initial job training
- Crew meetings, as needed
- Individual training, as needed
- Whenever any new stormwater management practices are implemented
- After the occurrence of a reportable release
- Annual training for SWPPP

Initial Employee Training Program Topics:

At a minimum all new hires shall receive training on the following:

- Inbound Scrap Source Control Program;
- Components and goals of the SWPPP;
- Spill response procedures and notifications; and
- Good housekeeping measures, inspections and BMPs

In addition, the following items also shall be discussed with new hires:

- Review equipment inspection, maintenance, and repair schedules and procedures
- Location of cleanup equipment, proper disposal location of various wastes, and postings of emergency contact numbers

STORMWATER POLLUTION PREVENTION PLAN

- Describe potential spill areas and drainage routes
- Discuss past spill events, why they happened and measures to be implemented to avoid similar incidents from occurring again
- Conduct drills on spill cleanup procedures
- Identify container labels
- Explain recycling practices
- Demonstrate procedures for sealing valves and drums
- Make certain employees understand the consequences of violating company policies and/or procedures

Annual refresher topics:

- Review any environmental/health and safety incidents that occurred
- Review stormwater management controls and BMPs outlined in Section 4.0
- Announce any changes to the SWPPP

STORMWATER POLLUTION PREVENTION PLAN

6.0 INSPECTIONS AND MONITORING

6.1 Routine Facility Inspection

Once per quarter, the Facility will be inspected by a member of the Stormwater Pollution Prevention Team. At least once per calendar year, this inspection will be conducted during a period when stormwater has the potential to discharge within 72 hours of the beginning of a storm event equal to or greater than 0.25 inches in 24 hours. The inspection shall be performed by a person who possesses the knowledge and skills to assess conditions and activities that could impact stormwater quality and who can also evaluate the effectiveness of Facility control measures. The routine visual inspection will include the following:

1. Inspect material handling and storage areas for evidence of, or the potential for, pollutants to enter stormwater and discharge off-site.
2. Inspect structural BMPs for any damage or erosion and to ensure they are operating effectively. Special attention is to be given to:
 - Seawall berm along the southern property boundary adjacent to the Chicago Sanitary & Ship Canal
 - Stormwater catch basins and filter inserts
 - Fueling and fluid storage areas
 - Underground stormwater detention area for the MRP
 - Vehicle depolluting area
3. Inspect roads and stockpile storage areas for erosion.
4. Inspect containment areas and secondary containment structures, for tanks, drums and totes that are exposed to stormwater accumulation to determine whether they are required to be drained.

The results of the routine quarterly Facility inspections will be documented on the Quarterly Routine Facility Inspection Form contained in Appendix F and will include the following:

- The inspection date and time;
- The name(s) and signature(s) of the inspector(s);
- Weather information and a description of any discharges occurring at the time of the inspection;
- Any previously unidentified discharges of pollutants from the site;
- Any control measures needing maintenance or repairs;

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- Any failed control measures that need replacement;
- Any incidents of noncompliance observed; and,
- Any additional control measures needed to comply with the General Permit requirements.

6.2 Bulk Storage Containment Area Drainage

The secondary containment structures associated with the turnings storage containment pad and the ASTs/totes at the vehicle depolluting fluid recovery rack are to be inspected and drained periodically in accordance with procedures outlined in Section 4.9. Record of the inspection and drainage events are to be documented on the Containment Inspection and Drainage Record. If any additional bulk storage containment areas are constructed, the containment area(s) will be drained only following the removal of any residual oil or other potential pollutants and record of the drainage will be documented on the Containment Drainage Record. Completed inspection and drainage records are to be maintained in Appendix G.

6.3 Quarterly Visual Observation of Stormwater Discharges

As previously noted there is no direct or indirect stormwater discharge associated with industrial activities at the Facility. Visual observations for stormwater discharges will be performed on a quarterly basis as follows, if discharge is noted:

- The visual monitoring will be performed during daylight hours on stormwater samples collected within one hour of a discharge from a storm event equal to or greater than 0.25 inch in 24 hours which occurs at least 72 hours from a previous discharge.
- Samples will be collected in general accordance with the “Industrial Storm Water Monitoring and Sampling Guide” (EPA March 2009, Final Draft).
- The visual observation of stormwater samples, if collected, must document color, odor, clarity, floating solids, settled solids, suspended solids, foam, oil sheen, and other obvious indicators of stormwater pollution.
- The Quarterly Visual Discharge Observation Log contained in Appendix H will be completed and maintained.
- If no discharge is observed, “No Discharge” should be noted on the Quarterly Visual Discharge Observation Log.
- If visual observations indicate unnatural color, odor, turbidity, floatable material, oil sheen, or other indicators of stormwater pollution, a sample is to be obtained for quantitative analytical testing.

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If evidence of pollution is noted during the required quarterly visual observation of stormwater discharge, a stormwater sample will be collected and analyzed for the following parameters:

- oil and grease
- total aluminum
- total lead
- Mercury
- total suspended solids
- total copper
- total zinc
- PCBs
- chemical oxygen demand
- total iron
- total phosphorus

Laboratory reports, including chain-of-custody documentation forms, of quantitative stormwater samples, if collected during quarterly visual observations, shall be maintained in Appendix C.

6.4 Benchmark Monitoring

Benchmark monitoring of stormwater discharge, if a discharge is observed, is to be performed quarterly with the first monitoring period to be completed prior to October 2, 2017. The data obtained will be used to evaluate the overall effectiveness of Facility control measures being implemented, and it will assist in knowing if corrective action(s) may be necessary to achieve the established benchmark levels for the Facility's sector-specific and site-specific monitoring parameters. The quarterly benchmark monitoring of stormwater discharge sampling will be performed at the Facility, if a discharge is observed, as follows:

- Benchmark monitoring sample collection will be performed during daylight hours on stormwater samples collected within one hour of a discharge from a storm event equal to or greater than 0.25 inch in 24 hours which occurs at least 72 hours from a previous discharge.
- Samples will be collected in general accordance with the "Industrial Storm Water Monitoring and Sampling Guide" (EPA March 2009, Final Draft).
- The samples will be shipped the same day as collected via overnight carrier to an accredited IEPA laboratory (Prairie Analytical, Inc. of Springfield, IL) following standard chain-of-custody procedures.
- The laboratory will analyze the samples for the sector-specific and site-specific parameters identified in Section 6.3 consistent with the methodologies as outlined in 40 CFR 136.

If collected, and following completion of four quarterly benchmark monitoring events, an average of the analytical results for each parameter will be calculated and compared to the IEPA-established benchmark values. If the average of the four monitoring values for any parameters does not exceed the established benchmark level, no further benchmark monitoring is required. If

STORMWATER POLLUTION PREVENTION PLAN

any average values exceed the established benchmark level, then corrective actions (i.e., design, installation and implementation of new and/or additional control measures) must be implemented and the benchmark monitoring must continue for any parameter(s) for which the average value exceeded the benchmark level.

Below are the established benchmark levels applicable to the Facility's stormwater discharge:

Parameter	Benchmark Level (mg/L)
Oil and grease	15
Total suspended solids	100
Chemical oxygen demand	120
Total aluminum	0.75
Total copper	0.0285*
Total iron	1.0
Total lead	0.213*
Total zinc	0.23*
Total Phosphorous	2.0
Total mercury	0.0024
PCBs	0.00127

* = Hardness-specific value (222 mg/L) based on MWRD data obtained in Chicago Sanitary and Ship Canal at station WW 75 for hydraulic unit 7120003.

6.5 Annual Inspection Report

An annual inspection is to be conducted to verify that this SWPPP accurately reflects Facility conditions and effectively controls potential releases of pollutants into the stormwater. The annual inspection is to consist of a complete examination of the Facility and review of the SWPPP to evaluate whether practices and controls to minimize stormwater pollution are effective and properly implemented or whether additional controls are necessary. The following steps will provide guidance for conducting the annual inspection and SWPPP review:

STORMWATER POLLUTION PREVENTION PLAN

1. Perform a complete Facility Inspection

- ☐ Inspect stormwater drainage areas for evidence of pollutants
- ☐ Determine if practices or controls are in place as identified in the SWPPP
- ☐ Evaluate the effectiveness of BMPs. Evaluate whether the controls described in the SWPPP are sufficient to minimize stormwater pollution or if additional controls are necessary
- ☐ Verify operational guidelines and other standard operating procedures are being followed
- ☐ Conduct inventory review and visually inspect equipment needed to implement the SWPPP such as spill response kits, drip pans, and tarps, etc.

2. Review SWPPP

- ☐ Review and update personnel and contact information in Section 2.1
- ☐ Determine if Facility information presented in Section 2.4 and Section 3.0 are up-to-date and reflects current Facility conditions and operations
- ☐ Determine if changes to the selected BMPs (Section 4.0) and changes to the training program (Section 5.0) are needed based on results of inspections (Section 6.0)

3. Evaluate compliance

- ☐ Determine if additional controls are needed
- ☐ Determine if a benchmark monitoring exceedance has occurred (Section 6.4)
- ☐ Verify compliance with employee training program (Section 5.0)
- ☐ Verify compliance with record keeping requirements (Section 8.0)
- ☐ Check the General Permit (Appendix A) expiration date

4. Complete the IEPA Annual Facility Inspection Report (Appendix I)

- ☐ The Annual Facility Inspection Report is to include documentation of events that may have resulted in pollutants discharged to stormwater (i.e., spill, containment or seawall berm breach, evidence of pollution in stormwater discharge, etc.) including corrective actions implemented
- ☐ The annual report is to include a summary of changes to the Facility that resulted in significant changes to the SWPPP
- ☐ The annual report is to be certified and signed by the authorized Facility employee

conducting the inspection

- ☐ Send the Annual Facility Inspection Report to IEPA on or before August 1st of each year via email to: epa.indannualinsp@illinois.gov. The annual report is to contain copies of the Quarterly Routine Facility Inspection Forms, Quarterly Visual Discharge Observation Logs and results of the quarterly benchmark monitoring (if applicable).
- ☐ Maintain completed IEPA Annual Facility Inspection Reports along with delivery confirmation in Appendix I for the duration of the General Permit and for three years after the date of the report.

5. Revise SWPPP

- ☐ If required, make revisions to the SWPPP in accordance with Section 8.3

7.0 CORRECTIVE ACTIONS

7.1 Conditions Requiring SWPPP Review and Revision

The SWPPP must be reviewed when any of the following conditions occur:

- An unauthorized release or discharge (e.g., spill, leak, or discharge of non-stormwater not authorized by the Permit).
- Control measures are not stringent enough for the discharge to meet applicable water quality standards or conditions of the Permit.
- A required control measure was never installed, was installed incorrectly, or not in accordance with the Permit or is not being properly operated or maintained.
- Visual observations indicate signs of stormwater pollution (e.g. unusual color, odor, turbidity, floatable material, settled solids, suspended solids, foam and oil sheen) in discharge.
- The average of four quarterly sampling results exceeds any applicable benchmark monitoring level. If less than four samples have been taken, but the results are such that an exceedance of the four quarter average is mathematically certain (i.e., if the sum of the quarterly sample results to date is more than four times the benchmark monitoring concentration).
- Construction or a change in design, operation, or maintenance at the Facility that modifies the type or concentration of pollutants discharged in stormwater, or increases the quantity of pollutants discharged.

If any of the above conditions occur, immediate reasonable steps necessary to minimize or prevent the discharge of pollutants until a permanent solution is installed and made operational, including cleaning up contaminated surfaces, must be implemented. If additional changes are necessary, new or modified control measures or repairs completed to existing controls, must be installed and made operational prior to the next storm event and within 14 days of the time of the discovery of the condition. A schedule for completing the installation of a new control measure or making repairs to an existing control measure must be identified and the work completed as soon as practical after the 14-day timeframe, but no longer than 45 days after discovery of the condition.

7.2 Corrective Action Documentation

Documentation of the corrective actions implemented or to be implemented as a result of the conditions identified in Section 7.1 are to be made in Velocity EHS as standalone corrective actions.

The following information, where applicable, must be included on the Corrective Action Form:

- Identification and description of the condition triggering the need for corrective action. For any spills or leaks, include the following information: a description of the incident including material, date/time, amount, location and reason for spill, and any leaks, spills, or other releases that resulted in discharges of pollutants to waters of the State.
- Date the condition was discovered.
- For any spills or leaks, include response actions, the date/time clean-up completed, notifications made, and staff involved. Also include any measures implemented to prevent reoccurrence of similar release/spill.

The documentation of corrective actions implemented or to be implemented as a result of the conditions identified in Section 7.1 are to be made on the Corrective Action Report within 14 days from the time of discovery.

STORMWATER POLLUTION PREVENTION PLAN

8.0 SUMMARY OF SWPPP REQUIREMENTS

8.1 Recordkeeping and Reporting

The following records related to compliance with the General Permit are to be retained for the duration of the permit or for a period of at least three years from the date of the record:

Record	Storage Location
Stormwater Pollution Prevention Plan; signed and up-to-date	Facility office (hard copy in binder) and Company computer system (electronic)
Completed Notice of Intent	Appendix A of the SWPPP
IEPA Discharge Authorization Letter (General Permit)	Appendix A of the SWPPP
Non-Stormwater Assessment & Certification	Appendix D of the SWPPP
Spill Report Forms	- Velocity EHS
Preventative Maintenance Records	Facility office
Employee Training Records	Velocity EHS
Quarterly Routine Facility Inspection Forms	Appendix F of the SWPPP
Containment Drainage & Inspection Records	Appendix G of the SWPPP
Quarterly Visual Discharge Monitoring Logs	Appendix H of the SWPPP
Quantitative Stormwater Benchmark Monitoring Reports and Supporting Documentation	Appendix C of the SWPPP
IEPA Annual Facility Inspection Reports	Appendix I of the SWPPP
Corrective Action Documentation	Velocity EHS
SWPPP Revisions/Historical Plan Copies	Facility office and summary in Appendix J of the SWPPP

8.2 SWPPP Implementation

The following is a summary of SWPPP implementation requirements:

SWPPP Requirement	Frequency
Implement Stormwater Control Measures per Section 4.0	<ul style="list-style-type: none"> • Immediately and continually
Conduct Employee Training per Section 5.0	<ul style="list-style-type: none"> • New Hire Training (within 60 Days) • Annual Refresher • As Needed
Inspect bulk storage containment areas and complete Containment Inspection and Drainage Record per Section 4.9 and Section 6.2	<ul style="list-style-type: none"> • After Rain Event
Complete Quarterly Routine Facility Inspection and Quarterly Visual Discharge Monitoring per Section 6.1 and Section 6.3, respectively	<ul style="list-style-type: none"> • Quarterly; One inspection to be completed annually during a rain event when discharge is occurring.

SWPPP Requirement	Frequency
Perform Benchmark Monitoring per Section 6.4	<ul style="list-style-type: none"> Quarterly starting prior to October 2, 2017 and continue until applicable benchmark levels are met, if discharge is observed
Perform SWPPP Facility inspection and review and submit Annual Facility Inspection Report to IEPA per Section 6.5	<ul style="list-style-type: none"> Annually, prior to August 1st
Conduct and implement corrective actions per Section 7.0	<ul style="list-style-type: none"> When applicable and immediately upon discovery of condition per Section 7.1
Pay annual stormwater General Permit fee to IEPA (IEPA sends invoice)	<ul style="list-style-type: none"> Prior to August of each year
Revise and update the SWPPP per Section 8.3	<ul style="list-style-type: none"> Within 30 Days <ul style="list-style-type: none"> After change in operations After reportable spill event After a SWPPP review indicates changes are needed
Complete Spill Reporting Form per Section 4.5 and Facility SPCC Plan	<ul style="list-style-type: none"> Whenever a significant spill event occurs
Submit Notice of Termination to IEPA	<ul style="list-style-type: none"> Within 30 Days <ul style="list-style-type: none"> A change in ownership or operational control of the Facility Operations at the Facility have ceased and there are no discharges or no stormwater exposure to industrial activities Coverage has been obtain under an individual NPDES permit

8.3 SWPPP Amendments

The SWPPP shall be amended whenever:

1. There is a change in design, construction, operation, or maintenance, which has a significant effect on the potential for the discharge of pollutants;
2. The SWPPP proves to be ineffective in achieving the general objectives of controlling pollutants in stormwater discharges;
3. The recognition of deficiencies or needed changes discovered as a result of a Facility inspection; and/or
4. Annual inspection (Section 6.5) indicates changes are needed.

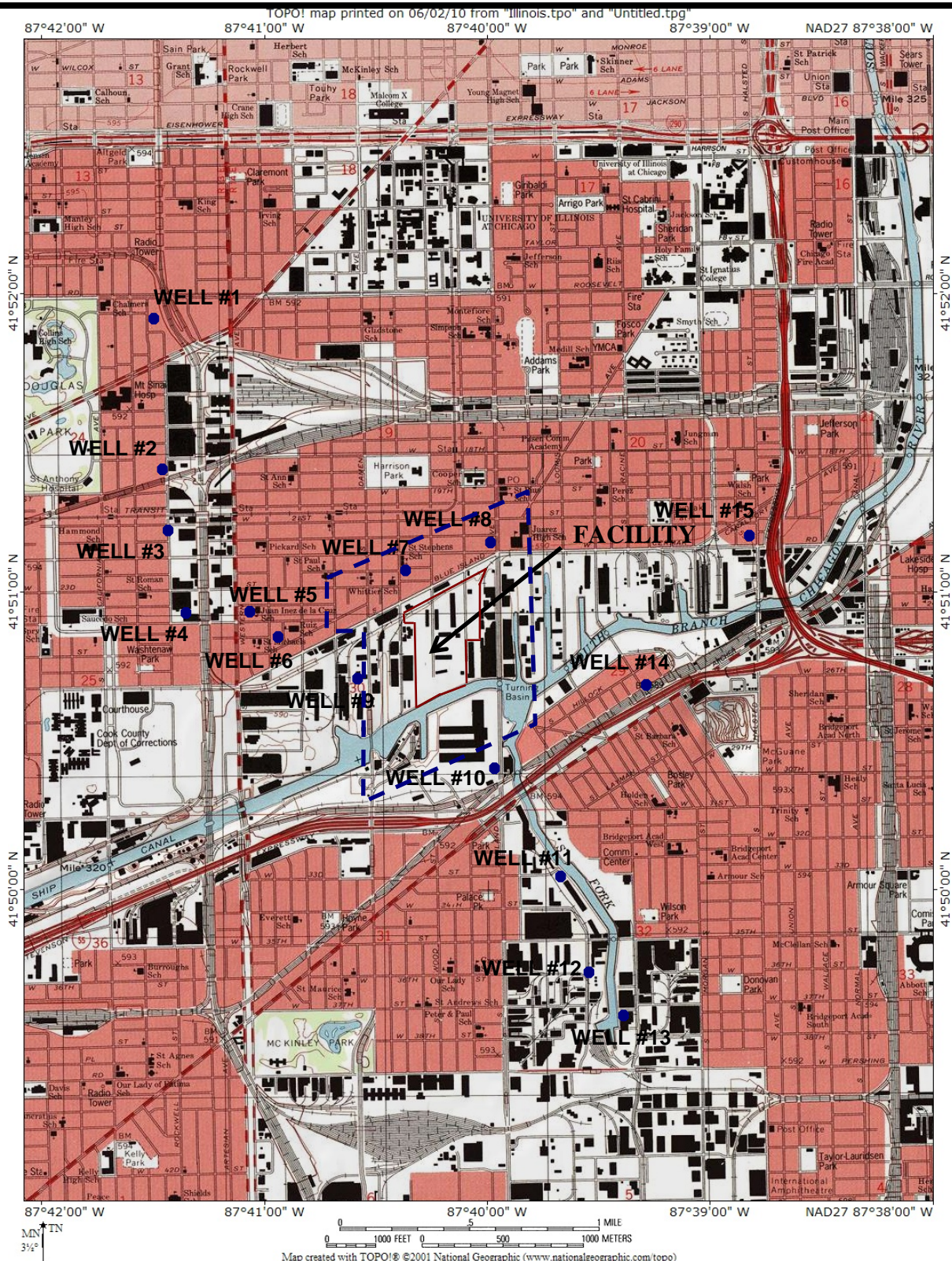
STORMWATER POLLUTION PREVENTION PLAN

Revisions to the SWPPP are to be documented. A history of revisions since the initial SWPPP development date, as stated on the title page, is to be maintained in Appendix K. The revision number is to be updated on the revised pages. The updated pages are to be inserted in their proper place in the SWPPP and the obsolete pages are to be placed in Appendix K. Revisions to the SWPPP are to be logged in the “History of Revisions” log included in Appendix K.

Amendments to the SWPPP are to be made within thirty days and are to be submitted to IEPA via email at epa.indilr00swppp@illinois.gov.

APPENDICES

Appendix A.	General Permit & Supporting Documentation
Appendix B.	Facility Figures
Appendix C.	Quantitative Stormwater Sampling Data
Appendix D.	Non-Stormwater Discharge Certification
Appendix E	Employee Training Documentation (see Velocity EHS)
Appendix F	Routine Facility Inspection Forms
Appendix G.	Containment Inspection and Drainage Records
Appendix H.	Quarterly Visual Observation Logs
Appendix I.	IEPA Annual Facility Inspection Reports
Appendix J.	SWPPP Revision History



K P R G
ENVIRONMENTAL CONSULTATION & REMEDIATION
KPRG and Associates, Inc.

KPRG
Project No.:

13917

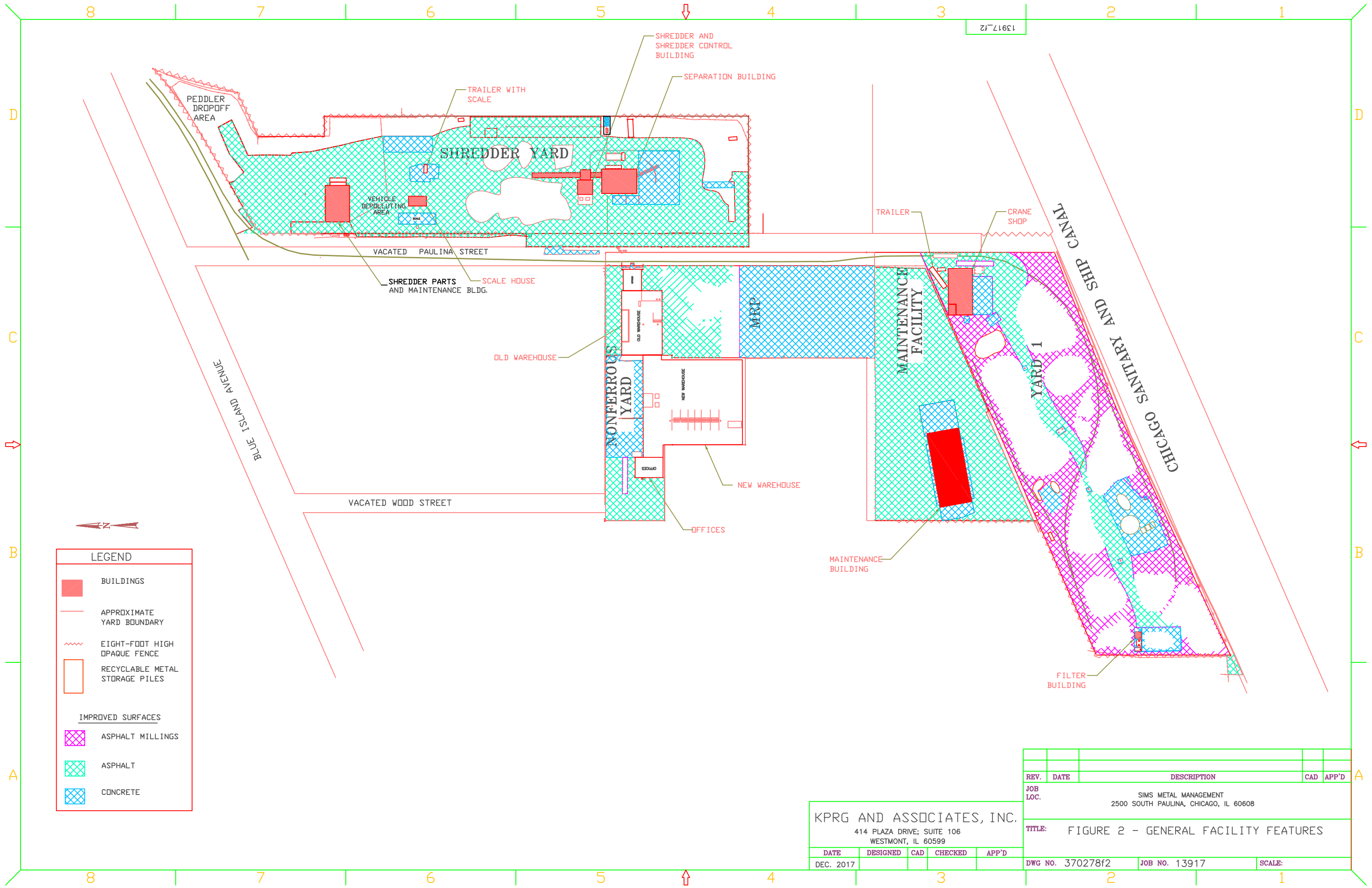
SOURCE: National Geographic USGS Seamless Topographic Map

● Private Water Well Location (ISGS)

1/4-Mile Radius

FIGURE 1: FACILITY LOCATION MAP

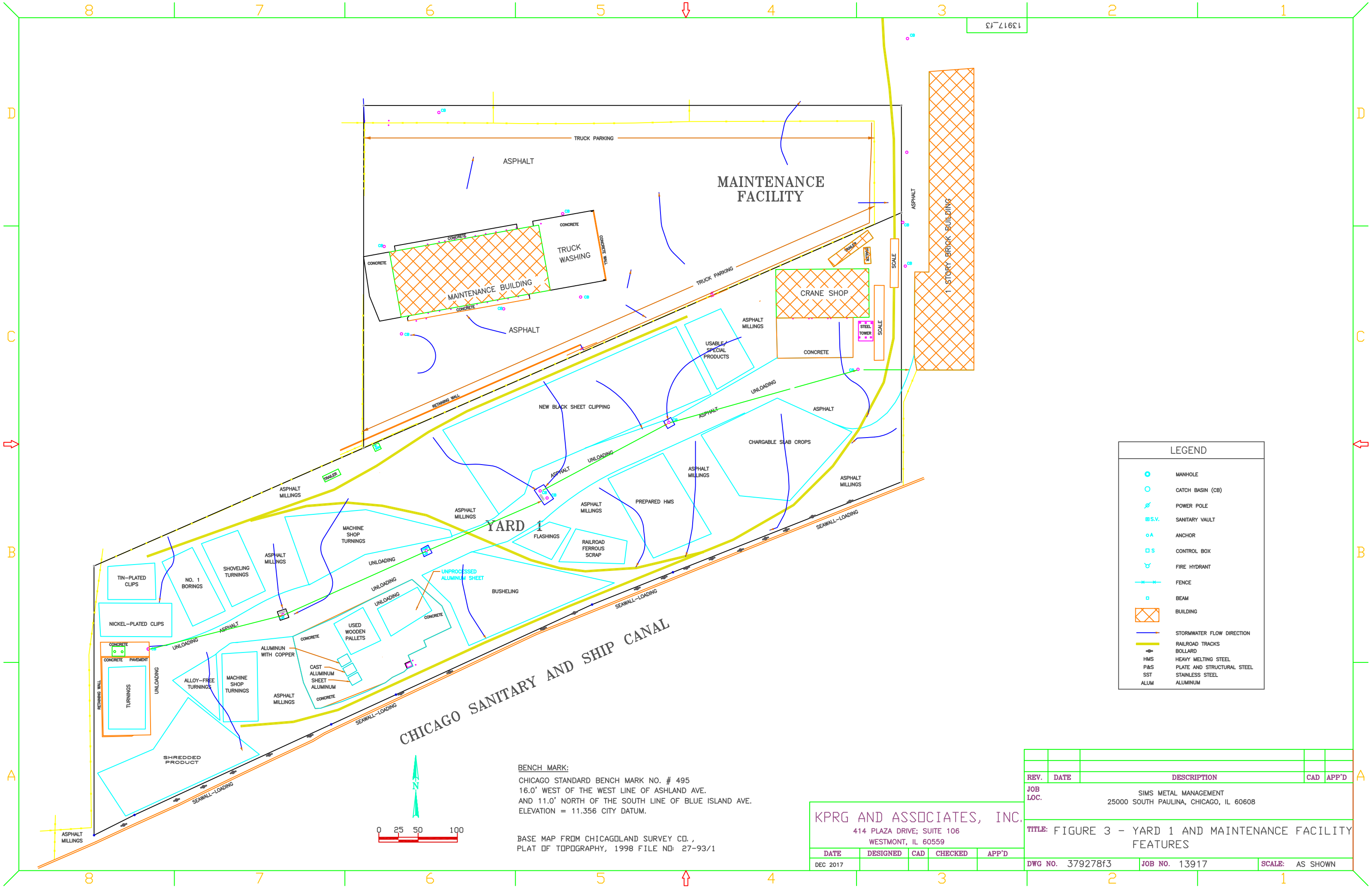
**METAL MANAGEMENT MIDWEST INC
2500 SOUTH PAULINA STREET
CHICAGO, IL 60608**



KPRG AND ASSOCIATES, INC.
414 PLAZA DRIVE; SUITE 106
WESTMONT, IL 60599

DATE	DESIGNED	CAD	CHECKED	APP'D
DEC. 2017				

REV.	DATE	DESCRIPTION	CAD	APP'D
JOB LOC.	SIMS METAL MANAGEMENT 2500 SOUTH PAULINA, CHICAGO, IL 60608			
TITLE: FIGURE 2 - GENERAL FACILITY FEATURES				
DWG NO. 370278f2		JOB NO. 13917	SCALE:	



13917-f3

LEGEND	
	MANHOLE
	CATCH BASIN (CB)
	POWER POLE
	SANITARY VAULT
	ANCHOR
	CONTROL BOX
	FIRE HYDRANT
	FENCE
	BEAM
	BUILDING
	STORMWATER FLOW DIRECTION
	RAILROAD TRACKS
	BOLLARD
	HEAVY MELTING STEEL
	PLATE AND STRUCTURAL STEEL
	STAINLESS STEEL
	ALUMINUM

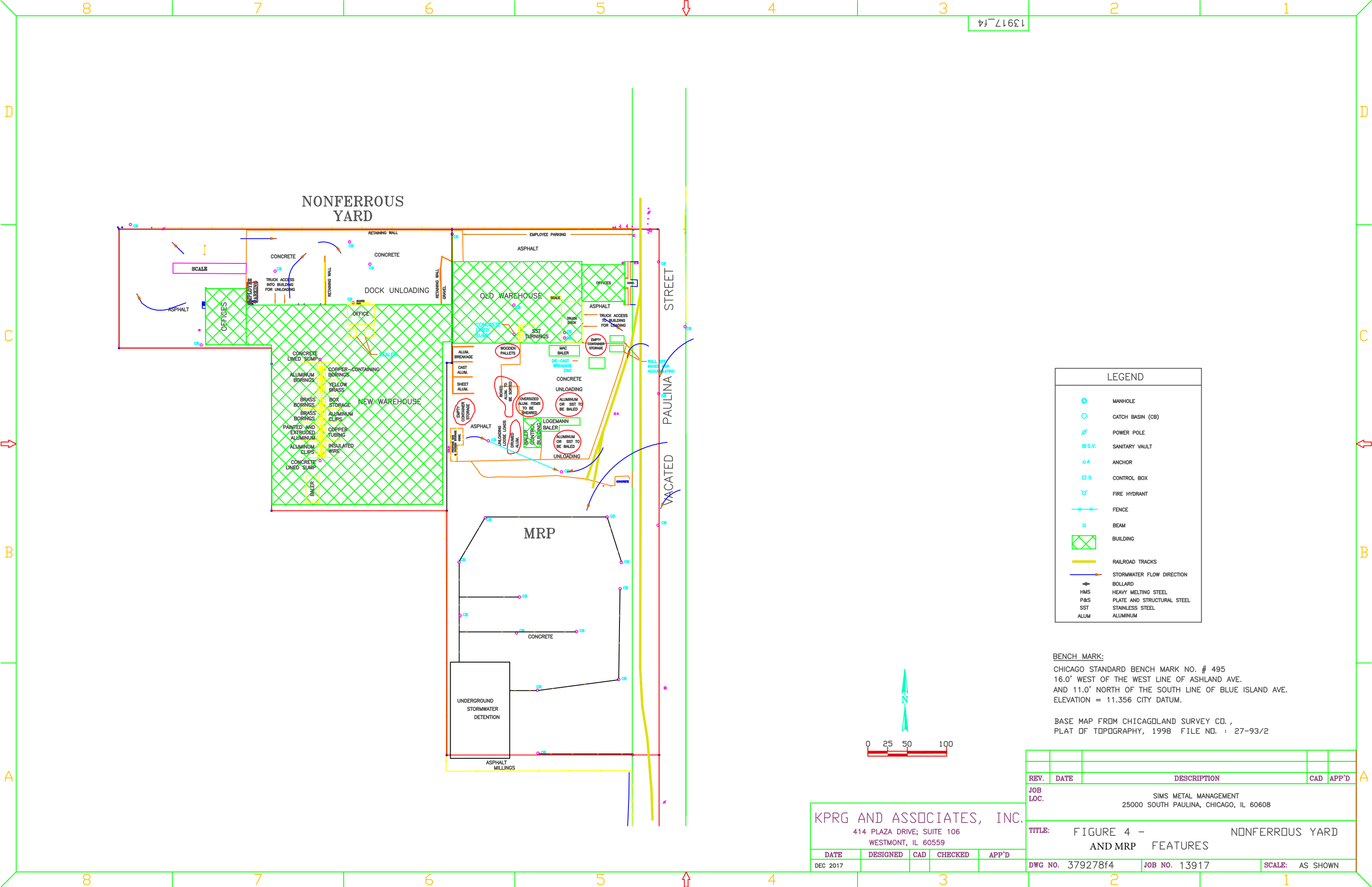
CHICAGO SANITARY AND SHIP CANAL

BENCH MARK:
CHICAGO STANDARD BENCH MARK NO. # 495
16.0' WEST OF THE WEST LINE OF ASHLAND AVE.
AND 11.0' NORTH OF THE SOUTH LINE OF BLUE ISLAND AVE.
ELEVATION = 11.356 CITY DATUM.

BASE MAP FROM CHICAGOLAND SURVEY CO.,
PLAT OF TOPOGRAPHY, 1998 FILE NO: 27-93/1

KPRG AND ASSOCIATES, INC.				
414 PLAZA DRIVE; SUITE 106 WESTMONT, IL 60559				
DATE	DESIGNED	CAD	CHECKED	APP'D
DEC 2017				

REV.	DATE	DESCRIPTION	CAD	APP'D
JOB LOC. SIMS METAL MANAGEMENT 25000 SOUTH PAULINA, CHICAGO, IL 60608				
TITLE: FIGURE 3 - YARD 1 AND MAINTENANCE FACILITY FEATURES				
DWG NO. 379278f3		JOB NO. 13917		SCALE: AS SHOWN



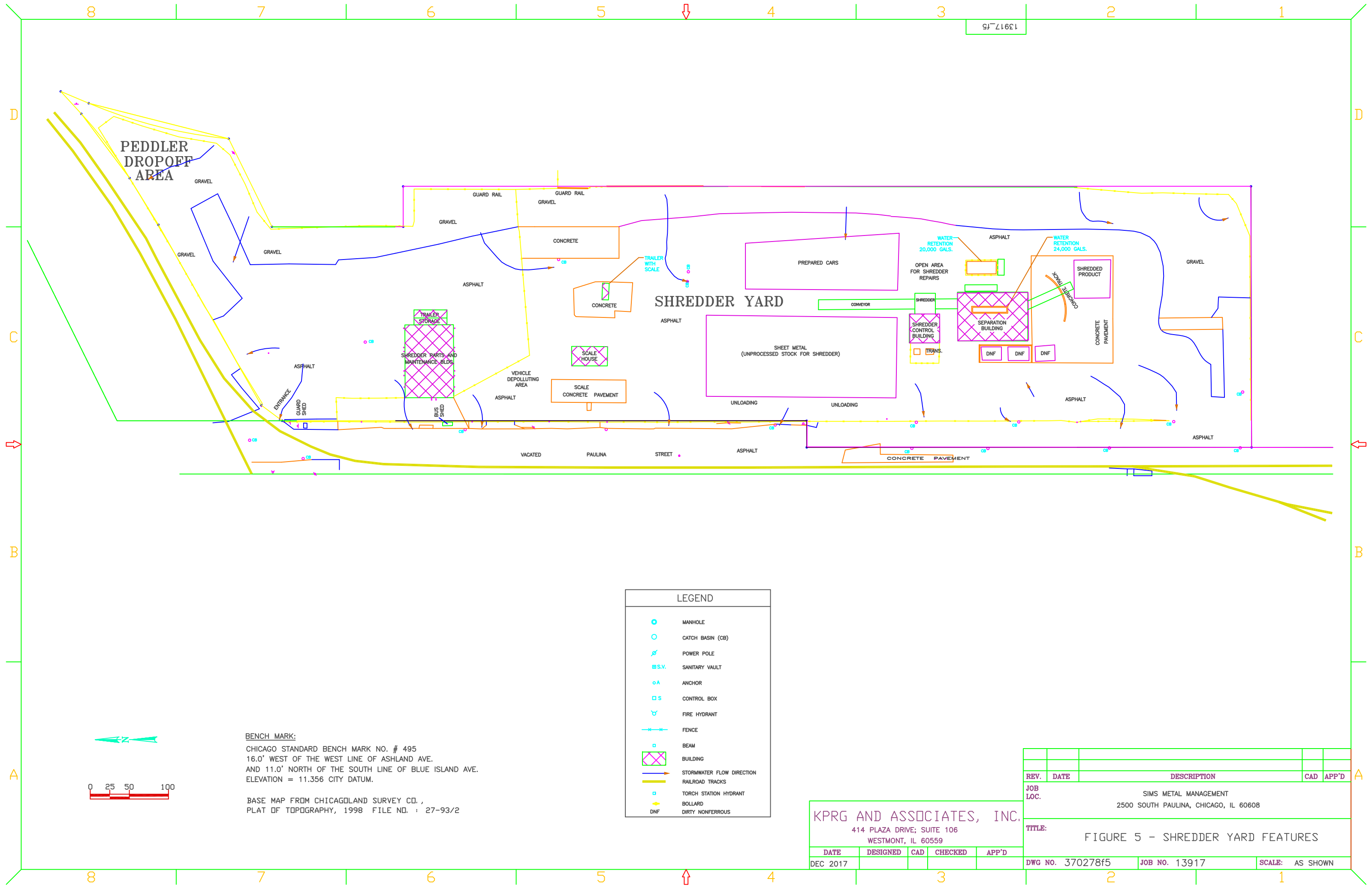
LEGEND	
	MANHOLE
	CATCH BASIN (CB)
	POWER POLE
	SANITARY VAULT
	ANCHOR
	CONTROL BOX
	FIRE HYDRANT
	FENCE
	BEAM
	BUILDING
	RAILROAD TRACKS
	STORMWATER FLOW DIRECTION
	BOLLARD
	HEAVY MELTING STEEL
	PLATE AND STRUCTURAL STEEL
	STAINLESS STEEL
	ALUMINUM

BENCH MARK:
CHICAGO STANDARD BENCH MARK NO. # 495
16.0' WEST OF THE WEST LINE OF ASHLAND AVE.
AND 11.0' NORTH OF THE SOUTH LINE OF BLUE ISLAND AVE.
ELEVATION = 11.356 CITY DATUM.

BASE MAP FROM CHICAGOLAND SURVEY CO. ,
PLAT OF TOPOGRAPHY, 1998 FILE NO. : 27-93/2

REV.	DATE	DESCRIPTION	CAD	APP'D
JOB LOC. SIMS METAL MANAGEMENT 25000 SOUTH PAULINA, CHICAGO, IL 60608				
TITLE: FIGURE 4 - NONFERROUS YARD AND MRP FEATURES				
DWG NO. 379278f4		JOB NO. 13917		SCALE: AS SHOWN

KPRG AND ASSOCIATES, INC.				
414 PLAZA DRIVE; SUITE 106 WESTMONT, IL 60559				
DATE	DESIGNED	CAD	CHECKED	APP'D
DEC 2017				



APPENDIX P. HOURS OF OPERATION WAIVER



DEPARTMENT OF PUBLIC HEALTH
CITY OF CHICAGO

Recycling Facility Hours of Operation
WAIVER

Pursuant to Rule 8.0 of the Rules and Regulations for Recycling Facilities and having found that operation of the facility will not create a public nuisance or adversely impact the surrounding area or surrounding users, the Commissioner of Health hereby grants an Hours of Operation Waiver to Metal Management Midwest Inc. (the Permittee) for the operation of a Class IVB Recycling Facility located at 2500 S Paulina Street. This Waiver shall be valid for the permit term ending on November 15, 2021. Accordingly, the Permittee may operate the facility from 5:00 a.m. to 10:00 p.m. Monday through Friday, and from 5:00 a.m. and 5 p.m. on Saturdays and Sundays. In addition, the facility may operate up to twenty-four hours per day, as needed to prevent excessive stockpiles at the Facility.

If, at any time during this permit term, the Commissioner finds that operation of the facility after 9:00 p.m. and before 7:00 a.m. is creating a nuisance, the commissioner may revoke this waiver.

Allison Arwady, M.D.
Chicago Department of Public Health, Commissioner

By: _____
Renante Marante, Environmental Engineer III
(312) 745-3136

APPENDIX Q. SPCC PLAN

**SPILL PREVENTION CONTROL
AND
COUNTERMEASURES PLAN**

**SIMS METAL MANAGEMENT, INC.
D/B/A SIMS METAL MANAGEMENT
PAULINA FACILITY
2500 SOUTH PAULINA STREET
CHICAGO, ILLINOIS 60608**

PREPARED BY: KPRG and Associates, Inc.
414 Plaza Drive, Suite 106
Westmont, Illinois 60559

KPRG Project No. 13917

Rev-01: August 2000 by CPI
Rev-02: October 2004 by CPI
Rev-03: June 2010 by CPI
Rev-04: March 2020 by KPRG

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

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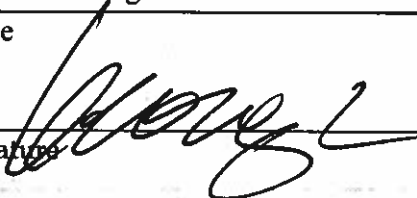
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Appendix G. Emergency Containment Methods
Appendix H. Spill Reporting Form
Appendix I. SPCC Plan Review Form
Appendix J. SPCC Plan Revision Log

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

MANAGEMENT CERTIFICATION / COMMITMENT OF RESOURCES

[40 CFR §112.6(a)]

I certify that I have reviewed this Spill Prevention Control and Countermeasure (SPCC) Plan, and attest to the following: (1) I am familiar with the requirements of 40 CFR §112, (6); (2) I have visited and examined the facility; (3) that the Plan has been prepared in accordance with accepted and sound industry practices and standards, and with the requirements of this part; (4) that procedures for required inspections and testing have been established; (5) that the SPCC Plan is being fully implemented at this facility; (6) the Plan does not deviate from any requirements of this part as allowed by 112.7(a)(2) and 112.7(d) of this section; and (7) the Plan and individuals responsible for implementing the Plan have the full approval of management and the facility owner and operator has committed the necessary resources to fully implement the Plan.

George Malamis	General Manager
_____ Name	_____ Title
 _____ Signature	4/24/20 _____ Date

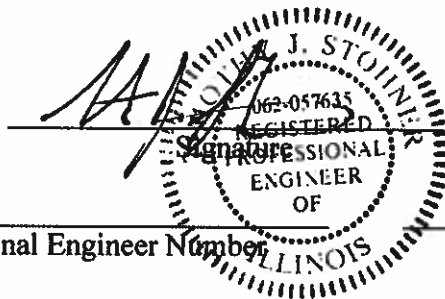
SPILL PREVENTION CONTROL & COUNTERMEASURE PLAN

PROFESSIONAL ENGINEER CERTIFICATION

I certify that I have reviewed this Spill Prevention Control and Countermeasure (SPCC) Plan, and attest to the following: (1) I am familiar with the requirements of 40 CFR §112; (2) I have visited and examined the facility or have supervised examination of the facility by appropriately qualified personnel; (3) that the Plan has been prepared in accordance with good engineering practices, including consideration of applicable industry standards, and in accordance with EPA requirements of the SPCC final rule dated July 17, 2002 and as amended in 2009; (4) that procedures for required inspections and testing have been established; and (5) that the SPCC Plan is adequate for the facility.

This certification in no way relieves the owner or operator of the facility of his/her duty to prepare and fully implement this SPCC Plan in accordance with the requirements of 40 CFR §112. This SPCC Plan is valid only to the extent that the facility owner or operator maintains, tests, and inspects equipment, containment, and other devices as prescribed in this SPCC Plan.

Timothy J. Stohner
Name



4/14/2020
Date

062-057635
Registered Professional Engineer Number

Illinois
State of Registration

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

1.0 INTRODUCTION

A Spill Prevention Control and Countermeasures (SPCC) Plan for Sims Metal Management Paulina Facility located at 2500 South Paulina Street in Chicago, Illinois is presented herein. The main purpose of an SPCC Plan is to form a comprehensive prevention program that minimizes the potential for discharge of oil. In addition to preventing discharges of oil, the SPCC Plan provides information on responding to discharges or releases of oil in the event they may occur.

1.1 Summary of Applicable Regulations

1.1.1 Federal Regulations

Section 311 (b)(1) of the Clean Water Act (Act) states that " . . . there should be no discharge of oil onto, or upon, the navigable waters of the United States, adjoining shorelines or into, or upon, the waters of a contiguous zone." Subsequent to the Act, the U.S. Environmental Protection Agency (USEPA) published regulations to prevent discharges of oil into navigable waters and to contain such discharges if they occur. These regulations include 40 CFR Parts §110 and §112 that set out rules and regulations governing oil pollution prevention, SPCC Plan requirements, and penalties for violation of regulations. The SPCC Plan is required by USEPA's Federal regulations in 40 CFR Part §112. Subparts applicable to this facility include §112.1 through §112.7 of Subpart A, and §112.8 of Subpart B. Copies of these regulations are included in Appendix A.

The SPCC rule applies to owners or operators of facilities that drill, produce, gather, store, process, refine, transfer, distribute, or consume oil and oil products. Owners and operators of applicable facilities are required to implement a SPCC Plan if, due to its location, it could reasonably be expected to discharge oil into or upon the navigable waters of the United States or adjoining shorelines, and the facility meets one of the following criteria regarding oil storage:

- The total aboveground storage capacity (including off-road mobile equipment and excluding *de minimus* containers less than 55 gallons) exceeds 1,320 gallons or
- The underground storage capacity not meeting certain conditions exceeds 42,000 gallons.

The civil penalty for failure to have a SPCC Plan in operation at facilities required to have an SPCC Plan is a maximum of \$10,000 per day for each day that the violation exists.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

1.1.2 State Regulation

Title 29 Illinois Administrative Code (IAC) 430 states: “...Any hazardous material that equals or exceeds the reportable quantity listed in Appendix A of 40 CFR 355...” See “Reportable Spill” in Section 1.3.

1.2 Pertinent Definitions

Important terms defined in Federal and State regulations and used in the SPCC Plan are defined below.

Accident (State) – means a release that occurs unintentionally, for example, as a result of malfunctioning equipment or an act of God.

Bulk Storage Container (Federal) – Means any container used to store oil. These containers are used for purposes including, but not limited to, the storage of oil prior to use, while being used, or prior to further distribution in commerce. Oil-filled electrical, operating, or manufacturing equipment is not a bulk storage container.

Environment (State) – means water, air and land and the inter-relationship, which exist among and between water, air and land and all living things.

Discharge (Federal) – Includes, but is not limited to, any spilling, leaking, pumping, pouring, emitting, emptying or dumping of oil as defined in 40 CFR Part §112.

Harmful Quantities (Federal) – As defined in 40 CFR Part 110, quantities of released oil which:

- Cause a film or sheen upon or discoloration of the surface of adjoining shorelines,
- Cause a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines, or
- Violate Federal water quality standards identified in Sections 303 and 304 of the Act, or water quality standards adopted by the State pursuant to Section 303 of the Act, or promulgated by USEPA pursuant to that section.

Mobile Refueler (Federal) – A *bulk storage container* onboard a vehicle or towed, that is designed or used solely to store and transport fuel for transfer into or from an aircraft, motor vehicle, locomotive, vessel, ground service equipment, or other oil storage container.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

Motive Power Container (Federal) – Any onboard bulk storage container used primarily to power the movement of a motor vehicle, or ancillary onboard oil-filled operational equipment.

Navigable Water (Federal) – Navigable waters include tributaries to navigable water; interstate waters and wetlands; intrastate lakes, rivers and streams that are utilized by interstate travelers for recreational and other purposes; and, intrastate lakes, rivers and streams from which fish or shellfish are taken and sold in interstate commerce. Navigable waters are defined broadly and include surface water in the U.S, all interstate waters including wetlands, and all intrastate waters, such as lakes, rivers, streams, wetlands, sloughs, prairie potholes, wet meadows, playa lakes, or natural ponds as defined in 40 CFR Part §112. It also includes stormwater lines that lead to navigable waters.

Oil (Federal and State) – Means oil of any kind or in any form, including but not limited to petroleum, gasoline, fuel oil, grease, sludge, oil refuse, and oil mixed with wastes other than dredged spoil as defined in 40 CFR Part §112. For purposes of this SPCC Plan, the term “petroleum” is used interchangeably with the term “oil.”

Oil-filled Operational Equipment (Federal) – Equipment that includes an oil storage container (or multiple containers) in which the oil is present solely to support the function of the apparatus or the device. Oil-filled operational equipment is not considered a bulk storage container, and does not include oil-filled manufacturing equipment (flow-through process).

Qualified Facility (Federal) – A qualified self-certified facility is one that: (1) has an aggregate aboveground storage capacity of 10,000 gallons or less; and (2) has had no single discharge as described in 112.1(b) exceeding 1,000 gallons, or no two discharges as described in 112.1 (b) each exceeding 42 gallons within any twelve month period in the three years prior to the SPCC Plan self-certification date, or since becoming subject to 40 CFR §112, if the facility has been in operation for less than three years (other than discharges as described in part 112.1.(b) that are the result of natural disasters, acts of war or terrorism).

Release (State) – means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment (including the abandonment or discharging of barrels, containers, and other closed receptacles). For the purposes of 29 IAC Part 430, "Release" includes the loss of containment of a reportable hazardous substance which is not wholly contained within a building or structure inside plant or facility boundaries.

Reportable Spill (Federal and State) – A discharge of oil that must be reported to the appropriate agency as discussed in Section 4.4. *A reportable spill is defined in federal regulations* by the

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

"sheen rule" (as defined in 40 CFR Part 110); that is, a discharge into navigable waters that causes a film or sheen upon or discoloration of the surface of adjoining shorelines or that causes a sludge or emulsion to be deposited beneath the surface of the water or upon adjoining shorelines, or that violates applicable state or federal water quality standards, must be reported.

- A reportable spill in the State of Illinois is defined by a release of petroleum (or oil) that produces a sheen on nearby water and/or threatens navigable waters including a spill or overflow of petroleum that results in a release to the environment that exceeds 25 gallons (41 IAC 176.340). Releases that exceed 25 gallons are to be immediately reported to the Illinois Emergency Management Agency (IEMA).

NOTE: The State of Illinois includes groundwater in its definition of a water of the state. So any spill that can impact groundwater is considered reportable, in addition to the "sheen rule" on navigable waters. According to the Illinois Environmental Protection Agency Office of Emergency Response, if a spill is contained on an impervious surface and it is unlikely to reach a water of the state, it would not be considered "reportable".

Sheen (Federal) – An iridescent appearance on the surface of water caused by oil.

Spill or Discharge (Federal) – any spilling, leaking, pumping, pouring, emitting, emptying, or dumping of oil.

1.3 Plan Organization

This SPCC Plan is presented in four parts to meet Federal regulations outlined in Subpart A and Subpart B of 40 CFR §112.

- **Section 2 – Facility Assessment** provides general facility information and an assessment of the operation's potential to discharge to navigable water. The required "Certificate of Substantial Harm" also is included in Section 2.
- **Section 3 – Spill Prevention and Control** describes general structural and operational procedures employed to prevent and control potential discharges associated with activities involving the storage and use of oil.
- **Section 4 – Spill Response Plan** describes the actions to be taken after an oil spill event occurs.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

- **Section 5 – SPCC Plan Review** provides procedures on reviewing and amending the SPCC Plan.

1.4 Regulatory Cross-Reference

In accordance with 40 CFR §112.7, the following section provides a cross-reference of regulatory requirements and the equivalent requirements in this SPCC Plan:

40 CFR Section Regulatory Reference	Requirement	SPCC Plan Section
§112.1	Introduction/Regulatory Summary Information	Section 1.0
§112.2 & 112.3	Pertinent Definitions	Section 1.2
§112.3(d)	Professional Engineer Review	Section 5.3 (if applicable)
§112.4(a)	Spill Reporting	Section 4.4
§112.5(a)	Plan Amendments	Section 5.2
§112.5(b)	Plan Review	Section 5.1
§112.6 (a)	Management Certification	Page iii
§112.6 (b),(c),(d)	Plan Amendments	Section 5.2 & 5.3
§112.7(a)(3)	Facility Diagram	Section 2.0; Figure 1
§112.7(a)(3)(i)	Tank Inventory	Table 2
§112.7(a)(3)(ii)	Discharge Prevention	Section 3.0
§112.7(a)(3)(iii)	Drainage Controls	Section 3.2
§112.7(a)(3)(iv)	Discovery, response, cleanup	Section 4.0
§112.7(a)(3)(v)	Disposal	Section 4.3
§112.7(a)(4)	Spill Reporting	Section 4.4
§112.7(a)(5)	Spill Response Procedures	Section 4.0
§112.7(b)	Reasonable Potential for Failure	Section 2.4
§112.7(c)	Containment/Diversionary Structures	Section 3.1; Table 2
§112.7(d)	Impracticability Determination	Section 3.1 (if applicable); 5.3
§112.7(e)	Inspections & Testing	Section 3.6
§112.7(f)	Training	Section 3.7
§112.7(g)	Security	Section 3.8
§112.7(h)	Tank car/Tank truck	Section 3.5
§112.7(i)	Field constructed ASTs	[not applicable]
§112.7(j)	Discharge Prevention & Containment Structure Discussions	Within applicable Sections
§112.7(k)	Qualified Oil Filled Operational Equipment	Table 2; Section 3.1 (if applicable)
§112.8(a)	General Plan Requirements	[as presented above]
§112.8(b)	Facility Drainage	Section 3.2
§112.8(c)	Bulk Storage Containers	Section 3.3; Table 2
§112.8(d)	Transfer Operations	Section 3.4
§112.9-15	[not applicable]	
§112.20	[not applicable; certification provided in Section 2.5]	
§112.21	[not applicable]	

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

1.5 Summary of SPCC Plan Requirements

- Management shall approve the SPCC Plan and the necessary resources shall be committed to implement the Plan and authorized as such (page iii).
- Personnel shall be trained in preventing, controlling, responding, and reporting procedures for oil and chemical spills. Training sessions shall be conducted and documented as outlined in Section 3.7. Training records shall be kept with the Plan for a minimum of three years.
- Spill response shall be in accordance with Section 4.0.
- Tank inspection and containment drainage records shall be completed as discussed in Section 3.6 and Section 3.3 Item #4, respectively, and maintained with the Plan for a minimum of three years.
- Emergency response telephone numbers, notification sequence, and spill response procedures shall be posted in conspicuous locations at the following locations:
 - o Administrative Offices
 - o Shredder Hydraulic Control Building
 - o Ferrous Maintenance Building
 - o Non-Ferrous Building (HRB Baler)
 - o Shredder Maintenance Building
- As part of the emergency spill response plan, the facility shall maintain accessible and adequate spill kits.
- A review of the SPCC Plan shall be conducted at least once every five years as discussed in Section 5.1.
- Amendments to the SPCC Plan shall occur as discussed in Section 5.2.
- Since occupied for at least four hours per day, a copy of the SPCC Plan shall be maintained at the facility [§112.3(e)(1)].
- This SPCC Plan shall be made available to representatives of the USEPA for on-site-review during normal working hours [§112.3(e)(2)].

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

2.0 FACILITY ASSESSMENT

2.1 General Facility Information

[40 CFR §112.7(a)]

Facility Address: Metal Management Midwest – Paulina Facility
d/b/a Sims Metal Management
2500 South Paulina Street
Chicago, Illinois 60608

Owner Name & Address: Metal Management Midwest, Inc.
d/b/a Sims Metal Management, Inc.
Attention: Environmental Manager
2500 South Paulina
Chicago, Illinois 60608
(773) 245-1200

Contact Information

Environmental Manager: Deborah Hays
Office: (773) 245-1200
Cell: (312) 343-4549

General Manager: George Malamis
Office: (773) 650-6440
Cell: (773) 551-0472

General facility information is provided below in Table 1. The physical layout and features of the facility are depicted on Figure 1.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

Table 1. General Facility Information

FACILITY DESCRIPTION	The Paulina Facility is a scrap metal recycling operation that purchases, processes, and ships ferrous and non-ferrous metal. The facility stores and uses hydraulic oil, diesel fuel, gasoline, gear oil, motor oil, and other maintenance-type petroleum products as part of daily operations. The facility is secured by fencing, and the main entrance is guarded. Security lighting is present throughout the facility.
NEAREST NAVIGABLE WATERS	Chicago Sanitary and Ship Canal along the south side of the facility.
OPERATIONAL HOURS	Receive Scrap – 5:00 AM to 5:30 PM Monday through Saturday and Sunday (periodically) 6:00 AM to 12:00 PM
NUMBER OF ON-SITE EMPLOYEES	100 (varies)

PETROLEUM STORAGE INVENTORY

Fixed Above Ground Storage Tanks (FAST)

FAST-4 = 600-gal. single wall hydraulic oil
 FAST-5 = 600-gal. single wall motor oil
FAST-6 = 300-gal. single wall empty
 FAST-14 = 1,000-gal. double wall off-road diesel
 FAST-15 = 300-gal. single wall hydraulic oil
 FAST-16 = 300-gal. single wall gear oil
 FAST-17 = 300-gal. single wall motor oil
 FAST-18 = 300-gal. single wall hydraulic oil
 FAST-19 = 1,000-gal. double wall used gasoline

Fixed Equipment Tanks (FET)

FET-1 = 150-gal. single wall hydraulic oil
 FET-2 = 200-gal. single wall hydraulic oil
 FET-3 = 300-gal. single wall hydraulic oil
 FET-4 = 710-gal. single wall hydraulic oil
 FET-5 = 200-gal. single wall used gasoline
 FET-6 = 200-gal. single wall used gasoline
 FET-7 = 200-gal. single wall used oil
 FET-8 = 200-gal. single wall used gasoline
 FET-9 = 200-gal. single wall used gasoline
 FET-10 = 200-gal. single wall used oil

Portable Above Ground Storage Tanks (PAST)

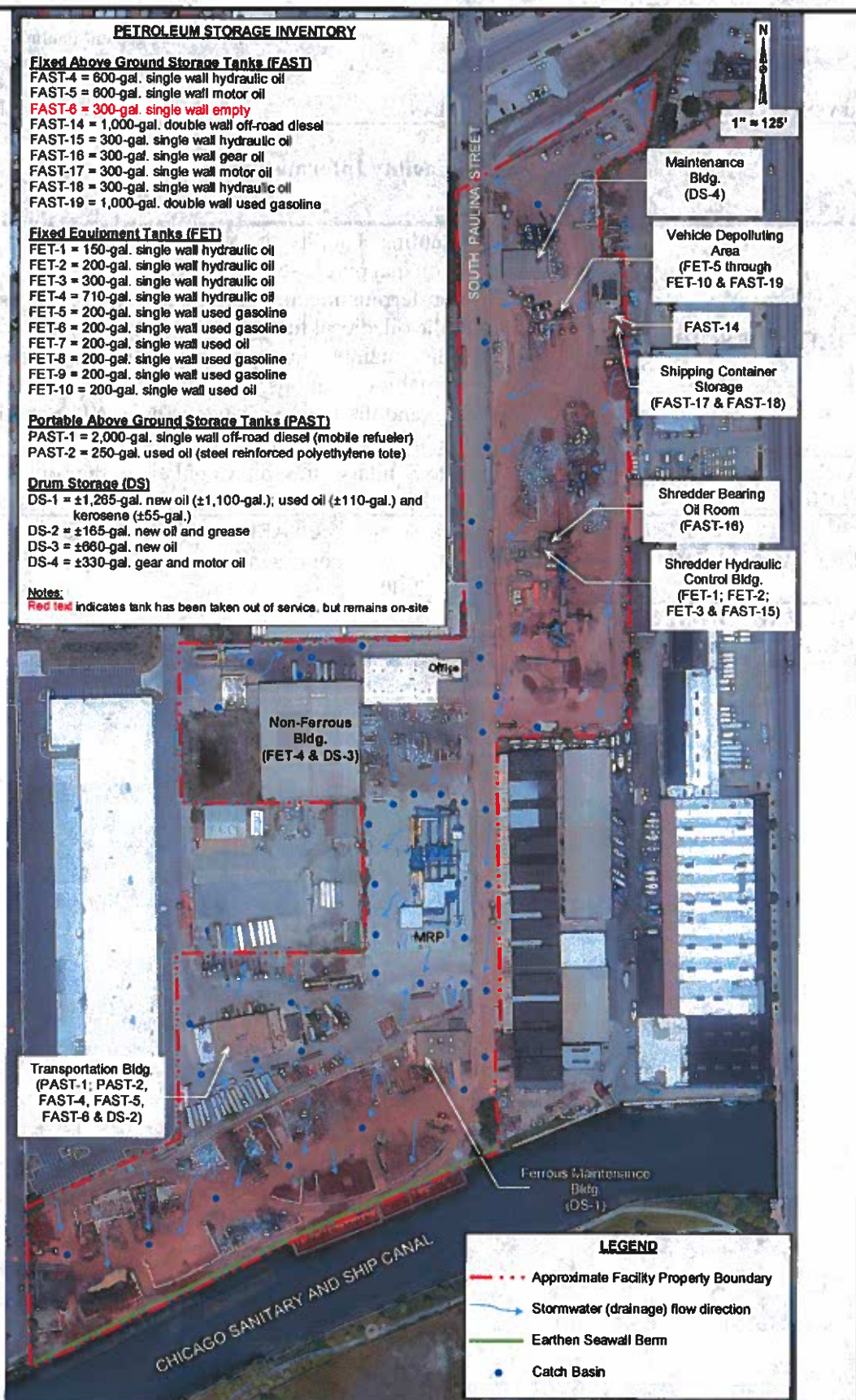
PAST-1 = 2,000-gal. single wall off-road diesel (mobile refueler)
 PAST-2 = 250-gal. used oil (steel reinforced polyethylene tote)

Drum Storage (DS)

DS-1 = ±1,265-gal. new oil (±1,100-gal.), used oil (±110-gal.) and kerosene (±55-gal.)
 DS-2 = ±165-gal. new oil and grease
 DS-3 = ±660-gal. new oil
 DS-4 = ±330-gal. gear and motor oil

Notes:

Red text indicates tank has been taken out of service, but remains on-site



K P R G

ENVIRONMENTAL CONSULTATION & REMEDIATION
 KPRG and Associates, Inc.

KPRG
 Project No.:
 13917

FIGURE 1. FACILITY MAP

SIMS METAL MANAGEMENT PAULINA
 FACILITY
 2500 SOUTH PAULINA STREET
 CHICAGO, ILLINOIS

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

2.2 Petroleum Inventory Summary

[40 CFR §112.7(a)]

Table 2 presents an inventory of oil storage devices (including bulk storage containers greater than 55 gallons and oil-filled equipment) at the facility. Figure 1 illustrates the location of the storage devices by assigned facility identification number.

2.3 Past Spill Reporting

[40 CFR §112.6]

No known releases of petroleum product have occurred or have been reported at the facility, in the past 20 years.

Future significant releases of petroleum products, should they occur, shall be recorded and maintained in this SPCC Plan.

2.4 Potential Releases Due to Equipment Failure

[40 CFR §112.7(b)]

The potential for a release to enter into navigable waters as the result of an equipment failure is unlikely. The facility's significant oil storage areas are not located in the vicinity of the Chicago Sanitary and Ship Canal. Furthermore, a combination of an established inspection and preventive maintenance program along with secondary containment and other engineering controls, such as the presence of an earthen seawall berm along Chicago Sanitary and Ship Canal, also minimizes the risk of a release from entering navigable waters. Secondary containment controls for petroleum storage are designed and constructed to hold 110% of the largest petroleum tank/container in place at the facility.

Since a potential for overflow, rupture, or leakage always exists despite implemented controls, reasonable potential failures are discussed in this section along with engineering measures and management practices to reduce the likelihood of a worst-case release.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

Release During Transfer Operations

The potential exists for a release to occur during transfer operations while filling a tank or pumping out a tank. Possible incidents include operator error or equipment failure leading to tank overfills, line kinks, or improper hose connections. The quantity of such a release is variable, but likely would not exceed 2,500 gallons, the typical size of a single compartment of a tank truck operated by contracted services supplying diesel fuel to the facility's aboveground storage tank (AST), or removing used oil from facility ASTs. The flow direction of released material is dependent on where transfer operations occur (see flow directions on Figure 1).

Implemented Controls: Practices are in place to reduce the likelihood of a release occurring during unloading/loading as discussed in Section 3.5. Since personnel are required to be present, response to a potential release occurring during transfer operations would be immediate, thereby minimizing the likelihood of a release reaching the bermed area flanking navigable waters (Chicago Sanitary and Ship Canal). Transfer operations are primarily conducted by contracted services that have necessary training and control mechanisms. Transfer operations are conducted under close supervision and employees are trained to respond quickly to overflow or spillage conditions not contained in a secondary containment structure, thereby limiting potential release quantities. In the event that such a release is not contained by engineered containment systems, personnel are instructed in appropriate spill response procedures. Spill kits are maintained near potential spill release areas.

Release Due To Leaks or Breaks in Hydraulic Lines

Experience shows that the most likely potential release due to equipment failure is associated with leaks or breaks in hydraulic lines. However, equipment would have to be running (i.e., pumps online) to cause a significant release from a failed hose. The quantity of such a release is variable. The flow direction of released material is dependent on where the equipment is located (see flow directions on Figure 1).

Implemented Controls: Equipment failures are minimized through established preventive maintenance practices, engineering controls, and regular visual inspections prior to equipment operation. Personnel are present while equipment is in operation. An equipment failure likely would cause the equipment to malfunction, thereby alerting the operator to the condition. Personnel are trained

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

to quickly respond to equipment failures by immediately turning off equipment, addressing spills immediately and repairing equipment as soon as possible, thereby limiting potential release quantities. In the event that such a release is not contained by engineered structural control systems, personnel are instructed in appropriate spill response procedures.

Release Due To Tank Leak or Rupture

The potential exists for a release to occur due to tank leak or rupture, such as from failed welded seams, leaking drain plug, vehicular/mobile equipment collisions, or a puncture. The quantity of such a release is variable and flow rates would be dependent on degree of leak or rupture. The flow direction of released material is dependent on where the equipment is located (see flow directions on Figure 1).

Implemented Controls: Equipment failures are minimized through established preventive maintenance practices and regular visual inspections. Personnel are trained to respond to equipment failures by immediately containing spills, addressing spills immediately and repairing equipment as soon as possible, thereby limiting release quantities. Tanks, drums and portable totes are positioned in areas protected from vehicular collisions and are present inside secondary containment structures. Fixed ASTs are either secondarily contained or of double-wall construction with interstitial monitoring minimizing the potential of release from tank rupture. Facility operations require the use of portable polyethylene ASTs (totes). Portable totes are used to store petroleum products. When not in use these totes are stored within secondary containment features, or inside buildings. Releases associated with these ASTs and totes or container leaks or ruptures likely would be contained in the immediate area, except when the portable totes are moved from containment areas. Tanks and drums are positioned in areas protected from vehicular collisions. In addition, the hydraulic oil reservoirs associated with processing equipment are located inside building structures surrounded by secondary concrete containment areas that would contain potential spills/releases. Therefore, releases associated with tank or container leaks or ruptures likely would be contained within the immediate area and are unlikely to enter into navigable waters.

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

2.5 Certificate of Substantial Harm

[40 CFR §112.20]

The facility neither transfers oil over water to or from vessels nor does it have a total underground oil storage capacity greater than 42,000 gallons. A Certificate of Substantial Harm has been completed to certify that the facility does not meet the substantial harm criteria listed in Appendix 1 of 40 CFR §112 and is contained in Appendix B of this SPCC Plan

Table 2. Tank Inventory

[40CFR 112.7(a)(3)(i)]
[40 CFR §112.7(k)]

Tank ID	Description	Contents	Capacity (Gal.)	Location	Containment	Monitoring of contents	Subject to rainwater accumulation?
Bulk Storage Containers (Fixed Above Ground Storage Tanks)							
FAST-4	Steel Constructed Single Wall Bulk Tank	Hydraulic Oil	600	Inside Transportation Building	Curbed Concrete	Personnel Monitoring	No
FAST-5	Steel Constructed Single Wall Bulk Tank	Motor Oil (15W40)	600	Inside Transportation Building	Curbed Concrete	Personnel Monitoring	No
FAST-6	Steel Constructed Single Wall Dispensing Tank	N/A	300	Inside Transportation Building	Curbed Concrete	Personnel Monitoring	No
FAST-14	Steel Constructed Double Wall Tank	Off-Road Diesel	1,000	Directly south of Supervisors Office Shredder	Double Wall Tank	Visual Gauge and Personnel Monitoring	No
FAST-15	Steel Constructed Single Wall Bulk Tank	Hydraulic Oil (ISO 100)	300	Inside Shredder Hydraulic Control Bldg.	Curbed Concrete	Personnel Monitoring	No
FAST-16	Steel Constructed Single Wall Bulk Tank	Gear? Oil	300	Inside Shredder Bearing Oil Room	Curbed Concrete	Personnel Monitoring	No
FAST-17	Steel Constructed Single Wall Bulk Tank	Motor Oil (15W30)	300	Inside Shipping Container Near Scale House at Shredder	Steel Constructed Containment	Personnel Monitoring	No
FAST-18	Steel Constructed Single Wall Bulk Tank	Hydraulic Oil	300	Inside Shipping Container Near Scale House at Shredder	Steel Constructed Containment	Personnel Monitoring	No

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Tank ID	Description	Contents	Capacity (Gal.)	Location	Containment	Monitoring of contents	Subject to rainwater accumulation?
FAST-19	Steel Constructed Double Wall Bulk Tank	Used Gasoline	1,000	Outside in Vehicle Depolluting Area	Double Wall Tank	Visual Gauge and Personnel Monitoring	No
Oil Filled Operational Equipment (Fixed Equipment Tanks)							
FET-1	Steel Constructed Single Wall Tank	Hydraulic Oil (ISO 100)	150	Inside Shredder Hydraulic Control Bldg.	Curbed Concrete	Visual Gauge and Personnel Monitoring	No
FET-2	Steel Constructed Single Wall Tank	Hydraulic Oil	200	Inside Shredder Hydraulic Control Bldg.	Curbed Concrete	Visual Gauge and Personnel Monitoring	No
FET-3	Steel Constructed Single Wall Tank	Hydraulic Oil	300	Inside Shredder Hydraulic Control Bldg.	Curbed Concrete	Visual Gauge and Personnel Monitoring	No
FET-4	Steel Constructed Single Wall Tank	Hydraulic Oil	710	Inside Non-Ferrous Bldg. (HRB Baler)	Curbed Concrete	Visual Gauge and Personnel Monitoring	No
FET-5	Steel Constructed Single Wall Tank	Used Gasoline	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #1)	Steel Self Containment Unit	Personnel Monitoring	Yes
FET-6	Steel Constructed Single Wall Tank	Used Gasoline	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #1)	Steel Self Containment Unit	Personnel Monitoring	Yes
FET-7	Steel Constructed Single Wall Tank	Used Oil	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #1)	Steel Self Containment Unit	Personnel Monitoring	Yes
FET-8	Steel Constructed Single Wall Tank	Used Gasoline	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #2)	Steel Self Containment Unit	Personnel Monitoring	Yes

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Tank ID	Description	Contents	Capacity (Gal.)	Location	Containment	Monitoring of contents	Subject to rainwater accumulation?
FET-9	Steel Constructed Single Wall Tank	Used Gasoline	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #2)	Steel Self Containment Unit	Personnel Monitoring	Yes
FET-10	Steel Constructed Single Wall Tank	Used Oil	200	Outside in Vehicle Depolluting Area (Iron Ax Rack #2)	Steel Self Containment Unit	Personnel Monitoring	Yes
Portable Above Ground Storage Tank							
PAST-1	Steel Constructed Mobile Fuel Tanker	Off Road Diesel Fuel	2,000	Outside Transportation Bldg.	Parked Outside Bldg. when not in use	Personnel Monitoring	No
PAST-2	Steel Reinforced Polyethylene Tote	Used Oil	250	Inside Transportation Bldg.	Steel Constructed Secondary Containment Capable of containing at least 110% of tank contents	Personnel Monitoring	No
Drum Storage							
DS-1	Steel Drum	New Oils, Kerosene & Used Oil	1,265 ±	Inside Ferrous Maintenance Bldg.	Steel Constructed Secondary Containment Capable of containing at least 110% of drum contents	Personnel Monitoring	No
DS-2	Steel Drum	New Oil & Grease	165 ±	Inside Transportation Bldg.	Concrete Curbed and Steel Constructed Secondary Containment Capable of containing at least 110% of drum contents	Personnel Monitoring	No
DS-3	Steel Drum	New Oil	660 ±	Inside Non-Ferrous Bldg.	Concrete Curbed and Steel Constructed Secondary Containment Capable of containing at least 110% of drum contents	Personnel Monitoring	No
DS-4	Steel Drum	Gear & Motor Oil	330	Inside Maintenance Bldg.	Steel Constructed Secondary Containment Capable of containing at least 110% of drum contents	Personnel Monitoring	No
Total Capacity			11,930 gal ±				

KEY:

FAST – Fixed Aboveground Storage Tank

FET – Fixed Equipment Tank

PAST – Portable Above Ground Storage Tank

DS – Drum Storage

FAST-4 = Tank Taken Out of Service, but remains on-site

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3.0 SPILL PREVENTION AND CONTROL

The following sections present spill prevention controls, techniques, and countermeasures implemented at the facility to reduce the potential of spills occurring or to minimize the damage resulting from a potential spill of petroleum at the facility. Spill prevention and control at the facility includes:

- Establishing structural controls such as containment systems;
- Training personnel in practices to reduce the likelihood of releases from material handling;
- Developing preventive maintenance programs; and
- Regularly inspecting equipment for integrity.

3.1 Containment and/or Diversionary Structures or Equipment

[40 CFR §112.7(c)]

Table 2 summarizes containment structures implemented at the various oil storage and use areas to aid in containing a potential release from leaving the property or entering nearby navigable waters.

As part of the facility's preventive maintenance program, daily visual inspections of the equipment are performed to ensure that the equipment is in proper operating condition. Additionally, routine maintenance intervals for the equipment, recommended by the manufacturer, are adhered to. Lastly, emergency response materials (spill kits) are maintained in storage areas so that should a failure occur, it can be immediately addressed, thus minimizing the impact of the failure.

3.2 Facility Drainage

[40 CFR §112.8(b)]

1. Drainage from containment structures, which accumulate rainwater, is restrained by no outlets (valves) below highest potential liquid level. Drainage of containment structures is performed through manually activated pumps after the condition of the accumulation is examined to assure no oil will be discharged. The drainage water is run through oil-absorbent dewatering bag prior to discharging to the adjacent ground surface. While draining activities are occurring, the area is monitored by facility personnel.

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2. Drainage for the facility is depicted on Figure 1. A portion of the facility is adjacent to the Chicago Sanitary and Ship Canal. An earthen seawall berm has been constructed along the canal, which prevents stormwater runoff from the facility from entering the canal. Stormwater from the remainder of the facility, except the Metal Recovery Plant (MRP) located in the Nonferrous Yard, is designed to enter into various catch basins that are part of the Metropolitan Water Reclamation District of Greater Chicago's combined sewer system. Drainage from the MRP operations also is designed to flow into catch basins, which is then conveyed through underground piping to an underground stormwater detention system with an approximate 30,000 cubic feet of storage capacity. Based on the presence of the earthen seawall berm and the designed Facility drainage, there is no direct or indirect discharge of stormwater to the canal or waters of the State.
3. Surface grade in and around operational areas that contain tanks with non-fixed containment (e.g., mobile equipment) is maintained so that the highest potential release quantity is captured in the immediate area of the equipment.
4. Containment structures and/or facility grading are maintained to prevent the entry of a release of oil to navigable waters or storm sewers. In the event implemented controls fail, emergency diversionary practices are to be implemented. Emergency diversionary practices consist of temporarily diverting flow of petroleum through the use of oil booms, temporary soil berms, catch basin covers, and/or other oil absorbent materials to prevent flow from entering into drainage areas.
5. At present, there is no treatment of drainage waters from secondary containment structures other than discharging those waters through oil-absorbent dewatering bags.

3.3 Storage Tanks

[40 CFR §112.8(c)]

1. Fixed ASTs are of steel construction and are compatible with the material stored.
2. Portable ASTs, are either constructed of steel or steel reinforced polyethylene (totes) and compatible with the material stored.

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3. Secondary containment structures are constructed to hold at least the contents of the largest tank in addition to an amount for rainwater accumulations (i.e., freeboard) typical of the geographic region in which the facility is located or to an amount, which the containment structure is typically exposed. A summary of containment structures and whether the containment structure is subject to rainwater accumulation for each tank is provided on Table 2.

4. Only authorized personnel are to open secondary containment drainage valves.

Accumulated stormwater is to be inspected for the presence of a sheen or oil prior to releasing the contents to the ground surface to assure the run-off rainwater is compliant with applicable water quality standards. If oil is observed within the containment or sheen is apparent on the surface of the accumulated rainwater, the drainage waters are to be run through an oil-absorbent dewatering bag while discharging to the ground surface. During pumping or draining activities, the area is to be monitored by the above named authorized personnel or other personnel as designated by the authorized personnel. Drainage of such areas is to be recorded on the "Dike Drainage Inspection and Record" included in Appendix C. Records of drainage events will be maintained in Appendix C for a minimum of three years.

5. There are no regulated underground storage tanks (USTs) located on the facility. Underground triple basins are present at the facility and underground stormwater storage vessels are present near the metal turnings storage pad and the MRP.
6. There are no partially buried storage tanks located at the facility.
7. Refer to Section 3.6 for tank testing and inspection procedures.
8. The ASTs are not equipped with internal heating coils.
9. Due to the volume of the storage system, past experience, and the nature of the storage operations, automatic signals and reading devices are not practicable. Visual level indicators and the comparison of level readings taken during each loading/unloading operation combined with precautions such as mandatory supervision during loading/unloading operations are sufficient to ensure spill prevention within practical limits. Contracted fueling services are equipped with automatic shut-off dispensers. If future experience shows these precautions to be

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inadequate in minimizing spills resulting from overfilling, additional fail-safe engineered installations shall be installed.

Visual gauges used as liquid-level indicators and automatic shutoff dispensers are periodically inspected, cleaned, and maintained in working order to ensure accurate performance.

10. There are no known facility process effluent discharges. Stormwater is contained on the facility or discharged to the MWRDGC's combined sewer system. No discharge of stormwater to navigable waters occurs.
11. Visible discharges which result in a loss of oil from a container, including but not limited to its seams, gaskets, piping, pumps, valves, rivets, and bolts, will be promptly corrected upon discovery. Any accumulations of oil as a result of these discharges will be promptly removed and cleaned up.
12. Mobile and portable equipment and tanks/drums are positioned and stored so as to prevent spilled oil from reaching navigable waters. Due to the limited potential for a release from mobile equipment reaching navigable waters as a result of limited storage capacity, surface topography, distance to navigable waters, earthen seawall berm, and combined sanitary sewers, secondary containment is to be furnished through absorbent dikes, catch basin covers, booms or other emergency diversionary practices.

3.4 Facility Transfer Operations

[40 CFR §112.8(d)]

1. There are no buried piping installations containing petroleum products at the facility.
2. No petroleum piping warranting capping or blank flanging is present at the facility.
3. Hoses and/or piping supports from reservoirs to processing equipment (baler and shredder) are adequately designed to minimize abrasion and corrosion and to allow for expansion and contraction to the extent possible and taking into account the nature of facility operations.

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4. Conditions of valves, pipes, and/or hoses are to be visually assessed prior to operation.
5. No aboveground piping is exposed in areas where vehicular traffic will endanger its integrity.

3.5 Truck Loading/Unloading

[40 CFR §112.7(h)]

1. Contract service agreements or other arrangements established with contracted service providers unloading or loading fuel or oil at the facility are to include provisions to assure contractors conform to the requirements established by the Federal Department of Transportation, as well as regulations promulgated by the USEPA and the State of Illinois.
2. Truck loading and unloading takes place in areas a substantial distance away from navigable waters. A qualified person (i.e., someone who is aware of the procedure, has an unobstructed view of the transfer activity, and is within 25 feet of the vehicle during the unloading/loading process) is to attend the vehicle during the extent of loading/unloading operations. To prevent and control spills while loading and unloading tank trucks, the following steps are to be taken:
 - Turn engine off;
 - Set hand brake (if applicable); and
 - Remove connections and tighten valves before vehicle departure.
3. A physical barrier (i.e., wheel chocks) will be used when loading/unloading from a mobile refueler to prevent vehicle departure before complete disconnect of transfer hoses.
4. Prior to entering and departing the facility, contracted service providers and facility fuel truck performing loading/unloading services at facility tanks are to be responsible for ensuring that outlets of tank trucks are secure and for examining such outlets for security and leakage.

3.6 Inspections and Testing

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[40 CFR §112.7(e)]

To fulfill the requirements of oil spill control, oil storage and use areas are visually examined and inspected. Inspections include daily examinations and monthly documentation of processing and material handling equipment prior to operation, along with annual inspections to assure compliance with SPCC Plan requirements. Annual inspection of oil storage areas also are conducted. Observations of adverse conditions are to be promptly corrected.

3.6.1 Daily Operational Examinations / Monthly Documentation

- Tanks, reservoirs, and containment structures are to be observed for signs of deterioration, leaks, accumulation of oil or water inside containment structures, or stained or discolored surfaces in the area prior to daily use as part of preventive maintenance and daily plant inspections procedures.
- Conditions of valves, pipes, dispensers and/or hoses are to be visually assessed prior to operation as part of preventive maintenance and daily plant inspections procedures.
- Observations of adverse conditions are to be promptly corrected. Any unusual operating conditions are to be immediately investigated and resolved or reported to management prior to continuing operation.
- The observations noted in this section will be documented monthly on the Monthly Tank Inspection Record included in Appendix D. These records are to be maintained with the SPCC for three years after the completion date of the inspection.

3.6.2 Annual Inspections

The annual inspection is to be made under the supervision of the Environmental Manager or other authorized personnel as designated by the Environmental Manager.

- Tanks, reservoirs, and containment structures are to be visually inspected for signs of deterioration. The following components are to be inspected to assure integrity of the tank: tank walls, welded seams, gaskets, rivets, bolts, valves, hoses or pipes, dispensers, supports or foundations, vent pipes, and other related equipment.

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- Surrounding security measures, including lighting and fences, are to be inspected. Inspection shall include an evaluation of the adequacy of available lighting and security measures.
- Visual gauges used as liquid-level indicators are to be inspected, cleaned, and maintained in working order to assure accurate performance.
- Spill kits are to be inventoried and replenished, if necessary.
- Conditions observed during annual inspections are to be recorded on the “Annual Tank Inspection Form” included in Appendix E.
- Necessary repairs and improvements to tanks, containment structures, surrounding areas, or other equipment necessary to implement the SPCC Plan are to be noted on the “Annual Tank Inspection Form” included in Appendix E. As repairs or improvements are completed, they are to be noted in the appropriate column on the “Annual Tank Inspection Form.” Supporting documentation, if necessary, is to be attached to the “Tank Inspection Form.”
- The records of these annual inspections are to be maintained with the SPCC Plan (Appendix E) for three years after the completion date of the inspection.

3.7 Training

[40 CFR §112.7(f)]

Training is to be held to acquaint facility personnel and existing and new oil-handling employees with the SPCC Plan and with the requirements outlined within the SPCC Plan. Training is to be conducted during initial job training and on-the-job training, as described in Section 3.7.1 and as needed. In addition, “Discharge Prevention Briefings,” as described in Section 3.7.2 are to be conducted.

The persons accountable for discharge prevention and reporting to company management are the General Manager and Environmental Manager.

3.7.1 Initial Employee Training

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The following topics are to be presented to existing employees upon implementation of the SPCC Plan and to new hires during initial job training:

- Overview of SPCC Plan and applicable pollution control laws, rules, and regulations (Introduction)
- Proper storage and use locations of oil products
- Proper operation and maintenance of equipment to prevent discharge of oil
- Proper transfer, unloading and loading operations, (Section 3.4 and 3.5)
- Inspection procedures of equipment and secondary containment structures (Section 3.6)
- Containment drainage procedures and authorized individuals [Section 3.3(5)]
- Completion of Monthly Inspection Form, Annual Tank Inspection Form and Dike Drainage Inspection and Record (for authorized supervisory personnel only)
- Spill Response Procedures and Notification Sequence (Section 4.0)
- Location of equipment to carry out emergency spill response (i.e., spill kits)

3.7.2 Discharge Prevention Briefings

“Discharge Prevention Briefings” are to be held for oil-handling employees within one-week after any of the following events occur at the facility:

- Changes or amendments of operational procedures or equipment that effect spill prevention, control, or response
- Changes in personnel responsible for spill prevention or response
- Uncontrolled or controlled release of oil
- Recently developed failures, precautionary measures or malfunctioning equipment

At least one “Discharge Prevention Briefing” is to be held each year regardless if any of the above events occur. The following topics are to be presented to oil-handling employees on an annual basis:

- Review SPCC Plan to assure adequate understanding
- Changes or amendments of operational procedures or equipment that effect spill prevention, control, or response, if any, that occurred that year

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- Changes in personnel responsible for spill prevention or response, if any, that occurred that year
- Discharges that occurred that year, if any, and discussion of response procedures performed
- Failures, precautionary measures, and malfunctioning equipment, if any, that occurred that year

3.7.3 Record-Keeping Requirements

Records containing the following information are to be prepared to document each training and Discharge Prevention Briefing event: date of training session, names of attendees, and topics discussed. Training records are to be maintained for a period of three years. A copy of the training documentation form and records of training are contained in Appendix F.

3.8 Security

[40 CFR §112.7(g)]

1. The outer perimeter of the facility is fenced, except along that portion of the property bounded by the Chicago Sanitary and Ship Canal and at the Paulina Street entrance. A guard at the Paulina Street entrance is stationed during non-operational hours, or approximately 12 hours per day. Fixed tanks, portable tanks and drum storage areas inside buildings are secured when the buildings are not in operation by locking access doors. Night security patrol also is performed at the facility.
2. Valves connected to storage tanks and reservoirs that would permit direct outward flow of oil from the systems are to be secured in the closed position when in a non-operating or standby status. Only authorized personnel are permitted to open valves and drains on tanks and reservoirs, unless an emergency situation exists.
3. The starters on pumps and other equipment are accessible only to authorized personnel and are to be maintained in the "OFF" position when the pumps and equipment are in a non-operating or standby status.
4. When not in service or when in standby service for greater than one year, piping associated with reservoirs and tanks are to be securely capped regardless of whether the reservoir or tank was emptied of liquid content.

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5. Facility lighting both inside and outside is to be sufficiently maintained for discovery of spills, for response to spills, and as a deterrent for spills occurring through acts of vandalism during hours of darkness.

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4.0 SPILL RESPONSE PLAN

[40 CFR §112.7(a) (3)(iv)]

[40 CFR §112.7(a) (5)]

4.1 Spill Response Coordinator/Emergency Contacts

An individual is to be designated as Spill Response Coordinator (SRC). The name and telephone numbers of the Spill Response Coordinator is maintained in Table 3 on page 28 and is posted in the facility Office. The SRC and alternate SRC are to be provided the required authority and training to quickly and efficiently implement spill response measures, to provide spill prevention and response training to operating personnel, and to report directly to facility owners and operators.

In event of a spill, the SRC or alternative SRC is to perform the following tasks:

- Obtain information concerning the spill from the person reporting the spill. This information should include the person's name, the location of the spill, type of material spilled, estimate of the quantity spilled, and the time of occurrence.
- Contact the appropriate regulatory agencies as discussed in Section 4.4.
- Ensure that any threatened sewers, storm drains, conveyance to drainage ditches, if present near the spill, are sealed, or spill is prevented from entering such structures.
- Ensure that diversionary devices are constructed around the spill, as necessary, to limit the affected area.
- Ensure that action is taken to stop further spillage from the unit.
- If appropriate for safety and manpower, request temporary curtailment of operations, as required.
- Obtain material, equipment, or personnel necessary to confine or limit the spill.
- Direct cleanup activities including proper disposal of generated refuse material.
- Ensure equipment/materials needed to respond to spills are replenished.
- Complete Spill Reporting Form on electronic incident management system as outlined in Section 4.4.2, if necessary.

Emergency contact numbers are listed below in Table 3.

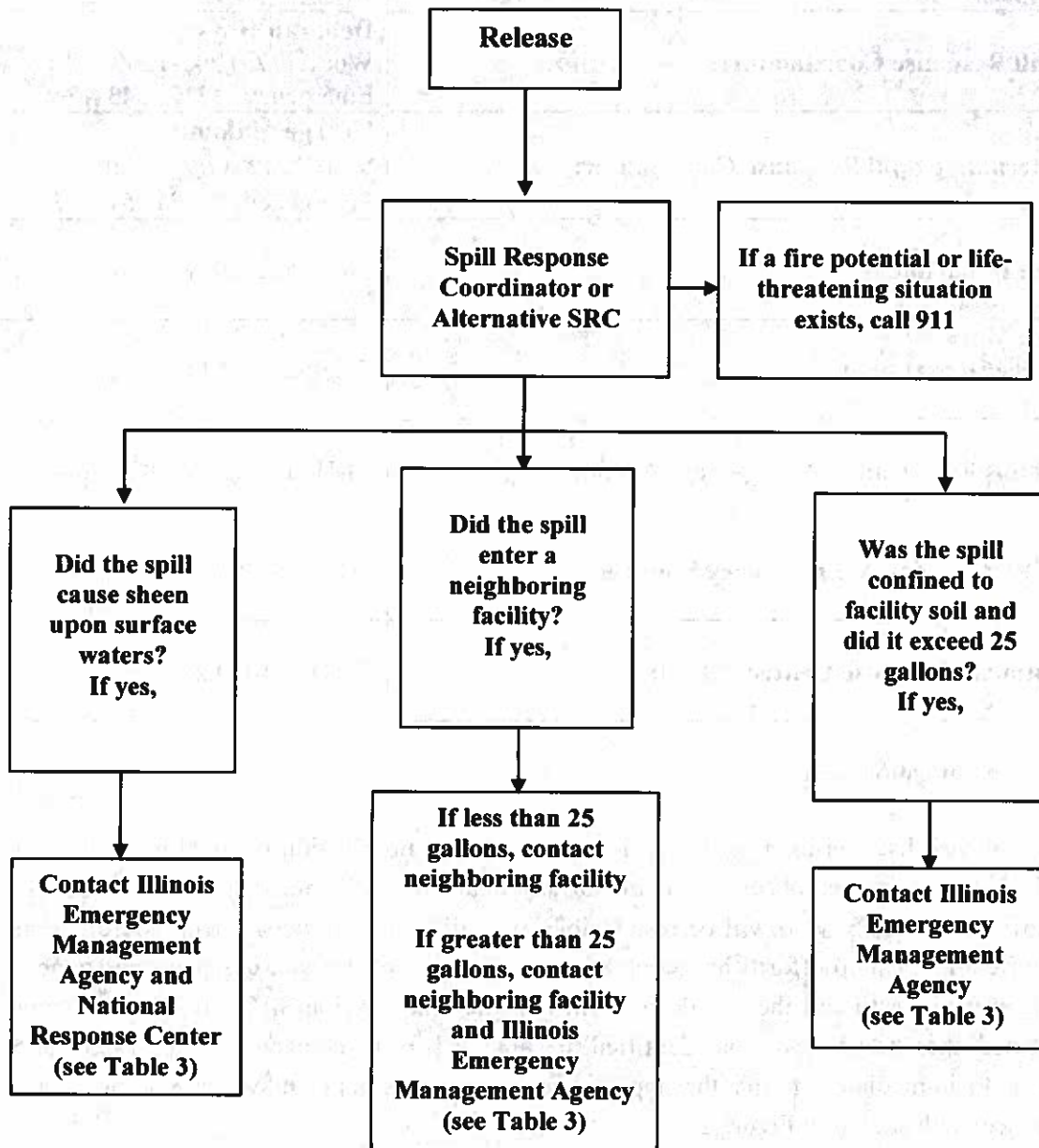
Table 3. Emergency Contacts

NAME	TELEPHONE
Spill Response Coordinator:	Deborah Hays Work: (773) 245-1200 Emergency: (312) 343-4549
Alternative Spill Response Coordinator:	George Malamis Work: (773) 650-6440 Emergency: (773) 551-0472
Fire Department:	Emergency: 911
Police Department:	Emergency: 911
Illinois Emergency Management Agency	24-Hours: (800) 782-7860
USEPA Region V Emergency Spill Line:	(312) 353-2318
National Response Center (NRC):	(800) 424-8802

4.2 Notification Sequence

An employee discovering a spill shall follow the proper notification procedures outlined in this section. Any employee observing a spill of any quantity shall immediately notify the SRC, as identified in Table 3, who will be responsible for calling the fire department, coordinating spill response and cleanup efforts, and contacting necessary agencies and company personnel. The decision whether to call the fire department is to be made by the SRC. If the SRC cannot be contacted, the alternate SRC, as identified in Table 3, is to be contacted. The SRC or alternate SRC is to immediately notify the appropriate agencies, as applicable (see Section 4.4). This sequence is illustrated in Figure 2.

Figure 2. Spill Response Notification Sequence



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4.3 Spill Response Procedures

[40 CFR §112.7(a) (3)(v)]

Actions to control, contain, remove, and cleanup spills are to begin immediately whenever an employee has reported an oil spill, or whenever a suspected release of oil is believed to have occurred. A release is suspected if:

- Sampling indicates a release occurred.
- Impacts are discovered in the surrounding area, such as evidence of petroleum products in soils, sewer and utility lines, drainage ditches, or nearby surface water.
- Unusual operating conditions exist, such as sudden loss of product from a tank, unexplained presence of water in a tank, or physical presence of petroleum products on site of unknown origin.

Available equipment and manpower at the facility's disposal are to be used as required to minimize the amount of oil discharged and to prevent it from entering any body of water.

Normal course of action for the discovery of a spill, as illustrated in Figure 3, is as follows:

(1) Assess the Situation:

Determine whether ignition sources or other safety issues exist. If a fire potential or life-threatening situation exists, evacuate the area and immediately notify the SRC, or alternate SRC in the absence of the SRC, who should contact the appropriate emergency personnel. **If a fire or life-threatening situation exists, the SRC (or alternate SRC) will contact local emergency response (911) and will await instruction from emergency crews—do not attempt to stop or contain the spill unless instructed by emergency crew to assist.**

If a fire potential or life-threatening situation does not exist, proceed to Step 2.

(2) Contain the Spill (See Appendix G):

Prevent discharges from reaching drainage or watercourses. Examine containment system, if applicable, for integrity. Contain localized spills with absorbent materials. Construct temporary berms or impoundment areas using booms or other absorbent materials where appropriate to divert spills away from waterways or

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inlets to waterways. If a release threatens to enter a waterway or inlet to a waterway, perform emergency procedures by using absorbent booms or construction of earthen berms to contain the release. Examples of containment methods including earth fill dams, straw barriers, and diverting booms are included in Appendix G.

(3) Stop the Flow:

Take measures (i.e., turn off pumps, close valves, etc.) to reduce or eliminate the flow.

(4) Report the Spill:

Verbal or written reports, if applicable, should be completed by the SRC and submitted to the appropriate agency as described in Section 4.4.

(5) Clean up the Spill:

For small spills, use enough absorbent to soak up the spilled liquid. If spilled liquid is flammable, use non-sparking shovels to prevent ignition. Scoop up spent absorbent and place in the proper waste container. Properly label waste container if material is flammable and/or combustible.

For large spills, contact:

Deborah Hays – SHEC Director, Midwest Region
Sims Metal Management
Work Number: (773) 650-695
Emergency Number: (312) 343-4549

(6) Decontaminate Equipment:

Wash all equipment such as pumps, hoses, and tools used in emergency response; collect and contain wash water.

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(7) Dispose of Material and Collected Wash Water Properly:

Contact the SRC to obtain procedures for characterizing, transporting, and disposing of generated solid, liquid, and/or sludge waste streams.

(8) Replenish Emergency Response Equipment:

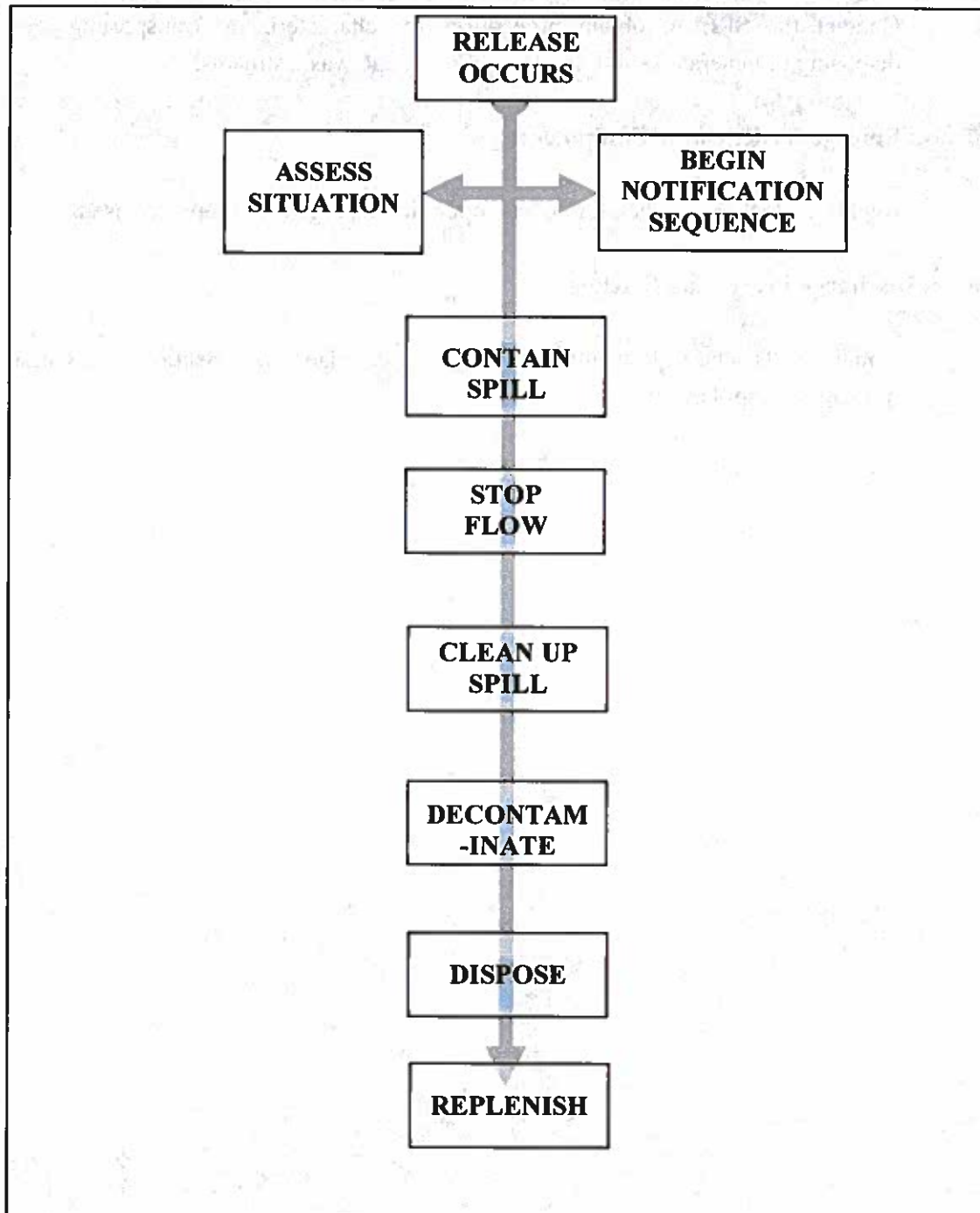
Repair, restock, and check for normal operation emergency equipment used.

(9) Conduct Discharge Prevention Briefing:

Conduct a “Discharge Prevention Briefing” in accordance with Section 3.7.2 within one-week of spill event.

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Figure 3. Spill Response Procedures



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4.4 Spill Reporting Procedures

4.4.1 Verbal Reporting Requirements

The occurrence of a spill may require the SRC or alternate SRC to call **any or all** of the agencies listed in this section. Notifications are to be documented by the SRC or alternate SRC. The SRC or alternate SRC should be prepared to supply the following information:

- Name and contact information
- Specific location of spill
- Time of the spill
- Identity of the material spilled
- Approximate quantity spilled
- Source of spill
- Cause and circumstance of the spill
- Existing or potential hazards
- Personal injuries or casualties, if any
- Name of body of water involved, or nearest body of water to the spill area
- Name of any response organization responding to the spill
- The list of agencies notified
- Corrective actions being taken and timetable to contain, control, and clean up spill

The following questions should be addressed to determine if any or all the agencies listed below need to be contacted.

1. Was the spill of petroleum confined to facility soil and did the quantity exceed 25 gallons?

If yes, report the spill as soon as possible following discovery to:

Illinois Emergency Management Agency (IEMA)/State Emergency Response Commission (SREC) at 800-782-7860.

IEMA may request that a written report of the spill incident be submitted, as discussed in Section 4.4.2.

Exception: Releases of materials that do not have reportable quantities, or releases less than 25 gallons from bulk storage containers which do not enter into navigable waters.

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2. Did the spill of any quantity threaten waters of the State or enter navigable water?

If yes, immediately notify:

- **National Response Center (NRC) – (800) 424-8802**
- **IEMA/SREC at 800-782-7860**

See Table 3 for additional telephone numbers. The NRC will relay required emergency information to the USEPA regional office, if necessary, although reporting individual should verify at the time of reporting to the NRC if the USEPA will be contacted or if the reporting individual should contact USEPA.

3. Did the spill enter soils outside the facility boundaries?

If the quantity released was less than 25 gallons, immediately notify the neighboring facility of the release.

If the quantity released was greater than 25 gallons, immediately notify the neighboring facility of the release and IEMA.

4.4.2 Written Reporting Requirements

1. Was reporting of the spill to IEMA required?

Fill out a *Spill Reporting Form* (Appendix H – Electronic Incident Management System).

If the release required verbal notification to IEMA, as discussed in Section 4.4.1, IEMA may request that a written report be submitted. IEMA will provide details in writing of what should be included in the written report during the time of release notification.

Retain a copy of the submitted report with the facility's SPCC and Stormwater Pollution Prevention Plan and make necessary updates to that plan and this SPCC Plan, if applicable.

2. Did the spill exceed 25 gallons of oil into navigable waters during a one-time event or is this the second spill event to have occurred in the last 12 months when more than 42 gallons was released [§112.4(a)]?

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If yes, this SPCC Plan and a written report must be sent to the Regional USEPA office within 60 days of the knowledge of the spill.

The written report is to contain the following information:

- Name of facility;
- Name(s) of the owner or operator of the facility;
- Location of the facility;
- Maximum storage or handling capacity of the facility and normal daily throughput;
- The corrective actions and/or countermeasures taken, including a description of equipment repairs and/or replacements;
- Descriptions of the facility, including maps, flow diagrams, and topographical maps;
- The cause(s) of such discharge, including a failure analysis of the system in which failure occurred;
- Additional preventive measures taken or contemplated to minimize the possibility of recurrence;
- Such other information as the Regional Administrator may reasonably require pertinent to the Plan or spill event.

Send the completed report to:

Regional Administrator
U.S. Environmental Protection Agency – Region V
77 West Jackson Boulevard
Chicago, Illinois 60604

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

5.0 SPCC PLAN REVIEW AND AMENDMENTS

5.1 SPCC Plan Review

[40 CFR §112.5(b)]

A review and evaluation of the SPCC Plan is to be conducted at least once every five (5) years. Evidence of these reviews is to be recorded on the “SPCC Plan Review” form included as Appendix I. Amendments to the SPCC Plan in response to these reviews are to be performed in accordance with Section 5.2 and 5.3 below.

5.2 SPCC Plan Amendments

[40 CFR §112.5(a)]

The SPCC Plan is to be amended in response to the review or whenever:

- A change in facility design, construction, operation, or maintenance occurs that affects the facility’s potential for discharge to navigable waters¹.
- Applicable regulations are revised.
- The Plan fails in an emergency release situation.
- The SRC and/or alternate SRC change.
- The agency requires changes to be implemented.

Amendments must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment. The revision number and date is to be updated on the revised pages. The updated pages are to be inserted in their proper place in the SPCC Plan and the obsolete pages are to be placed in Appendix J. Revisions to the SPCC Plan are to be logged in the “SPCC Plan Revision Log” included in Appendix J.

¹ Examples include commissioning or decommissioning containers; replacement, reconstruction, or relocation of container storage areas; construction or demolition that might alter secondary containment; changes of products; or revision of standard operation or maintenance procedures at a facility. An amendment made due to a change at the facility must be prepared within six months, and implemented as soon as possible, but not later than six months following preparation of the amendment [§112.5(a)].

SPILL PREVENTION CONTROL & COUNTERMEASURES PLAN

5.3 SPCC Amendment Requiring Professional Engineer Certification

[40 CFR §112.6 (b)(c)(d)]

The SPCC Plan, or discrete sections thereof, are to be certified by a Professional Engineer whenever:

- An amendment to a section that previously required the certification of a Professional Engineer is made
- An alternative measure, which provides equivalent environmental protection, is offered within the Plan
- An impracticality determination of secondary containment requirements are offered within the Plan
- A change in the facility which causes the facility to exceed 10,000 gallons in aggregate aboveground storage capacity
- Required by the State of Illinois as a result of a spill report

APPENDICES

- Appendix A. SPCC Federal and State Regulations**
- Appendix B. Certificate of Substantial Harm**
- Appendix C. Dike Drainage and Inspection Record**
- Appendix D. Monthly Inspection Form**
- Appendix E. Annual Tank Inspection Form**
- Appendix F. Training Documentation**
- Appendix G. Emergency Containment Methods**
- Appendix H. Spill Reporting Form**
- Appendix I. SPCC Plan Review Form**
- Appendix J. SPCC Plan Revision Log**

APPENDIX R. AIR DISPERSION MODELING ANALYSIS

AIR DISPERSION MODELING STUDY

Metal Management Midwest, Inc.
Paulina Facility / Chicago, IL

Prepared By:

TRINITY CONSULTANTS
1801 S Meyers Road
Suite 350
Oakbrook Terrace, IL 60181

October 2021

Project 211401.0065



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1. INTRODUCTION

Trinity Consultants Inc. (Trinity) has prepared this air dispersion modeling report to describe the analyses conducted as part of the Air Quality Impact Assessment for the Metal Management Midwest, Inc. (Metal Management) facility located at 2500 S. Paulina Street in Chicago (Paulina Facility). Adhering to 40 CFR 51, Appendix W, this report is designed to cover the methodology and analyses for Metal Managements Air Quality Impact Assessment as part of their Application for a Large Recycling Facility Permit.

1.1 Background

The City of Chicago issued the Rules for Large Recycling Facilities effective June 5, 2020. Existing facilities subject to the requirements of the Rules for Large Recycling Facilities are required to renew their City of Chicago permit every three years by submitting an application prior to permit expiration. Metal Management's current City of Chicago permit is set to expire in November 2021. As such, this air dispersion modeling report has been prepared as part of the Air Quality Impact Assessment being submitted alongside Metal Management's City of Chicago permit application.

The requirements for the air dispersion modeling study are described in Condition 3.9.21.1 of the Rules for Large Recycling Facilities. Namely, the air dispersion modeling study must evaluate PM₁₀ emissions for each point and fugitive source except for emissions from diesel on-road mobile sources which are not required to be included. Additionally, the air dispersion modeling study must evaluate the following HAPs in the modeling study: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium compounds.

Note that the results of this air dispersion modeling study were also used to determine monitor placement for the dust monitoring plan¹ required by Condition 3.9.21.2 of the Rules for Large Recycling Facilities.

¹ The dust monitoring plan is presented in a separate document.

2. PM₁₀ AIR QUALITY ANALYSIS

2.1 Dispersion Modeling Selection

The current U.S. EPA regulatory model, AERMOD (version 21112) was used as incorporated within Trinity's *BREEZE™ AERMOD Pro* software to calculate ground-level concentrations with the regulatory default parameters. Per Condition 3.9.21.2 of the Rules for Large Recycling Facilities, a 24-hour averaging period was used for PM₁₀ based on the federal and state ambient air quality standards. The following guidance documents were also considered in the modeling analysis:

- ▶ U.S. EPA's *Guideline on Air Quality Models* 40 CFR 51, Appendix W (Revised, January 17, 2017)
- ▶ U.S. EPA's *AERMOD Implementation Guide* (Revised April 2021);

2.2 Source Characterization

The air dispersion modeling study is used to determine locations of maximum predicted concentrations of PM₁₀. Emission sources quantified for the facility include the following: Hammermill Shredder, the Metals Recycling Plant (MRP), stock piles, torch cutting, guillotine shear, material handling, and stockpiles. PM₁₀ emission rates are based existing permit limits, AP-42 emission factors, and stack test results.

2.3 Building Downwash

The purpose of a building downwash analysis is to determine if the plume discharged from a stack will become caught in the turbulent wake of a building (or other structure), resulting in downwash of the plume. The downwash of the plume can result in elevated ground-level concentrations.

The Building Profile Input Program (BPIP) with Plume Rise Model Enhancements (PRIME) (version 04274) was used to determine the building downwash characteristics for each stack in 10-degree directional intervals. The PRIME version of BPIP features enhanced plume dispersion coefficients due to turbulent wake and reduced plume rise caused by a combination of the descending streamlines in the lee of the building and the increase entrainment in the wake. For PRIME downwash analyses, the building downwash data include the parameters listed below for various buildings located at the Paulina Facility. Note that buildings outside of the facility boundary were not considered in the model. Additionally, building downwash is only applicable to point sources.

- ▶ Building height,
- ▶ Building width,
- ▶ Building length,
- ▶ X-dimension building adjustment, and
- ▶ Y-dimension building adjustment.

2.4 Coordinate System

In all modeling input and output files, the locations of emission sources, structures, and receptors were represented in the UTM coordinate system. The UTM grid divides the world into coordinates that are measured in north meters (measured from the equator) and east meters (measured from the central meridian of a particular zone, which is set at 500 km). The center of the Paulina Facility is approximately UTM Zone 16, 444,525 m East, 4,633,086 m North. The base elevation of the facility is approximately 179 meters above sea level. All model objects will be defined in North American Datum of 1983 (NAD83).

2.5 Receptor Grid

Trinity used a variable-density grid in order to determine the impacts around the Paulina Facility. The following list describes the different density receptor grids used.

- ▶ Property line receptors with spacing of 25 meters
- ▶ 50 meter spacing grid extending approximately 1,000 meters from the facility center
- ▶ 100 meter spacing, from 1,000 meters to approximately 2,500 meters from the facility center

Metal Management is surrounded by fencing that restricts access to the facility along the property line. The fences cause the property line to serve as a boundary between the facility and its ambient air.² The ambient air boundary for the facility can be seen in Figure 2-1, denoted in purple.

2.6 Terrain Elevations

The terrain elevation for each receptor point was determined using USGS 1 arc-second National Elevation Dataset (NED) data. The data, obtained from the USGS, has terrain elevations at 30-meter intervals. The terrain height for each individual modeled receptor was determined by assigning the interpolated height from the digital terrain elevations surrounding each modeled receptor.

In addition, the AERMOD terrain processor, AERMAP (version 18081_64), was used to compute the hill height scales for each receptor. AERMAP searches all NED data points for the terrain height and location that has the greatest influence on each receptor to determine the hill height scale for that receptor. AERMOD then uses the hill height scale in order to select the correct critical dividing streamline and concentration algorithm for each receptor.

The elevations of the Metal Management sources and buildings involved in the modeling demonstration were also estimated based on the AERMAP processing described above.

² https://www.epa.gov/sites/production/files/2019-12/documents/revised_policy_on_exclusions_from_ambient_air.pdf

Figure 2-1. Facility Ambient Air Boundary



2.7 Meteorological Data

The meteorological data used for this modeling demonstration were obtained from the Chicago Midway International Airport, located in Chicago, IL. Illinois EPA provides raw meteorological data that is then processed for AERMOD using AERMET (version 21112). Due to significant missing data in 2017, 2012 to 2016 is the most recent consecutive five-year period of meteorological data without significantly missing data.

Chicago Midway International Airport is located approximately 6 miles to the southwest of the Paulina Facility, so in very close proximity to the site. Additionally, the terrain surrounding the two locations is similar, in that both are located in primarily urban/suburban areas. The Paulina Facility is approximately 3 miles west of Lake Michigan while Midway is approximately 8 miles west of Lake Michigan. Other meteorological stations that do have 1-minute data near the Paulina Facility are farther away from the site than Midway and are further inland, creating a potential difference in wind direction between the meteorological data and the site. Using these sites may not appropriately represent the meteorological conditions expected at the Paulina Facility, thus the Chicago Midway International Airport was considered the most representative station. One-minute wind data were processed using the AERMINUTE program and input to AERMET. Finally, the regulatory default ADJ_U* option was selected in AERMET in the meteorological data used for this analysis.

As shown in Table 2-1, surface data from the Chicago Midway International Airport are much greater than 90% complete (i.e., less than 10% missing) each year. The number of calm and missing hours from Chicago Midway International Airport are shown for each year in Table 2-1.

Table 2-1. Chicago Midway International Airport Meteorological Data Valid Hours

Year	Number of Calm Hours	Number of Missing Hours	Missing Hours (%)
2012	16	35	0.40%
2013	14	53	0.61%
2014	16	54	0.62%
2015	27	75	0.86%
2016	13	49	0.56%

Based on the high data capture rate and the representativeness, the Chicago Midway International Airport data was used in this modeling demonstration. The data station is 186.5 meters above sea level, and that elevation will be input as the PROFBASE elevation in AERMOD. The upper air data used in the processing is from Davenport, Iowa.

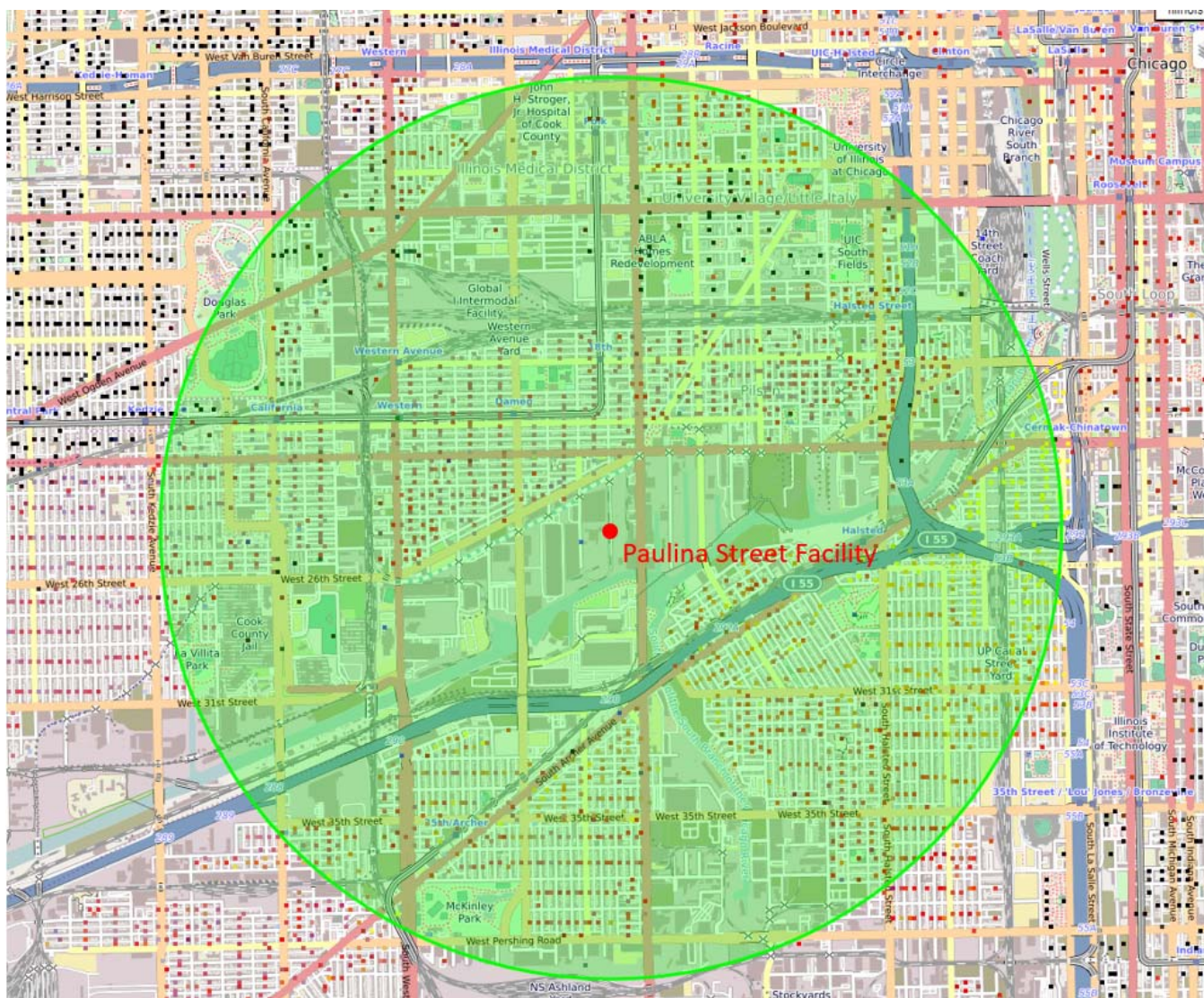
2.8 Land Use Determination

The AERMOD model includes the option to specify if the source is located in an urban area. This option modifies the dispersion for low-level emission sources to produce more realistic urban dispersion. 40 CFR Part 50 Appendix W provides two procedures to determine if rural or urban dispersion coefficients should be used for a source, land use classification and population density. The first procedure is based on land use classification. If the land use types I1, I2, C1, R2, and R3 accounting for 50 percent or more of the area within a three-kilometer radius surrounding the source, the urban option in AERMOD will be considered

appropriate for dispersion modeling. The second procedure to determine urban option appropriateness requires a population density within the three-kilometer radius to be greater than 750 people per square kilometer.

The Paulina Street facility is located in Chicago, Illinois. Population data from the 2010 census was compiled for the three-kilometer radius surrounding the Paulina Street facility using CensusViewer.³ Within the three-kilometer radius, the population is listed as 141,262. The area is approximately 28.27 km². This results in a population density of approximately 4,996 persons per square kilometer, which exceeds the 750 people per square mile. Figure 2-2 presents a map showing the three-kilometer area surrounding the Paulina Street facility.

Figure 2-2. Paulina Street Facility Population Map



³ <http://illinois.us.censusviewer.com/client>

2.9 Representation of Emission Sources

AERMOD allows for emission units to be represented as point, area, volume, or open pit sources, among other less commonly used source types. A continuous elevated source is most appropriately modeled as a point source. For point sources with unobstructed vertical releases, it is appropriate to use actual stack parameters (i.e., height, diameter, exhaust gas temperature, and gas exit velocity) in the modeling analyses. For releases from buildings that are not emitted from a well-defined stack or vent, area or volume sources are an appropriate representation of the release. The sources at the Paulina Facility include point, area, and volume sources. The Hammermill Shredder was modeled as one point source at the infeed chute and one area source at the under-mill oscillator (UMO). Emissions from sources released inside buildings, but for which emissions are not released from a particular vent are represented as volume sources in the model. Additionally, emissions from conveyor transfer operations and storage piles are represented as volume sources at the point of material transfer and storage pile location, respectively. Roadway emissions were modeled as area sources. To represent actual source operation, the Hammermill Shredder was modeled as operating 5 am – 2 pm daily. Likewise, roadways emissions were modeled as operating 4 am – 4 pm daily. Source data for the Paulina Facility sources is shown in Attachment B.

2.10 Criteria Pollutant Modeling Results

This section summarizes the results of the air dispersion modeling analysis. As noted above, the results of the air dispersion modeling analysis were also used to determine PM₁₀ monitor placement for the dust monitoring plan required by Condition 3.9.21.2 of Rules for Large Recycling Facilities. Table 2-2 below presents the predicted highest 6th high 24-hour average concentration over five (5) years from 2012 to 2016.

Table 2-2. 24-Hour PM₁₀ Modeling Predicted Impact

Pollutant	AEMOD Predicted Concentration (µg/m³)	Coordinates	
		East (m)	West (m)
PM ₁₀	145.69	444619.2	4633188.9

A contour plot is presented in Figure 2-3 below outlining the 24-hour PM₁₀ concentrations surrounding the Paulina Street Facility. Note that the current dispersion modeling does not show any modeled exceedances of the 24-hour PM₁₀ NAAQS standard. These modeling analysis results will be used as a guideline for PM₁₀ monitor placement in the dust monitoring plan.

Figure 2-3. 24-Hour PM₁₀ Model Results



3. HAZARDOUS AIR POLLUTANT MODELING ANALYSIS

Per Condition 3.9.21.1, this modeling report also addresses hazardous air pollutant (HAP) impacts for the following select metal HAPs: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium compounds. The metal HAP modeling is performed to determine if any additional RALs need to be established due to metal HAP modeled impacts exceeding relevant acute or chronic health screening limits or standards.

3.1 Modeling Approach

Metal HAP emission rates were sampled during September 20th, 2019 source testing at the Paulina Facility.⁴ The metal HAP emission rates obtained during sampling were used to scale the PM₁₀ emission rates for all emission units to their respective metal HAP emission rates. Dispersion models were then run for each metal HAP. Note that background concentrations for HAPs were not readily available and were thus not considered in this modeling analysis. Table 3-1 below identifies the relevant acute or chronic health screening standards/levels that were used to evaluate modeled metal HAP impacts. Note that health screening standards/levels were taken from either the NAAQS (lead), Wisconsin's Air Toxics Rule (NR 445), US EPA's Initial Risk Information System (IRIS), the Agency for Toxic Substances and Disease Registry (ATSDR), or the California Air Resources Board (CARB).

Table 3-1. Metal HAP Health Screening Standards/Levels

Metal HAP	Standard/Level (ug/m3)	Averaging Period	Source
Antimony	12.00	24-hr	NR 445
	0.30	Annual	ATSDR
Arsenic	0.00430 ^a	Annual	IRIS
Beryllium	0.02	Annual	NR 445
	0.00240 ^a	Annual	IRIS
Cadmium	0.01	Annual	ATSDR
	0.00180 ^a	Annual	IRIS
Chromium	12.00	24-hr	NR 445
Cobalt	0.48	24-hr	NR 445
	0.10	Annual	ATSDR
Lead	0.15	3-Month Rolling	NAAQS
Manganese	4.80	24-hr	NR 445
	0.30	Annual	ATSDR
Nickel	0.09	Annual	ATSDR
	0.00026 ^a	Annual	CARB
Selenium	4.80	24-hr	NR 445

^a IRIS and CARB standards are Inhalation Unit Risk factors with units (ug/m³)⁻¹

⁴ Source testing completed pursuant to US EPA Clean Air Act Administrative Consent Order No. CAA-05-2019-0006 (12/2018).

3.2 Lead Modeling Results

AERMOD post files were prepared and processed using leadpost.exe published by US EPA. Leadpost calculates rolling three-month average lead concentrations for comparison against the NAAQS. Table 3-2 below provides the predicted impacts based on the lead modeling performed as described above.

Table 3-2. Lead Predicted Impacts

Metal HAP	Maximum 3-Month Rolling Average Period	Predicted Monthly Average ($\mu\text{g}/\text{m}^3$)	Predicted Maximum 3-Month Rolling Average ($\mu\text{g}/\text{m}^3$)	Pb NAAQS Standard (3-Month Rolling Avg) ($\mu\text{g}/\text{m}^3$)	Predicted Impact Meets Standard (Y/N)?
Lead	November 2015	0.0104			
	December 2015	0.0089	0.0092	0.15	Yes
	January 2016	0.0084			

As shown above, the predicted impacts for lead are well below the lead NAAQS standard.

3.3 Other Metal HAP Modeling Results

Table 3-3 below provides the predicted impacts based on the dispersion modeling for the various metal HAPs.

Table 3-3. Other Metal HAP Predicted Impacts

Metal HAP	Averaging Period	Year	Predicted Impact ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	Comparative Level ($\mu\text{g}/\text{m}^3$)	Predicted Impact Meets Comparative Level (Y/N)?
Antimony	24-hr	2012	0.00289	0.00387	12.00 (NR 445)	Yes
		2013	0.00387			
		2014	0.00319			
		2015	0.00377			
		2016	0.00362			
	Annual	2012	0.00050	0.00055	0.30 (ATSDR)	Yes
		2013	0.00054			
		2014	0.00053			
		2015	0.00055			
		2016	0.00049			
Arsenic	Annual	2012	0.00045	Unit Risk Factor 0.00430	1.00E-05 (IRIS)	Yes
		2013	0.00048			
		2014	0.00048			

Metal HAP	Averaging Period	Year	Predicted Impact (µg/m³)	Maximum Predicted Impact (µg/m³)	Comparative Level (µg/m³)	Predicted Impact Meets Comparative Level (Y/N)?
		2015	0.00050	Inhalation Impact ^a 2.15E-06		
		2016	0.00044			
Beryllium	Annual	2012	0.00002	0.00003	0.02 (NR 445)	Yes
		2013	0.00003			
		2014	0.00003	Unit Risk Factor 0.00240	1.00E-05 (IRIS)	Yes
		2015	0.00003	Inhalation Impact ^a 7.20E-08		
		2016	0.00002			
Cadmium	Annual	2012	0.00018	0.00023	0.01 (ATSDR)	Yes
		2013	0.00019			
		2014	0.00019	Unit Risk Factor 0.00180	1.00E-05 (IRIS)	Yes
		2015	0.00020	Inhalation Impact ^a 3.60E-07		
		2016	0.00017			
Chromium	24-hr	2012	0.00863	0.01153	12.00 (NR 445)	Yes
		2013	0.01153			
		2014	0.00951			
		2015	0.01125			
		2016	0.01078			
Cobalt	24-hr	2012	0.00124	0.00166	0.48 (NR 445)	Yes
		2013	0.00166			
		2014	0.00137			
		2015	0.00162			
		2016	0.00155			
	Annual	2012	0.00021	0.00024	0.10 (ATSDR)	Yes
		2013	0.00023			
		2014	0.00023			
		2015	0.00024			
		2016	0.00021			

Metal HAP	Averaging Period	Year	Predicted Impact ($\mu\text{g}/\text{m}^3$)	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	Comparative Level ($\mu\text{g}/\text{m}^3$)	Predicted Impact Meets Comparative Level (Y/N)?
Manganese	24-hr	2012	0.02761	0.03692	4.80 (NR 445)	Yes
		2013	0.03692			
		2014	0.03043			
		2015	0.03601			
		2016	0.03451			
	Annual	2012	0.00474	0.00526	0.30 (ATSDR)	Yes
		2013	0.00513			
		2014	0.00509			
		2015	0.00526			
		2016	0.00464			
Nickel	Annual	2012	0.00133	0.00170	0.09 (ATSDR)	Yes
		2013	0.00143			
		2014	0.00142	Unit Risk Factor 0.00026 Inhalation Impact ^a 3.82E-07	1.00E-05 (CARB)	Yes
		2015	0.00147			
		2016	0.00130			
Selenium	24-hr	2012	0.00136	0.00182	4.80 (NR 445)	Yes
		2013	0.00182			
		2014	0.00150			
		2015	0.00178			
		2016	0.00170			

^a For IRIS or CARB unit risk impacts, maximum predicted ambient impact is multiplied by the Unit Risk Factor and compared against a unit risk of 1×10^{-5} . This is consistent with the Alternative Method of Compliance specified in NR 445.08(3) for hazardous air contaminants with unit risk factors established by either EPA or CARB.

As shown in Table 3-3, the predicted impacts for the metal HAPs (other than Lead addressed in Section 3.2) are less than the health screening standards detailed in Table 3-1.

ATTACHMENT A. MODELING FILES

Model files will be submitted to the City of Chicago electronically via flash drive.

ATTACHMENT B. MODELED EMISSION SOURCE INVENTORY

**Attachment Table B-1. Point Source Parameters and Emission Rates for Metal Management
Emission Units**

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM ₁₀ Emission Rate (g/s)	Stack Height (m)	Stack Temp (K)	Stack Velocity (m/s)	Stack Diameter (m)
SHREDTOP	444577.5	4633181.2	179.41	0.7507	7.62	298	3.048	3.15

**Attachment Table B-2. Area Source Parameters and Emission Rates for Metal Management
Emission Units**

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM ₁₀ Emission Rate (g/s/m ²)	Release Height (m)	Initial Vertical Dimension (m)
ROAD1	444534.3	4633411.6	179.71	1.45E-05	3.50	2.37
ROAD2	444568.7	4633392.2	179.64	1.45E-05	3.50	2.37
ROAD3	444568.7	4633392.2	179.64	1.45E-05	3.50	2.37
ROAD4	444588.7	4633359.9	179.56	1.45E-05	3.50	2.37
ROAD5	444582.9	4633363.8	179.62	1.45E-05	3.50	2.37
ROAD6	444593.6	4633277.2	179.44	1.45E-05	3.50	2.37
ROAD7	444592.1	4633284.3	179.42	1.45E-05	3.50	2.37
ROAD8	444608.4	4633235.4	179.51	1.45E-05	3.50	2.37
ROAD9	444608.4	4633236.6	179.51	1.45E-05	3.50	2.37
ROAD10	444610.6	4633076.4	179.48	1.45E-05	3.50	2.37
ROAD11	444610.6	4633076.4	179.48	1.45E-05	3.50	2.37
ROAD12	444546.5	4633076.6	179.24	1.45E-05	3.50	2.37
ROAD13	444546.5	4633067.6	179.21	1.45E-05	3.50	2.37
ROAD14	444542.6	4633262.3	179.33	1.45E-05	3.50	2.37
ROAD15	444533.6	4633262.1	179.35	1.45E-05	3.50	2.37
ROAD16	444550.6	4633286.2	179.42	1.45E-05	3.50	2.37
ROAD17	444550.6	4633286.2	179.42	1.45E-05	3.50	2.37
ROAD18	444550.4	4633313.7	179.41	1.45E-05	3.50	2.37
ROAD19	444550.4	4633313.7	179.41	1.45E-05	3.50	2.37
ROAD20	444530.8	4633327.2	179.52	1.45E-05	3.50	2.37
ROAD21	444517.0	4633116.6	179.21	1.45E-05	3.50	2.37
ROAD22	444519.2	4632911.5	178.76	1.45E-05	3.50	2.37
ROAD23	444472.0	4632912.7	178.71	1.45E-05	3.50	2.37
ROAD24	444471.8	4632903.7	178.72	1.45E-05	3.50	2.37
ROAD25	444472.7	4633011.7	178.96	1.45E-05	3.50	2.37
ROAD26	444463.7	4633011.8	178.91	1.45E-05	3.50	2.37
ROAD27	444514.5	4633038.7	179.10	1.45E-05	3.50	2.37
ROAD28	444520.0	4632828.1	178.41	1.45E-05	3.50	2.37
ROAD29	444520.2	4632819.1	178.33	1.45E-05	3.50	2.37
ROAD30	444484.6	4632818.4	178.42	1.45E-05	3.50	2.37
ROAD31	444484.6	4632818.4	178.42	1.45E-05	3.50	2.37
ROAD32	444265.6	4632708.3	178.31	1.45E-05	3.50	2.37
ROAD33	444257.3	4632704.9	178.31	1.45E-05	3.50	2.37
ROAD34	444250.2	4632745.6	178.42	1.45E-05	3.50	2.37
ROAD35	444241.9	4632742.1	178.43	1.45E-05	3.50	2.37

**Attachment Table B-2. Area Source Parameters and Emission Rates for Metal Management
Emission Units (Continued)**

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM₁₀ Emission Rate (g/s/m²)	Release Height (m)	Initial Vertical Dimension (m)
ROAD36	444314.7	4632769.6	178.41	1.45E-05	3.50	2.37
ROAD37	444311.5	4632778.0	178.43	1.45E-05	3.50	2.37
ROAD38	444349.5	4632754.4	178.32	1.45E-05	3.50	2.37
SHREDBOT	444577.5	4633172.8	179.41	5.56E-02	1.83	0.00
TRCHCUT	444439.5	4632836.3	178.50	4.04E-07	0.46	0.21

Attachment Table B-3. Shredder Volume Source Parameters and Emission Rates for Metal Management Emission Units

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM₁₀ Emission Rate (g/s)	Release Height (m)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
SC1	444577.5	4633181.3	179.41	5.80E-02	6.86	0.64	1.77
SC2	444578.1	4633172.3	179.41	2.50E-03	0.61	0.35	0.57
SC3	444578.2	4633159.5	179.41	2.50E-03	4.57	0.35	0.28
SC4	444578.4	4633151.4	179.41	2.50E-03	6.32	0.35	0.39
SC5	444578.7	4633139.8	179.41	2.50E-03	10.52	0.35	0.35
SC6	444597.7	4633131.8	179.52	1.10E-03	3.81	0.21	3.54
SC7	444586.6	4633132.8	179.45	1.10E-03	7.77	0.21	1.63
SC8	444578.8	4633129.5	179.41	2.50E-03	7.92	0.35	0.85
SH9	444581.2	4633104.0	179.41	1.10E-03	3.66	0.35	0.14
SH10	444579.8	4633103.9	179.41	2.50E-03	3.66	0.28	0.14
SHCYCL	444574.3	4633126.6	179.42	2.50E-03	12.65	0.78	2.62
SHBLOAD	444579.7	4633095.8	179.41	2.50E-03	3.51	0.28	0.50
SHSTACK	444563.0	4633087.3	179.33	2.50E-03	3.81	0.25	3.54

Attachment Table B-4. MRP Volume Source Parameters and Emission Rates for Metal Management Emission Units

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM ₁₀ Emission Rate (g/s)	Release Height (m)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
MRPE01	444507.7	4633020.9	179.01	5.07E-03	6.58	0.64	0.58
MRPE02	444500.4	4633005.7	178.99	5.51E-02	11.75	0.43	1.03
MRPE03	444482.8	4632998.3	178.91	1.93E-02	12.95	0.74	1.30
MRPBLDG1	444483.4	4632975.3	178.92	2.95E-03	10.62	1.86	2.58
MRPBLDG2	444497.1	4632953.2	178.92	5.41E-03	9.12	4.42	1.88
MRPBLDG3	444479.4	4632937.7	178.81	3.80E-04	7.75	3.14	1.24
MRPTP1	444507.6	4633015.8	179.01	6.61E-03	1.37	0.28	0.35
MRPTP2	444507.5	4633006.3	179.00	6.61E-03	10.97	0.28	0.35
MRPTP3	444501.2	4633006.8	179.00	2.32E-03	8.69	0.28	0.67
MRPTP4	444504.4	4633005.1	179.00	3.64E-03	6.48	0.28	0.74
MRPTP5	444510.5	4633005.0	179.01	6.60E-04	6.48	0.28	0.74
MRPTP6	444510.7	4632978.4	178.91	6.40E-04	4.04	0.28	0.64
MRPTP7	444510.7	4632975.8	178.91	2.97E-03	4.57	0.28	0.79
MRPTP8	444510.7	4632953.8	178.92	3.61E-03	3.35	0.28	0.71
MRPTP9	444510.7	4632951.3	178.91	5.30E-04	3.35	0.28	0.71
MRPTP10	444510.7	4632936.4	178.83	4.16E-03	2.44	0.28	2.27
MRPTP11	444483.0	4633005.7	178.93	2.32E-03	12.28	0.28	0.57
MRPTP12	444482.8	4632995.2	178.91	2.32E-03	13.72	0.28	0.43
MRPTP13	444482.6	4633001.9	178.91	9.30E-04	9.14	0.28	0.28
MRPTP14	444482.6	4633001.9	178.91	5.80E-04	10.41	0.28	0.30
MRPTP15	444482.6	4633001.1	178.91	8.10E-04	8.47	0.28	0.71
MRPTP20	444510.7	4632970.5	178.91	5.20E-04	3.90	0.28	0.31
MRPTP23	444488.2	4632964.4	178.92	2.83E-06	1.07	0.28	0.99
MRPTP26	444491.6	4632968.9	178.91	8.10E-04	2.82	0.28	0.46
MRPTP27	444488.2	4632970.9	178.92	8.10E-04	2.67	0.28	0.39
MRPTP28	444491.4	4633000.6	178.94	9.30E-04	7.07	0.28	0.58
MRPTP29	444497.6	4633001.1	178.96	5.80E-04	7.79	0.28	0.84
MRPTP30	444491.4	4632983.2	178.91	9.30E-04	10.67	0.28	0.35
MRPTP31	444497.6	4632983.2	178.91	5.80E-04	10.67	0.28	0.35
MRPTP32	444503.8	4632983.2	178.91	3.64E-03	10.67	0.28	0.35
MRPTP33	444491.4	4632983.2	178.91	4.72E-05	4.69	0.28	0.58
MRPTP34	444497.6	4632983.2	178.91	4.72E-05	4.69	0.28	0.58
MRPTP35	444503.8	4632983.2	178.91	9.45E-05	4.69	0.28	0.58
MRPTP36	444478.0	4632981.6	178.91	1.90E-04	1.71	0.28	1.59
MRPTP37	444491.3	4632975.7	178.91	5.30E-04	5.68	0.28	0.12
MRPTP38	444497.8	4632975.7	178.91	3.20E-04	5.68	0.28	0.12

Attachment Table B-4. MRP Volume Source Parameters and Emission Rates for Metal Management Emission Units (Continued)

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM₁₀ Emission Rate (g/s)	Release Height (m)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
MRPTP39	444504.2	4632975.7	178.91	2.13E-03	5.68	0.28	0.12
MRPTP40	444491.4	4632982.1	178.91	3.50E-04	4.19	0.28	0.82
MRPTP41	444497.6	4632982.1	178.91	2.70E-04	4.19	0.28	0.82
MRPTP42	444503.8	4632982.1	178.91	1.42E-03	4.19	0.28	0.82
MRPTP50	444483.1	4632954.6	178.89	1.90E-04	3.35	0.28	3.12
MRPTP54	444483.1	4632956.0	178.89	1.90E-04	1.75	0.28	1.63
MRPTP60	444504.3	4632950.0	178.91	6.80E-04	2.13	0.28	0.28
MRPTP64	444500.2	4632940.6	178.86	1.42E-06	2.82	0.28	0.46
MRPTP65	444504.0	4632933.7	178.82	1.24E-03	3.93	0.28	0.65
MRPTP70	444478.3	4632945.7	178.82	1.90E-04	1.52	0.28	1.42
MRPTP71	444474.8	4632945.7	178.83	1.90E-04	1.52	0.28	1.42
MRPNFST1	444459.0	4633006.6	178.91	2.50E-04	4.57	3.07	4.25
MRPWFST1	444482.1	4632884.9	178.63	1.58E-03	4.57	5.02	4.25
MRPNFST2	444458.3	4632993.5	178.91	2.50E-04	4.57	2.50	4.25
MRPNFST3	444458.3	4632980.3	178.87	2.50E-04	4.57	2.81	4.25
MRPNFST4	444459.1	4632966.2	178.89	2.50E-04	4.57	2.66	4.25
MRPNFST5	444458.5	4632952.4	178.83	2.50E-04	4.57	2.77	4.25
MRPNFLD1	444462.5	4633006.6	178.91	3.07E-03	4.57	0.71	4.25
MRPNFLD2	444462.5	4632993.3	178.91	3.07E-03	4.57	0.71	4.25
MRPNFLD3	444462.7	4632980.6	178.88	3.07E-03	4.57	0.71	4.25
MRPNFLD4	444462.7	4632965.5	178.91	3.07E-03	4.57	0.71	4.25
MRPNFLD5	444462.3	4632952.1	178.87	3.07E-03	4.57	0.71	4.25
MRPWFLD1	444484.9	4632901.3	178.72	3.07E-03	4.57	0.71	4.25

Attachment Table B-5. Other Volume Source Parameters and Emission Rates for Metal Management Emission Units

Model ID	UTM East (m)	UTM North (m)	Elevation (m)	24-Hour PM₁₀ Emission Rate (g/s)	Release Height (m)	Initial Lateral Dimension (m)	Initial Vertical Dimension (m)
BONFIG	444304.8	4632753.2	178.41	3.46E-03	2.71	0.71	2.52

APPENDIX S. DUST MONITORING PLAN

DUST MONITORING PLAN

Fugitive Dust PM₁₀ and Meteorological Monitoring Network

Metal Management Midwest, Inc.
Paulina Facility / Chicago, IL

Prepared By:

TRINITY CONSULTANTS

4525 South Wasatch Blvd.
Suite 200
Salt Lake City, Utah 84124
801-661-7591

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Project 214501.0047



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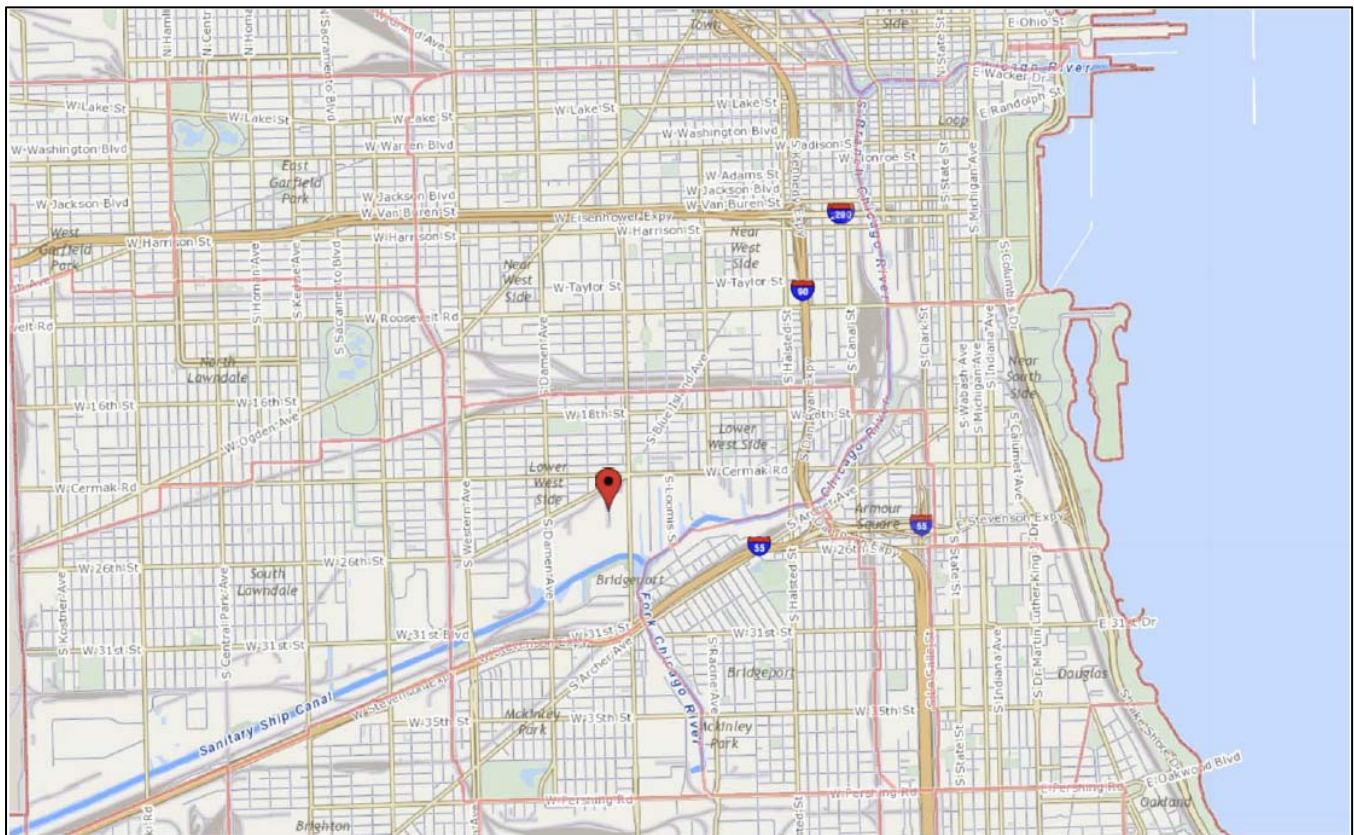
Table 1 Schedule of Calibrations and Quality Control Checks

12

1. Introduction

Metal Management Midwest, Inc. (Metal Management) is located at 2500 South Paulina Street in Chicago, Cook County, Illinois (Paulina Facility). Figure 1 presents the location of Metal Management's Paulina Facility. This dust monitoring plan (DMP) outlines the PM₁₀ and meteorological monitoring that will be conducted at the site¹. This plan also describes the equipment to be installed, the locations of the monitors, and information concerning the operation, maintenance, and calibration of the continuous PM₁₀ monitors and meteorological station.

Figure 1. Location Map of Metal Managements' Paulina Facility



¹ Rules and Regulations for Large Recycling Facilities, Effective June 5, 2020, Corrected June 19, 2020, City of Chicago Department of Public Health. (City Rule).

2. Continuous PM₁₀ Monitoring

This DMP addresses continuous perimeter monitoring for particulates and describes how the action levels will be identified and implemented for particulates. In addition, the plan describes how samples will be collected to directly measure toxic metals² and how the data will be utilized.

The DMP will be implemented and overseen by Metal Management's Environmental, Health, and Safety (EHS) Team. During the monitoring period, Metal Management personnel will communicate any alert conditions or near alert conditions to the EHS Team so that appropriate corrective actions and response measures can be implemented. The general outline for the air monitoring at the site is as follows:

- ▶ Five perimeter near-reference method PM₁₀ air monitors are deployed around the facility, as described in Sections 2.1 and 2.2. The perimeter air monitoring stations will monitor ambient air continuously, 24-hours per day, and seven days per week.
- ▶ A meteorological monitoring station, as described in Section 2.3, will be utilized at the facility and operated to continuously monitor local conditions.
- ▶ The five continuous PM₁₀ monitors will be calibrated once per year by comparing results of a filter-based sample to the ambient concentrations measured by the continuous monitors and applying a correction factor as described in the manufacturer's calibration procedures.

In general, continuous monitoring methods will be utilized to determine ambient PM₁₀ concentrations. Results of the air monitoring and laboratory data will be reported directly from an U.S. EPA accredited and certified laboratory.

2.1 PM₁₀ Sampling Equipment

Continuous air monitoring will be conducted at the Metal Management Paulina facility as required by Section 4.7.7.1 of the City Rule. Metal Management has chosen to utilize Met One E-Sampler compact monitoring stations, which can make near real-time, continuous measurements of PM₁₀.

The E-Sampler is a near-reference monitor³ that provides near real-time particulate measurement of PM₁₀ using a well proven near forward light scattering nephelometer and high precision sharp cut cyclone – with a measurement range of 0-60,000 µg/m³. A nephelometer is an optical sensor that uses light scattering from particulate matter to provide a continuous real-time measurement of airborne particle mass. The light source is a visible laser diode and scattered light is measured in the near forward angle using focusing optics and a photodiode. The nephelometer has an on-board temperature sensor which corrects for thermal drift, sheath air filter to keep the optics clean and automatic baseline drift correction.

The sharp cut cyclone is a precision engineered component fitted to the dust meter inlet that physically selects particles 10 microns in diameter and smaller. This ensures precise measurement of only the PM₁₀ size fraction. The inlet is fitted with a heater that is used to remove moisture from the incoming sample. Moisture can reduce the accuracy of optical measurement, so for best results the inlet heater is activated in the event of high humidity.

² Per the City Rule at 3.9.21.4, Hazardous Air Pollutants (HAPs) need to be evaluated at a minimum frequency of during the annual calibration of the particulate monitors. The HAPs to be evaluated are: antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium compounds.

³ Appendix B of the City Rule provides the minimum specifications for a near-reference PM₁₀ monitor.

To comply with the requirements of 4.7.7.5 of the City Rule, each E-Sampler will be equipped with a Campbell Scientific CR1000X data logger to collect and store particulate and flow information as well as other important instrument status readings. All particulate data will be collected and stored in the units of micrograms per cubic meter ($\mu\text{g}/\text{m}^3$), which is consistent with units for the National Ambient Air Quality Standards for PM_{10} .

2.2 Placement of the Ambient PM_{10} Monitors

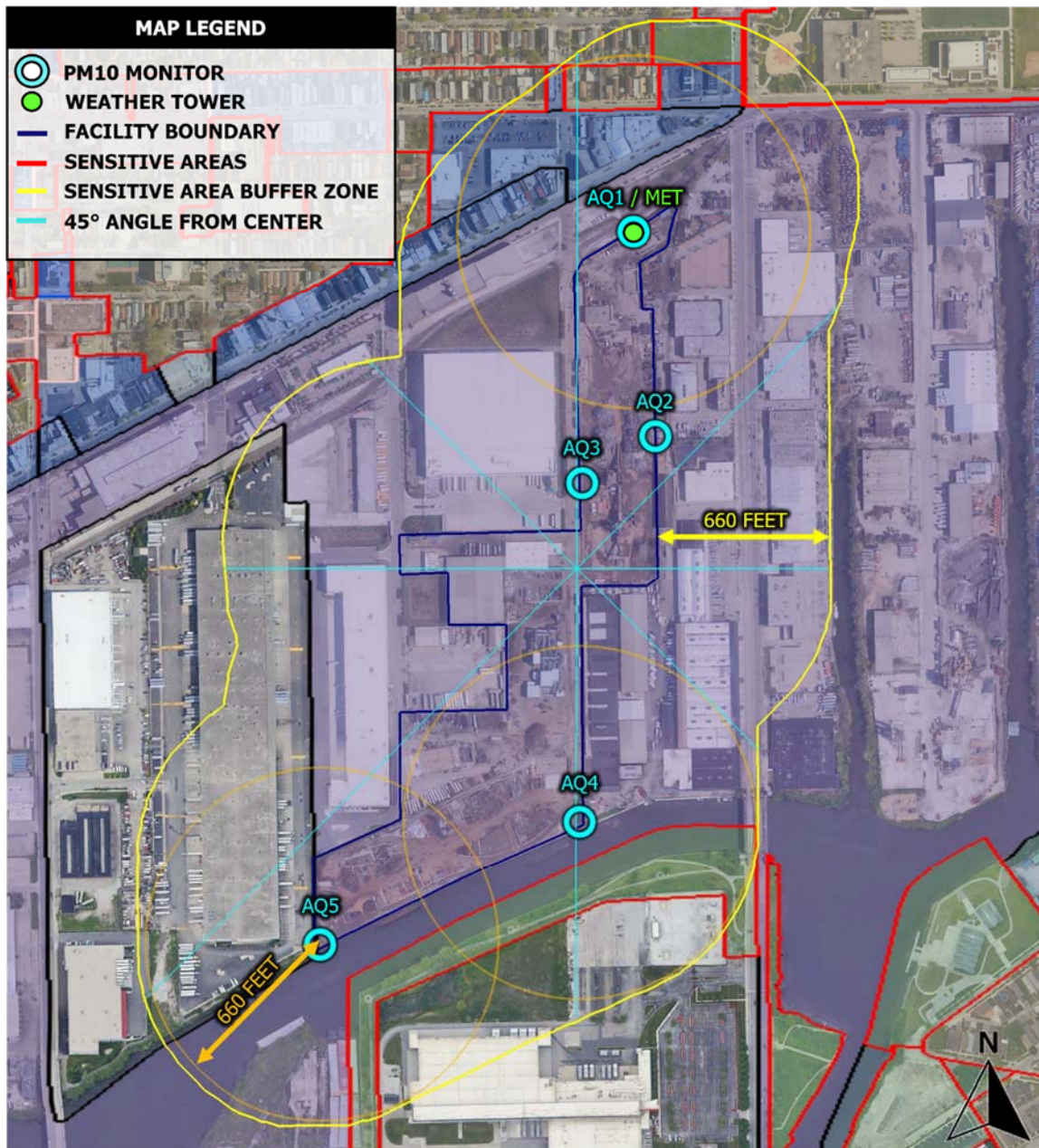
The ambient PM_{10} monitoring sites were chosen to meet the requirements of Section 3.9.21.2 of the City Rule and based on suitability of terrain, the distance from obstructions, and operational easements to ensure that representative data are collected. Monitor site selection guidance presented in 40 CFR Part 58, Appendices A & E were also considered when selecting the placement of the PM_{10} monitors.

The ambient monitoring network at Metal Management's Paulina facility consists of five (5) PM_{10} monitors. Three (3) monitor locations meet the requirement in 3.9.21.2(a) which calls for at least one monitor placed along the fence line, at each 45-degree direction from the center of the facility where there is a "Sensitive Area" within 660 feet of the facility boundary. The City of Chicago's Department of Planning and Development Zoning and Land Use Map was utilized to determine the location of Sensitive Areas surrounding the Metal Management's Paulina facility.

Two (2) monitors were selected based on the air dispersion modeling study⁴ as required in 3.9.21.2(b). Figure 2 presents a map showing the locations of the ambient PM_{10} monitors at Metal Management's Paulina Facility. The following sections provide a brief description of each monitor location.

⁴ The air dispersion modeling study is presented in a separate document.

Figure 2. Ambient PM₁₀ Monitors and Meteorological Station at Metal Management's Paulina Facility



2.2.1 AQ1 Monitoring Station

The AQ1 station is located at the north end of the Metal Management property to monitor for offsite impacts near sensitive areas. The location is within 660 feet of residential areas located north of the facility and the Benito Juarez Community Academy located northeast of the facility. This location was also selected for the meteorological tower. The meteorological system will continuously monitor temperature, barometric pressure, relative humidity, wind speed, and wind direction. The site meets U.S. EPA siting criteria and is generally free of obstructions. The site meets the definition of Microscale as defined in 40 CFR 58 Appendix D Subsection 4.6(b)(1). Figure 3 presents photographs of the four cardinal directions surrounding the AQ1 site location.

Figure 3. Photographs of AQ1 Monitoring Station Location



AQ1 Facing North



AQ1 Facing East



AQ1 Facing South

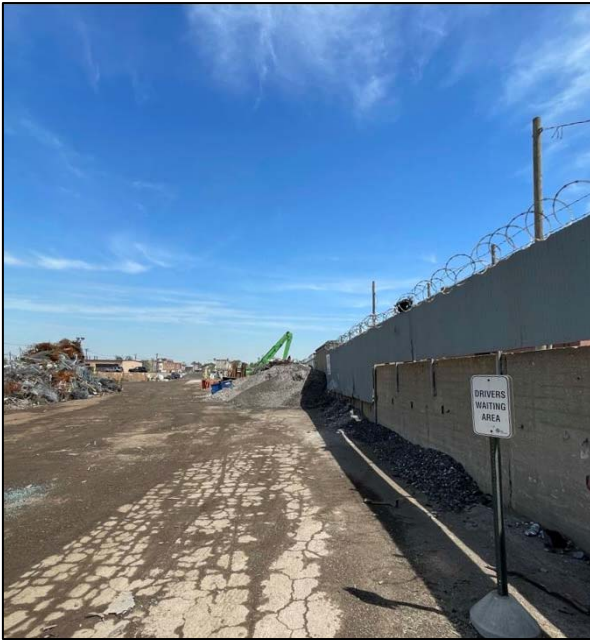


AQ1 Facing West

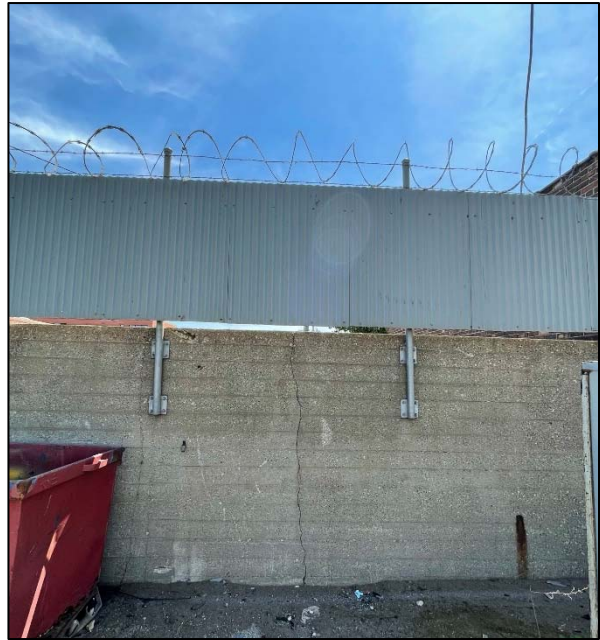
2.2.2 AQ2 Monitoring Station

The AQ2 station is located at the east side of the Metal Management property. The location was identified in the air quality impact modeling assessment and is a suitable monitoring location based on the predictive PM₁₀ impacts per modeling. Figure 4 presents photographs of the four cardinal directions surrounding the AQ2 site location. This location along the east property boundary was selected given line power availability. The site meets the definition of Microscale as defined in 40 CFR 58 Appendix D Subsection 4.6(b)(1).

Figure 4 Photographs of AQ2 Monitoring Station Location



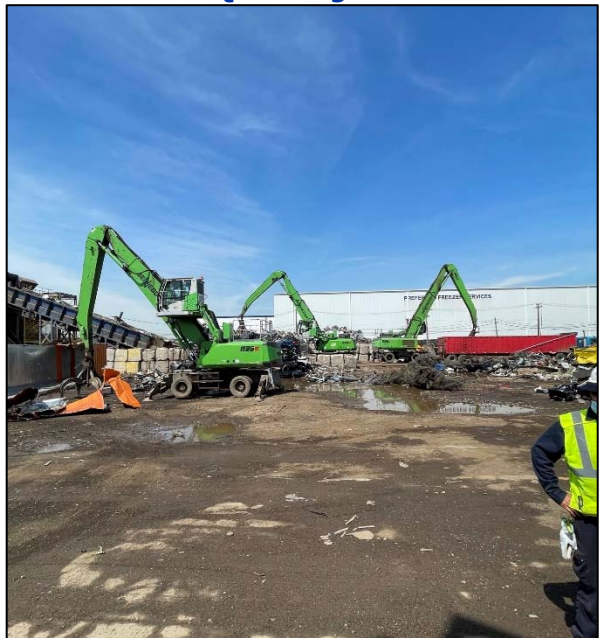
AQ2 Facing North



AQ2 Facing East



AQ2 Facing South



AQ2 Facing West

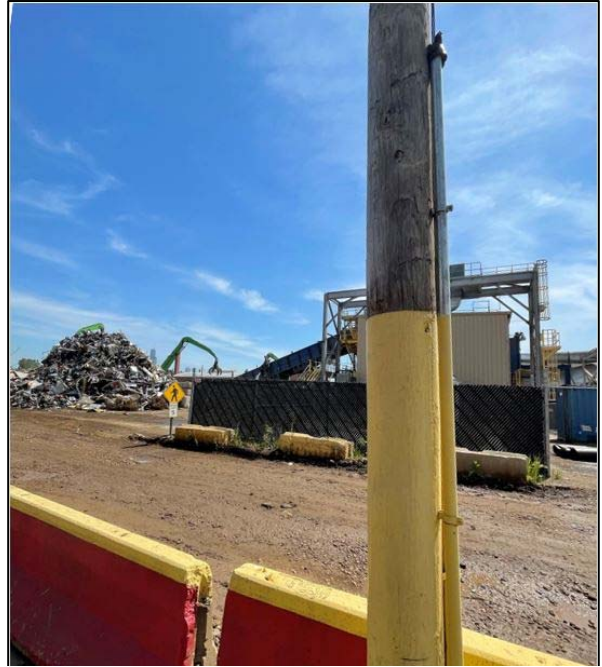
2.2.3 AQ3 Monitoring Station

The AQ3 monitoring station is located along the fence line of the Metal Management facility adjacent to Paulina Street. The location was identified in the air quality impact modeling assessment and is a suitable monitoring location based on the predictive PM₁₀ impacts per modeling. Figure 5 presents photographs of the four cardinal directions surrounding the AQ3 site location. This location along the property boundary west of the shredder yard was selected given line power availability. The site meets the definition of Microscale as defined in 40 CFR 58 Appendix D Subsection 4.6(b)(1).

Figure 5. Photographs of AQ3 Monitoring Station Location



AQ3 Facing North



AQ3 Facing East



AQ3 Facing South



AQ3 Facing West

2.2.4 AQ4 Monitoring Station

The AQ4 station is located at the southeast corner of the facility to monitor for offsite impacts near sensitive areas. The location is within 660 feet of the Canalport Riverwalk park. Figure 6 presents photographs of the four cardinal directions surrounding the AQ4 site location. The site meets the definition of Microscale as defined in 40 CFR 58 Appendix D Subsection 4.6(b)(1).

Figure 6. Photographs of AQ4 Monitoring Station Location



AQ4 Facing North



AQ4 Facing East



AQ4 Facing South



AQ4 Facing West

2.2.5 AQ5 Monitoring Station

The AQ5 station is located at the southeast corner of the facility to monitor for offsite impacts near sensitive areas. The location is within 660 feet of the Canalport Riverwalk park. Figure 7 presents photographs of the four cardinal directions surrounding the AQ5 site location. The site meets the definition of Microscale as defined in 40 CFR 58 Appendix D Subsection 4.6(b)(1).

Figure 7 Photographs of AQ5 Monitoring Station Location



AQ5 Facing North



AQ5 Facing East



AQ5 Facing South



AQ5 Facing West

2.3 Meteorological Monitoring Equipment

Per 4.7.7.4 of the City Rule, Metal Management will install a 10-meter tower to continuously measure the following parameters at the site:

- ▶ Wind speed at 10 meters,
- ▶ Wind direction at 10 meters,
- ▶ Temperature at 10 meters,
- ▶ Relative humidity at 10 meters, and,
- ▶ Precipitation (near ground-level).

A brief description of each meteorological sensor is presented in the following subsections.

2.3.1 Wind Speed and Wind Direction

The R.M. Young Model 05305 Wind Monitor AQ, to be used at the 10-meter level, is made of UV-stabilized plastic with stainless steel and anodized aluminum fittings. Precision grade, stainless steel ball bearings are used. Transient protection and cable terminations are in a convenient junction box.

The wind speed sensor is a four-blade helicoid propeller. Propeller rotation produces an AC sine wave voltage signal with frequency directly proportional to wind speed. Slip rings and brushes are eliminated for increased reliability. The starting threshold is 0.4 meters per second (m/s).

The wind direction sensor is a rugged yet lightweight vane with a sufficiently low aspect ratio to assure good fidelity in fluctuating wind conditions. Vane angle is sensed by a precision potentiometer housed in a sealed chamber. With a known excitation voltage applied to the potentiometer, the output voltage is directly proportional to vane angle. A mounting orientation ring assures correct alignment of the wind direction reference when the instrument is removed for maintenance. The vane starting threshold is 0.5 m/s at 10 degrees displacement.

2.3.2 Relative Humidity and Temperature

The Campbell Scientific Hygrovue relative humidity (RH)/temperature probe is designed for rugged, accurate air long-term, unattended applications. It includes a proprietary coating on the RH element that increases the life of the element and protects it from dirt, dust, salt, or other contaminants. The relative humidity sensor has an accuracy of $\pm 1.8\%$ from 0 to 80% RH and $\pm 3.0\%$ RH, from 90 to 100% RH.

2.3.3 Precipitation

Precipitation measurements will be made with a Texas Electronic model TE525 tipping bucket rain gage. The precipitation is funneled into a bucket mechanism that tips when filled to a calibrated level. A magnet attached to the tipping mechanism actuates a switch as the bucket tips. The momentary switch closure is counted by the pulse-counting circuitry of a Campbell Scientific datalogger. The accuracy of the gauge is 1.0% up to 2 inches per hour.

2.3.4 Data Logging System

The meteorological data will be continuously recorded on a Campbell Scientific, Inc. CR1000X data acquisition system. As presented in Section 2.2.1 of this document, the meteorological tower will be located adjacent to one of the PM₁₀ monitoring stations and will utilize the CR1000X of the monitoring station.

3. Operation of the Ambient PM₁₀ Monitors

Data obtained from the monitors conforms with the National Ambient Air Quality Standards (NAAQS) for PM₁₀. Procedures will comply with ambient monitoring practices and current U.S. EPA protocols for ambient air quality monitoring, including those for data completeness, calibration, inspection, maintenance, and site and instrument logs. Metal Management will maintain logs of all routine and non-routine maintenance and calibration activities associated with each fugitive dust monitor. Each monitoring station will be equipped with a Campbell Scientific CR1000X data logger to record data obtained at the monitors.

The data obtained from the continuous PM₁₀ monitors will be stored on-site and transmitted to a data collection platform. This platform will provide notification to both field and management personnel on a real-time basis, as well as provide access to values from each instrument.

The meteorological system will continuously monitor temperature, barometric pressure, relative humidity, wind speed, and wind direction. These data will be transmitted to the same data collection platform that the continuous particulate monitors utilize. Wind instruments will be located at a height of 10-meters above ground in an area clear of buildings, trees, or other obstructions.

3.1 Reportable Action Level (RAL) Alarms and Notifications

Metal Management will establish a reportable action level (RAL) as defined in the City Rule 4.7.7.6. The RAL is exceeded when any monitor has a 15-minute PM₁₀ concentration above 150 µg/m³ (less the concentration of an upwind monitor).

The monitoring system will be configured to transmit data from each continuous PM₁₀ monitor to a data collection platform. This platform will be programmed to alert facility and management personnel if the RAL is exceeded. Upon receipt of an RAL alert, the EHS or other designated facility personnel will confirm the exceedance of the RAL. Should the RAL be exceeded, the plant will execute response activities defined in the contingency plan⁵.

Per City Rule section 4.7.7.10, email notifications of RAL events will be submitted by email to envwastepermits@cityofchicago.org with the subject line "RAL Alert Condition – ", followed by the Facility's permit number.

- ▶ The date and time of the RAL exceedance,
- ▶ The average wind speed and wind direction recorded over the 15-minute period,
- ▶ The concentrations of PM₁₀ recorded by all monitors over the same 15-minute period, and
- ▶ The latitude and longitude coordinates in decimal degrees for all monitoring locations.

Upon confirmation of a RAL exceedance, the Operator will make a note of the event in the Operating Record, including the following:

- ▶ The date and time of the RAL exceedance,
- ▶ The average wind speed and PM₁₀ concentrations at the time of the RAL,
- ▶ The onsite and/or offsite sources of emissions,
- ▶ A description of mitigative actions taken,
- ▶ A description of any operational impact as a result of the RAL incident, and
- ▶ A description of any preventative measures to reduce or eliminate future incidents.

⁵ The contingency plan, as required per City Rule section 4.7.7.12, is provided in a separate document.

4. Quality Assurance/Quality Control

Quality assurance (QA) refers to the planned and systematic actions necessary to provide adequate confidence that a product or service will satisfy a given requirement for quality. QA is applied to location and equipment selection, equipment acquisition and installation, routine site operation, data processing, and reporting.

Quality control (QC) refers to the operational techniques and activities that are used to fulfill requirements for quality. QC procedures applied at each step provide checks for acceptable conditions with corrective procedures specified when necessary.

4.1 Quality Control

The purpose of QC procedures is to assess and document data quality and to define remedial corrective actions when operating conditions exceed pre-established limits. Routine QC procedures are designed to focus on areas most likely to have problems, based on experience and guideline documents. Table 1 shows the frequency of audits and routine QC measures for the air quality and meteorological monitoring program.

Table 1 Schedule of Calibrations and Quality Control Checks

Activity	Frequency	Acceptable Limits
Calibration of PM ₁₀ monitors	Prior to Start of Project and every 12 months	
System leak check	Monthly	Leak Check <0.3 lpm
Flow, temperature, and pressure check	Monthly	Flow Rate 2.0±0.1 lpm of Traceable Reference Standard Audit Device.
Zero air, fibre span, and laser current checks	Monthly	Zero Air < 2 µg/m ³ Fibre Span < 20% ADC (V) 3mA
Filter changes, cyclone, and inlet cleaning	Every 3 months	
Wind Direction	Every 6 months	±5° <0.5 m/s
Wind Speed	Every 6 months	±0.20 m/s <0.5 m/s
Temperature	Every 6 months	±0.5°C
Relative Humidity	Every 6 months	±7 %RH
Precipitation	Every 6 months	±10%

4.2 Quality Assurance

Precision and accuracy checks are both elements of QA. Precision checks are a measure of agreement among individual measurements of the same parameter, usually under prescribed similar conditions. Accuracy is the degree of agreement between an accepted reference measurement and the field measurement. Accuracy may be expressed as a total difference, or as a percentage of the reference value, or as a ratio. Precision checks are performed as collocated measurements.

Accuracy of ambient air sampling equipment is measured in terms of the accuracy of the flow rate measurement. Accurate determination of the air volume drawn through the air sampler is essential to the concentration calculation. Flow rates of the air samplers will be determined pre and post sampling using calibrated equipment appropriate to the sampling device.

Preventive maintenance will be part of the air samplers' QA program. Preventive maintenance is a combination of preventive and remedial actions taken to prevent or correct failure of the monitoring systems. Preventive maintenance for the air samplers includes inspection and cleaning of the inlets.

Quality Assurance performance audits on the continuous PM₁₀ monitors will be conducted once per quarter. The meteorological tower will be audited twice per year.

5. Data Validation

Meteorological and PM₁₀ data will be stored in each station's data logger memory as one-minute, 15-minute, and hourly averages computed from secondly values. Data validation will be performed on the hourly average data. An hourly average will be computed when at least 45-minutes of data are available for the hour. Each month, the proper operation of the meteorological and air quality equipment will be verified by reviewing the flow checks, calibration records, audit results, and field notes from the site technicians prior to formal acceptance of these data.

Data will also be subject to a series of quality control checks. The quality assurance software is used to generate flags or warnings that the parameter value is outside of a normally acceptable range. The outlier program does not invalidate data or erase file records based on these outlier tests. Raw data files are archived and never modified. It will be left to a qualified meteorologist to review the results of the outlier program in conjunction with the data parameter plots and initiate corrective actions if warranted (site visit or data invalidation).

Per EPA's Quality Assurance Handbook for Air Pollution Measurement Systems, Volume II: Ambient Air Quality Monitoring Program, EPA recommends the use of flags or result qualifiers to identify potential problems with data (or a sample). According to EPA, a flag is an indicator of the fact and the reason that a data value (a) did not produce a numeric result, (b) produced a numeric result but it is qualified in some respect relating to the type or validity of the result, or (c) produced a numeric result but for administrative reasons is not to be reported outside the organization.

6. E-Sampler Mass-Balance Calibration

Calibration of the light scattering nephelometer to establish a correction to the mass output of the nephelometer is recommended to be conducted on site. This recommendation is due to variability of average density and light scattering behavior of particulate in different airsheds and climate regions.

The calibration procedure is to compare the concentration of the nephelometer to the concentration of a gravimetric (filter-based) sample. The E-Sampler has a built-in 47 mm filter system that can be utilized to collect a filter sample for calibration purposes and to determine the gravimetric correction factor (K-factor) of the instrument. Below is the procedure for calibrating the E-Sampler.

1. Pre-weighed 47 mm disc filters will be obtained from an accredited lab.
2. All leak checks and flow calibrations will be made before setting up the filter sample.

3. For good gravimetric results, there should be about 0.5 mg (500 µg) of mass deposited on the filter if possible. Trinity estimates that the time it takes to accumulate this amount of dust onto the filter will take about 5 days.
4. The E-Sampler will be set to a TIMED sampling mode. The 47 mm filter will be installed and the timed sample run.
5. After the sample period has ended, the 47 mm filter will be removed and shipped to the lab for re-weighing. Proper protocols for sample handling, transport, and equilibration will be followed.
6. Light scatter, sample flow, and concentration data from the E-Sampler will be downloaded for the entire sampling period.
7. The total flow will be evaluated, and the total volume collected over the sample run will be calculated. The total volume will account for the periods in which the E-Sampler is conducting a self-test and is not drawing air sample onto the filter.
8. The K-factor is calculated by taking the ratio of the filter concentration and the average concentration from the nephelometer. See Equation 1.

Equation 1 K-Factor Determination

$$\text{K Factor} = \frac{\text{FRM Filter PM}_{10}}{\text{Dust Sentry PM}_{10}}$$

9. Once the K-Factor has been determined, it will be entered into the E-Sampler for making corrected measurements of PM₁₀.
10. After the calibration, the 47 mm filters will be evaluated for the metallic hazardous air pollutants (HAPs): antimony, arsenic, beryllium, cadmium, chromium, cobalt, lead, manganese, nickel, and selenium compounds as required in 3.9.21.4 of the City Rule. Any filter-based concentrations that appear to be abnormal will be rerun at the discretion of Metal Management.

7. Reporting

Summary reports of the validated data will be provided to the City monthly per Section 4.7.7.9 of the City Rule. Summary reports will be completed within 14 days of the end of the month being reported and submitted to CDPH by email to envwastepermits@cityofchicago.org.

8. Points of Contact

Concerns regarding the activities conducted at the Metal Management Paulina Facility should be addressed to the EHS Team at 773-254-1200 or the EHS Director:

Deborah Hays
 EHS Director, Midwest Region
 Metal Management
 2500 S. Paulina Street
 Chicago, IL 60608
 773-254-1200
 312-343-4549
debbie.hays@simsmm.com

APPENDIX T. INBOUND MATERIAL CONTROL PROGRAM



INBOUND MATERIAL CONTROL

1.0 PURPOSE & APPLICABILITY:

- 1.1 The purpose of this standard (Standard) is to supplement the Global SHEC Standard 013 – Inbound Material Control which outlines the minimum requirements for the acceptance of recyclable materials at any Sims Metal Management (SMM) recycling facility (Facility).
- 1.2 The Facility Manager is responsible for implementing the operational components of this standard at Facilities under their authority.
- 1.3 The Commercial Manager within the Midwest Region is responsible for implementing the elements of this Standard that pertain to commercial activities.
- 1.4 Any Facility may implement more stringent requirements than those set forth in this Standard.

2.0 DEFINITIONS:

- 2.1 **Material:** Ferrous metal, non-ferrous metal, plastic, glass, paper, electronics, and/or any other recyclable material purchased by the Midwest.
- 2.2 **Prohibited Material:** Those Materials described in Exhibit A (Prohibited Materials List).

3.0 MINIMUM REQUIREMENTS FOR INBOUND QUALITY CONTROL PROGRAM:

- 3.1 **Written Inbound Material Quality Control Program:** Each Facility shall have a written program that includes all requirements of their Inbound Material Quality Control Program. The Facility Manager shall ensure that the written program meets all requirements in this Standard, as well as, any applicable federal, state, or local law, regulation, or other requirement applicable to the facility that may be more stringent than this Standard. This Standard may be used to meet this requirement.
- 3.2 **Prohibited Materials:** No Facility shall accept any Prohibited Material.
- 3.3 **Signage:** Each Facility entrance used by Supplier trucks entrance shall have a sign listing Midwest's Prohibited Materials (see Exhibit B for sample sign).
- 3.4 **Supplier Agreements:** All Suppliers of Materials that could potentially have refrigerants (i.e., CFCs, HCFCs, Freon or substitutes) are required to have a Supplier Agreement (Exhibit C). Supplier Agreements shall be managed per Exhibit D.
 - **Commercial or Regular Suppliers:** The Senior Commercial Manager shall ensure that each regular or commercial Supplier of potentially refrigerant-containing Material has a Supplier Agreement on file that has been executed within the past 24 months.
 - **New Suppliers & Other Suppliers without Supplier Agreements:** The Facility Manager shall subject any load of Material that triggers SAI CFC Alarm System to a detailed inspection for CFCs (see Section 3.F.4, below). In addition, the Facility



NORTH AMERICAN SAFETY, HEALTH, ENVIRONMENT &
COMMUNITY (SHEC) MANAGEMENT STANDARD

INBOUND MATERIAL CONTROL

Midwest Region Supplement

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Manager shall provide that Supplier with a Supplier Agreement after completing the transaction.

3.4 Other required documents for material coming into the shredder:

- Copy of supplier's UDL
- Mercury Switch Sign-off (Exhibit E)
- NVMTIS Sign off (Exhibit F)

3.5 **Supplier Information Program** – Each Facility shall give all Suppliers written notice of Midwest's Inbound Material Quality Control Program upon establishing a business relationship with that Supplier and at least annually, thereafter.

- The written notice may be made by means of either a letter or flyer and shall include the Prohibited Materials List.
- The written notice may be provided as part of awareness training done at Supplier sites.

3.6 **Material Inspection/Screening Program** – All Materials are inspected prior to acceptance to identify quality concerns, such as: (i) proper grading, (ii) presence of Prohibited Materials, (iii) contamination, and (iv) other quality issues. The inspection program consists of the following:

- **Pre-Purchase Inspections:** The Senior Commercial Manager shall ensure that the Facility Manager receiving Materials is notified of any quality concerns observed by the Commercial Department during any pre-purchase inspections.
- **Pre-Pickup Inspections by Truck Drivers:** Where the Midwest arranges to pickup Material from a Supplier's location, the Driver (whether Midwest or contractor) shall visually inspect the Material being picked up for quality, safety or environmental concerns. If concerns are identified, the Driver shall contact the Dispatcher for instructions.
- **Radiation Screening:** Each Facility shall ensure that all loads received are screened for radiation.
- **Visual Inspections:** Each Facility shall visually inspect every load for quality concerns and document the inspection on the appropriate Company form or using a RF handheld. The inspection may include:
 - Visual inspection at the scale; and/or
 - Visual inspection after dumping at the infeed pile, prior to the Material being consolidated in a stockpile.
- **Detailed Inspections** at Shredder Facilities detailed inspections shall be completed, at a minimum weekly, of each supplier of ELVs received. . The Facility Manager shall ensure that the scope of the detailed inspection is sufficient to verify a Suppliers conformance with our Inbound Material Control Program. It is anticipated that detailed inspections will require that loads of Material be torn apart to inspect for quality concerns such as hidden Prohibited Materials. Detailed inspections shall be document on the applicable form (Exhibit G).



INBOUND MATERIAL CONTROL

- **Notifications of Quality Concerns:** The Plant Manager and the Commercial Manager assigned to a Supplier account shall be notified of all quality concerns or non-conformances identified during an inspection. The Facility Manager shall apply the Corrective Measures Program.

4.0 CORRECTIVE MEASURES PROGRAM

4.1. Each Facility, in cooperation with the Senior Commercial Manager, shall implement a Corrective Measures program to address Suppliers that do not conform to the Company's Inbound Quality Control Program. The Corrective Measures Program may include incentives (i.e., bounty program) or penalties (i.e., a progressive disciplinary program) as necessary to assure Supplier conformance with the Facility's Inbound Quality Control Program. See Exhibit H for Corrective Action Form.

5.0 OPTIONAL PROGRAMS TO SUPPORT INBOUND QUALITY CONTROL – Facilities shall consider the following programs to support their program

- 5.1 Purchasing lead-acid batteries at a price that encourages the removal of batteries from cars prior to delivery.
- 5.2 Accept PCB small capacitors and ballasts at no cost to Suppliers.
- 5.3 Accept cylinders from Suppliers if separated from the load.

6.0 TRAINING: Employees shall receive the following training in Inbound Quality Control.

6.1 Initial Training

- All new Commercial Managers (i.e., Buyers), Scale Operators, Inspectors, Material Handlers, Loader Operators, On-the-Road Truck Drivers, Supervisors and Managers shall receive extensive hands-on training in this Standard. This training shall be completed upon hire or transfer into one of the positions listed above;
- All other employees shall receive awareness training in this Standard as part of orientation.

6.2 **Update Training** - All Employees shall receive update training at least annually. The update training shall emphasize any changes to the Company's Inbound Quality Control Program.

7.0 ASSESSMENTS: CCVs (Critical Control Verifications) shall evaluate the effectiveness of this program.



EXHIBIT A

PROHIBITED MATERIAL SIGNAGE AND REGULATORY REFERENCES

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The following Materials are prohibited from acceptance at all SMM Facilities except by special arrangement with SMM:

- 1 Non-Metallic Materials, including but not limited to dirt, asphalt, concrete, debris, tires, trash, etc.**
- 2 Non-Hazardous Free-flowing Liquids, including but not limited to water.**
- 3 Hazardous Free-flowing Liquids including but not limited to gasoline, diesel fuel, motor oil, hydraulic fluids, anti-freeze, oil, paint, other lubricants and petroleum products, except as contained in whole cars that SMM specifically purchased for vehicle depollution.**
- 4 Flammable and Combustible Materials**
- 5 Corrosive Materials such as soda ash, acids, and lead-acid batteries, unless purchased separately by SMM.**
- 6 Radioactive Materials of any type, e.g., military scrap, medical scrap, measuring devices, etc.**
- 7 Explosive Materials or potentially explosive materials of any type, such as sealed tanks, munitions scrap, etc.**
- 8 Chemicals or Poisons in solid, powder, liquid, or gaseous form including fertilizers.**
- 9 Infectious Materials (generally placed in red bags or marked by the “infectious” symbol).**
- 10 Pressurized Containers or Cylinders including propane tanks, compressed gas tanks, aerosol cans, and extinguishers, except when such items have been properly cut up and certified as being properly vented.**
- 11 Closed Containers Formerly Containing Non-Hazardous Materials, including bulk storage tanks and vessels, unless properly cut up or certified as having been properly vented.**
- 12 Containers Formerly Containing Hazardous Materials including drums, bulk storage tanks, process vessels, paint cans and aerosol cans, unless certified as empty per applicable law and properly cut open to allow thorough inspection to verify they are empty in accordance with SMM’s empty container requirements.**
- 13 Any Materials Containing CFCs, HCFCs or other Refrigerant Substitutes.**
- 14 PCB-containing materials such as capacitors, ballasts, certain underground cables and transformers.**
- 15 Asbestos-containing materials (ACM), such as pipe insulation, surfacing materials.**
- 16 Mercury-containing materials such as switches, fluorescent and mercury vapor lights, fixtures, bulbs and thermostats, except as contained in whole cars that SMM specifically purchased for vehicle depollution.**
- 17 Cathode ray tubes (CRTs), liquid crystal displays (LCDs) or any device containing a CRT or LCD’s such as computer monitors, laptop screens and television sets, except at a designated Electronic Material receiving area.**
- 18 Hazardous Waste – Any Material containing hazardous or toxic substances or wastes of any kind.**

OTHER REQUIREMENTS FOR CERTAIN COMMODITIES TO BE ACCEPTED BY SIMS METAL MANAGEMENT:

Automobiles (except when purchased by SMM for vehicle depollution) must have the following items removed prior to delivery: all fluids including motor oil, coolants, fuel, refrigerants, and hydraulic fluids) to the extent required by law, batteries, leaded battery cable ends, mercury convenience light switches and other mercury containing devices as required by law (in certain states mercury headlamps, back lit displays) and air bag cannisters as required by law.

Lead Acid Batteries are accepted at most SMM facilities, only as separate commodities – not within auto bodies or appliances, etc., unless cracked, broken, burned or with missing caps.

California – certain “Materials Requiring Special Handling” may remain in certain appliances if the SMM facility is serving as Certified Appliance Recycler for those materials.

Electronic Material – Each state has its own requirements regarding which of this material may be accepted and under what requirements (most states allow acceptance of certain “electronic devices” as “Universal Waste”). Please refer to your state regulations before accepting any electronic material.



EXHIBIT A

PROHIBITED MATERIAL SIGNAGE AND REGULATORY REFERENCES

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Supersedes: 2013

SPANISH TRANSLATION

Los siguientes materiales están prohibidos de aceptación en todas las instalaciones de SMM excepto por un arreglo especial con SMM:

- 1 Materiales no-metálicos, incluyendo pero no limitados a la suciedad, asfalto, concreto, escombros, neumáticos, basura, etc.
- 2 Líquidos no-peligrosos-flujo libre, incluyendo pero no limitado al agua.
- 3 Líquidos de flujo libre peligrosos incluyendo pero no limitado a gasolina, combustible diesel, aceite de motor, fluidos hidráulicos, anticongelantes, aceite, pintura, otros lubricantes y productos derivados del petróleo, excepto que figuran en autos toda eso SMM adquirido específicamente para la descontaminación de vehículos.
- 4 Materiales inflamables y combustibles
- 5 Materiales corrosivos tales como la ceniza de soda, ácidos y baterías lead-acid, a menos que se compren por separado por SMM.
- 6 Materiales radiactivos de cualquier tipo, por ejemplo, militar chatarra, chatarra médica, medición de dispositivos, etc.
- 7 Materiales explosivos o materiales potencialmente explosivos de cualquier tipo, tales como tanques sellados, municiones de desecho, etc..
- 8 Productos químicos o venenos en estado sólido, polvo, líquido o gaseoso forma incluyendo fertilizantes.
- 9 Infectious Materials (generally placed in red bags or marked by the "infectious" symbol).
- 10 Pressurized Containers or Cylinders including propane tanks, compressed gas tanks, aerosol cans, and extinguishers, except when such items have been properly cut up and certified as being properly vented.
- 11 Closed Containers Formerly Containing Non-Hazardous Materials, including bulk storage tanks and vessels, unless properly cut up or certified as having been properly vented.
- 12 Containers Formerly Containing Hazardous Materials including drums, bulk storage tanks, process vessels, paint cans and aerosol cans, unless certified as empty per applicable law and properly cut open to allow thorough inspection to verify they are empty in accordance with SMM's empty container requirements.
- 13 Any Materials Containing CFCs, HCFCs or other Refrigerant Substitutes.
- 14 PCB-containing materials such as capacitors, ballasts, certain underground cables and transformers.
- 15 Asbestos-containing materials (ACM), such as pipe insulation, surfacing materials.
- 16 Mercury-containing materials such as switches, fluorescent and mercury vapor lights, fixtures, bulbs and thermostats, except as contained in whole cars that SMM specifically purchased for vehicle depollution.
- 17 Cathode ray tubes (CRTs), liquid crystal displays (LCDs) or any device containing a CRT or LCD's such as computer monitors, laptop screens and television sets, except at a designated Electronic Material receiving area.
- 18 Hazardous Waste – Any Material containing hazardous or toxic substances or wastes of any kind.

OTHER REQUIREMENTS FOR CERTAIN COMMODITIES TO BE ACCEPTED BY SIMS METAL MANAGEMENT:

Automobiles (except when purchased by SMM for vehicle depollution) must have the following items removed prior to delivery: all fluids including motor oil, coolants, fuel, refrigerants, and hydraulic fluids) to the extent required by law, batteries, leaded battery cable ends, mercury convenience light switches and other mercury containing devices as required by law (in certain states mercury headlamps, back lit displays) and air bag cannisters as required by law.

Lead Acid Batteries are accepted at most SMM facilities, only as separate commodities – not within auto bodies or appliances, etc., unless cracked, broken, burned or with missing caps.

California – certain "Materials Requiring Special Handling" may remain in certain appliances if the SMM facility is serving as Certified Appliance Recycler for those materials.

Electronic Material – Each state has its own requirements regarding which of this material may be accepted and under what requirements (most states allow acceptance of certain "electronic devices" as "Universal Waste"). Please refer to your state regulations before accepting any electronic material.



EXHIBIT B

PROHIBITED MATERIAL SIGNAGE AND REGULATORY REFERENCES

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www.SimsMM.com

PROHIBITED MATERIALS

(MATERIALES PROHIBIDOS)

NON-METALLICS NO-METÁLICOS  <ul style="list-style-type: none">• TIRES• DIRT• WOOD• ASBESTOS• INSULATION• FIBERGLASS• ROOFING• SOLID WASTE	CORROSIVES CORROSIVOS  <ul style="list-style-type: none">• BATTERIES	RADIOACTIVE MATERIALS MATERIALES RADIOACTIVOS 	COMPRESSED GAS CYLINDERS CILINDROS DE GAS COMPRIMIDO 	HAZARDOUS LIQUIDS LÍQUIDOS PELIGROSOS  <ul style="list-style-type: none">• ANTIFREEZE• OIL• PAINT
EXPLOSIVES EXPLOSIVOS  <ul style="list-style-type: none">• FIREARMS• AMMUNITION• SHELLS	FLAMMABLE MATERIALS MATERIALES INFLAMABLES  <ul style="list-style-type: none">• CAPACITORS• TRANSFORMERS• BALLAST	PCBs  <ul style="list-style-type: none">• CAPACITORS• TRANSFORMERS• BALLAST	CFC/FREON FREÓN  <ul style="list-style-type: none">• AIR CONDITIONERS• COMPRESSORS• CARS	OTHER HAZARDOUS MATERIALS OTROS MATERIALES PELIGROSOS  <ul style="list-style-type: none">• PESTICIDES• OIL FILTERS• AIR BAGS• LEAD• CRTs• MERCURY SWITCHES• FLUORESCENT LIGHTS

Regulatory References

1. The federal Clean Air Act, 42 U.S.C. § 7401 et seq. (including section 608) and its implementing regulations at 40 CFR Part 82 (including section 82.156(g)-(h)), requires the removal and disposal of refrigerants and non-exempt refrigerant substitutes from motor vehicles and appliances prior to recycling. Supplier certifies that any Materials containing refrigerants or non-exempt refrigerant substitutes as those terms are defined at 40 CFR 82.32(f) and 40 CFR 82.152 shall be removed by Supplier and disposed of by Supplier in accordance with all applicable laws prior to delivery to Receiver.
2. The federal Toxic Substances Control Act ("TSCA"), 15 U.S.C. § 2601 et seq. and its implementing regulations at 40 CFR Part 761, governs the removal and disposal of polychlorinated biphenyls ("PCBs"). Supplier certifies that all PCB capacitors, PCB small capacitors or any other PCB containing equipment shall be removed from all Materials by Supplier and disposed of by Supplier in accordance with all applicable laws prior to delivery to Receiver.
3. New York State's Environmental Conservation Law 27-2105(1), New Jersey's Recycling Rules at N.J.A.C. 7:26A, Pennsylvania Administrative Code - Title 2, Chapter 266b and the Mercury Switch Removal Act of 2004 (or other state law equivalent thereof) governs the removal of mercury switches from vehicles and/or other Materials. Supplier certifies that all mercury switches shall be removed from vehicles or other Materials by Supplier and disposed of by Supplier in accordance with all existing laws and regulations prior to delivery to Receiver, regardless of whether Supplier delivers the vehicle or other Materials to Receiver prior to the crushing, flattening, shredding or baling of the vehicle or Materials.
4. (New York State's Environmental Conservation Law 27-2303 to 2305 & New Jersey's Solid Waste and Recycling Rules) require certain potential environmental contaminants be drained, deployed or removed from end of life vehicles prior to crushing. For all vehicles delivered to a SMM facility, unless arrangements have been made for SMM to de-pollute ELV, Supplier certifies that the following shall be removed from end-of-life vehicles prior to delivery to Receiver: (i) fluids including engine oil, transmission fluid, transaxle fluid, front and rear axle fluid, brake fluid, power steering fluid, coolant, and fuel; (ii) lead acid batteries; (iii) small PCB capacitors, (iv) mercury switches or other mercury containing devices; (v) refrigerants used in automobile air conditioning systems; and (vi) air bags are deployed or canisters are removed.
5. Other federal, state and local laws, regulations and ordinances also affect the chemical and physical requirements for Materials delivered to the Receiver by the Supplier. Supplier certifies that it will not deliver to SMM materials that do not conform to such physical or chemical requirements and shall remove any substances necessary to achieve such conformance.



ATTACHMENT C SUPPLIER AGREEMENT

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*See individual State agreement and
add here*



ATTACHMENT D MANAGEMENT OF SUPPLIER AGREEMENTS

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1) OBTAINING SIGNED SUPPLIER AGREEMENTS

- a) The Commercial Manager is responsible for obtaining signed Supplier Agreements from each of their Industrial/Commercial Suppliers.
 - i) The Commercial Manager shall review all signed agreements for completeness.
 - ii) When the review is completed, the Commercial Manager shall sign the agreement.
- b) For Peddlers, the Scale Operator is responsible for obtaining signed Supplier Agreements.
 - i) The Commercial Manager, or designee, shall review all signed agreements for completeness.
 - ii) When the review is completed, the Commercial Manager shall sign the agreement.

2) PROCESSING SIGNED SUPPLIER AGREEMENTS:

- a) Suppliers with Vendor Accounts in SAI:
 - i) Agreement shall be scanned as a PDF.
 - ii) PDF shall be forwarded to the Commercial Department and the SHEC Department.
 - (1) The Commercial Administrative Assistant shall ensure that SAI vendor master file is updated with regard to the CFC Contract status.
 - (2) The Commercial Mgr. shall review the contract for completeness
 - (3) The Commercial Administrative Assistant shall maintain copies of all current agreements
- b) Suppliers without Vendor Accounts in SAI:
 - i) Agreements shall be scanned as a PDF.
 - ii) PDF shall be forwarded to the Commercial Department.
 - (1) The Commercial Mgr. shall review the contract for completeness.
 - iii) The hard copy should be kept in facility files for reference if the Peddler returns to the facility. It is recommended that the Facility CFC files have:
 - (1) New Contract Folder – For new agreements that need quality review and processing;
 - (2) Alphabetic folders – For agreements that have been processed. Each folder should be alphabetical.



ATTACHMENT E MERCURY SWITCH REMOVAL

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METAL MANAGEMENT MIDWEST, INC.

2500 S. Paulina Street
Chicago, IL 60608

SHREDDED SCRAP SUPPLIER FORM

The United States Environmental Protection Agency (USEPA) regulations mandate that steel consumers take certain measures to minimize the amount of mercury in the shredded scrap metal they melt. Metal Management Midwest requires that all suppliers of shredded scrap shall provide assurances that they are implementing appropriate steps to minimize the presence of mercury scrap in the scrap from end-of-life vehicles.

Please complete, sign and return the form detailing your practices for the management of mercury switches. Please check the appropriate boxes below. Feel free to add additional sheets.

☐

As a supplier of vehicles or shredded scrap, we are aware of the need to implement appropriate steps to minimize the presence of mercury in scrap from end-of-life vehicles.

☐

As a supplier of vehicles or shredded scrap, we participate in an approved program for the removal of mercury switches. If not the National Vehicle Mercury Switch Removal Program (NVMSRP through ELVsolutions.org), please describe:

☐

As a supplier of vehicles or shredded scrap, we communicate to our dismantler/crushed car suppliers the need to participate in a mercury switch removal program and can provide example letters to the consumer if requested.

☐

As a supplier of vehicles or shredded scrap, we have a source control program to assure the removal of mercury switches prior to our receipt of automobile scrap from our suppliers.

Company Name

Company Location

Authorized Individual (Print Name)

Title

Signature.

Date:



ATTACHMENT F NMVTIS SIGN-OFF

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August 1, 2018

Customer Name and Address.

Dear Supplier:

Sims Metal Management is providing you with this *Supplier Inbound Material Acknowledgment* letter due to the elevated potential of shredder explosions associated with the following non-conforming materials, all of which have been on the increase as of late: compressed gas cylinders (i.e. propane, acetylene, etc.) and residual fuel in cars.

Sims Metal Management takes a great deal of pride in our environmental sustainability and safety efforts, and we don't want to jeopardize our ability to continuing doing so in the future. In addition to our own policies/guidelines, we follow a strict adherence to state and federal governmental policies/laws within our business operations. Explosions and fires are an enormous threat and danger not only to Sims' operations and the ability to process the materials that we purchase from you as suppliers, but will also have negative consequences for all metal processors in general. In order for metal recyclers like Sims to effectively provide you with this service of buying and processing your scrap, we need the ability to operate safely and efficiently.

We all need to take responsibility and remain vigilant in our efforts to work together within our communities and environment. Please assist us in removing and ridding ourselves of these potential hazards associated with non-conforming materials, and assure Sims that you will do everything possible to make this happen on your end as well. If there are situations where you feel you need assistance in controlling this within your own facilities, we would be more than happy to do a site visit and provide recommendations in eliminating these threats on your end as well.

There's a cost associated with the separation, inspection, and service to safely decommission these compressed gas cylinders. We've also incurred past damages associated with remaining fuel in cars as well. For these reasons, we will be enforcing the following effective May 1, 2018 in the event that compressed gas cylinders or fuel left in cars are received within the facility.

- 1st occurrence – 1 ton deduction
- 2nd occurrence – 2 ton deduction
- 3rd occurrence – rejected load and suspension pending adequate corrective actions to eliminate future non-conforming material threats.

Sims Metal Management appreciates your business and partnership with us; likewise, we remain committed to providing you with the very best service experience while at our facilities. By eliminating these critical items, we're partnering in the best interests of our great community and environment!

Acknowledgment: The above information is acknowledged and hereby accepted by the following supplier representative:

Customer Name.

Accepted By: _____
Signature

Print Name: _____

Title / Date: _____



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[illegible]



EXHIBIT H CORRECTIVE ACTION FORM

Metal Management Midwest

Rev: May 2021

Supersedes: 2013

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Corrective/Preventive Action Request Form

Metal Management Midwest
d/b/a Sims Metal

Customer:		Date:	
Was the nonconformance found through the course of an audit or inspection?		YES <input type="checkbox"/>	NO <input type="checkbox"/>
Location of Finding (Sims Yard):			

Nonconformance Type:	Customer Issue	<input type="checkbox"/>	System Issue	<input type="checkbox"/>
	Process Issue	<input type="checkbox"/>	Other	<input type="checkbox"/>

Issue:	
Requested by:	Date:


Root Cause and Corrective Action Taken	
Completed by:	Date:

Sims Evaluation of Corrective Actions Implemented	
Time Period of Review:	
Conducted by:	Date:

Recommendations	
By:	Date:

Closed?	Yes	No	Signature	Date

APPENDIX U. RADIATION DETECTION AND RESPONSE PROCEDURE

	SAFETY, HEALTH, ENVIRONMENTAL & COMMUNITY MANAGEMENT PROCEDURE	
	RADIATION DETECTION & RESPONSE	
North America	Date of Most Recent Revision: April, 2008	Page 1 of 7

1.0 BACKGROUND & PURPOSE:

- 1.1 It is not unusual for radioactive materials to be inadvertently mixed in with materials sent to scrap facilities for recycling. Common radioactive materials include gauges, static eliminators, and flow measurement devices, typically used in medical/dental and industrial process operations. It is also common to have some elevated radiation from mineral deposits in pipe which are naturally-occurring radioactive materials (NORM).
- 1.2 This document defines the company's requirements for detection systems and the procedures for managing situations when radioactive materials are detected.
- 1.3 The Facility Manager is responsible for assuring compliance with this procedure.

2.0 COMMUNICATION: Each Facility shall ensure that:


- 2.1 Appropriate employees shall be trained in radioactive materials detection and response initially, with annual refresher training thereafter. The training shall include training in this procedure, training in use of appropriate radiation detection equipment and in the visual detection of radioactive materials.
- 2.2 All persons in the following titles, at a minimum, shall receive training:
 - 2.2.1 Scrap buyers;
 - 2.2.2 Scale personnel;
 - 2.2.3 Inspection personnel;
 - 2.2.4 Torch cutters;
 - 2.2.5 Supervisors/Foreman; and
 - 2.2.6 Plant Managers
 - 2.2.7 Fleet Drivers
- 2.3 Suppliers shall be informed of the relevant portions of this procedure through each Facility's Inbound Quality Control Plan.

3.0 RADIOACTIVE MATERIALS ACCEPTANCE POLICY

- 3.1 Radioactive Materials Are **PROHIBITED** at all Facilities. Exceptions may only be made by the Regional President.

4.0 MINIMUM STANDARDS FOR RADIATION DETECTION:

- 4.1 **Requirement for Radiation Screening of Inbound Material:** All inbound materials received by a Facility shall be screened by at least one radiation detection system meeting the following requirements as outlined in section 4.2.
 - 4.1.1 In addition, "Suspect Materials" shall be individually screened with a handheld detector to confirm the absence of radioactive materials. "Suspect Materials" include medical/dental scrap, military scrap, aircraft scrap and industrial scrap with gauges or dial.

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- 4.2 **Scale, Gate Monitor and Other Panel Detection System Specifications** – The following detection system requirements apply to all radiation detection systems used at scales in SMM NA, regardless of the manufacturer (e.g., Radcomm, Thermo, Ludlum and Exploranium).

4.2.1 **Detector Systems**

- 4.2.1.1 **Truck Scale Detector Systems/Gate Monitors** – All scales, both inbound and outbound, shall have gate monitor detectors that meet the following requirements (i.e., equivalent to a Bicron 3000 or Radcomm RC4000, Exploranium ST-20):


- 4.2.1.1.1 Number of Panels: Minimum of two per scale.
- 4.2.1.1.2 Size of Panels: Minimum combined total of 3,000 cubic inches of plastic scintillator per scale system inbound scale and 6000 Cubic inches at rail scales.
- 4.2.1.1.3 Installation Requirements:
 - 4.2.1.1.3.1 Detectors shall be installed according to manufacturer's specifications/recommendations.
 - 4.2.1.1.3.2 Detectors shall be positioned such that the panels vertically overlap with the vehicle bed that will hold the recyclable materials being delivered through that scale per manufacturer specifications/recommendations.

4.2.1.2 **Rail Scale Detector Systems/Gate Monitors**

- 4.2.1.2.1 Number of Panels: Min. of two per scale.
- 4.2.1.2.2 Size of Panels: Minimum combined total of 6,000 cubic inches of plastic scintillator per scale system (i.e., equivalent to a Bicron 3000 or Radcomm RC4000, Exploranium ST-20).
- 4.2.1.2.3 Installation Requirements:
 - 4.2.1.2.3.1 Detectors shall be installed according to manufacturer's specifications/recommendations.
 - 4.2.1.2.3.2 Detectors shall be positioned such that the panels vertically overlap with the rail bed that will hold the recyclable materials being delivered through that scale.

4.2.1.3 **Platform Scale (4 x 4) Detector Systems (non-ferrous)**

- 4.2.1.3.1 Min. of one detector per scale.
- 4.2.1.3.2 Min. 450 cubic centimeters of plastic scintillator total.
 - 4.2.1.3.2.1 Detector panel/media shall be installed according to manufacturer specifications.

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The Ludlum 375-600 and 3500-1000 meet, or exceed, these requirements.

4.2.2 Detector readouts shall be in close proximity to the weigh master and shall alarm for:

4.2.2.1 Detection of radiation above background;

4.2.2.2 For gate monitors, speed alarm (if vehicular traffic) set per manufacturer's recommendations, but in no case set higher than 5 mph; and

4.2.2.3 Sensor failure.

4.3 **Grapple or Other Panel Detection System Specifications** – If a gate monitor or panel detection system cannot be used to conduct radiation screening on inbound materials received at a facility, there is only one viable commercial option for radiation detection systems, the Radcomm Cricket radiation detection system. Therefore, this system would be required.

5.0 MINIMUM STANDARDS FOR RADIATION DETECTION SYSTEM CHECKS

5.1.1 Weekly Checks of All Operating Systems


5.1.1.1 All systems shall be tested according to manufacturer's specifications. monthly by walking a five microcurie (5 uCi) to ten microcurie (10 uCi) source through the detector at the furthest point where scrap may pass through the detection system (e.g., for gate monitors, at the center of the scale or as otherwise specified by manufacturer. If the source is not detected, corrective actions should be taken. The date of this check shall be noted on a log.

5.1.2 Monthly Checks of All Operating Systems

5.1.2.1 All systems shall be tested according to manufacturer's specifications. monthly by walking a five microcurie (5 uCi) to ten microcurie (10 uCi) source through the detector at the furthest point where scrap may pass through the detection system (e.g., for gate monitors, at the center of the scale or as otherwise specified by manufacturer. If the source is not detected, corrective actions should be taken. The date of this check shall be noted on a log.

5.1.3 Tri-Annual Checks for All Operating Systems

5.1.3.1 All systems should be completely checked by the manufacturer or other qualified technician at least every three years. The check shall include a full evaluation of the system, and include a calibration check.

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5.1.3.2 A report of this check shall be kept in the Facility's SHEC files.

5.1.4 Annual Checks for All Systems More than 7 Years Old

- 5.1.4.1 Place a five microcurie (5 uCi) to ten microcurie (10 uCi) source on a broom handle.
- 5.1.4.2 Walk through the detectors at the furthest point where scrap may pass through the detection system with the source at the maximum height that scrap may pass through the detector (e.g., 13 feet for a truck scale). Verify detection.
- 5.1.4.3 Walk through the detectors at the furthest point where scrap may pass through the detection system with the source at the minimum height that scrap may pass through the detector (e.g., 2 feet for a truck scale that takes peddler traffic). Verify detection.
- 5.1.4.4 Walk through the detectors at the furthest point where scrap may pass through the detection system with the source at the approximate midpoint that scrap may pass through the detector (e.g., 7 to 8 feet for a truck scale). Verify detection.
- 5.1.4.5 If a system does not detect the source under any of the above scenarios, corrective actions should be taken. If system is greater than seven (7) years old it must be replaced by a system as defined in section 4.2 of this standard.
- 5.1.4.6 A report of this check shall be kept in the Facility's SHEC files.

6.0 RESPONDING TO A RADIATION DETECTION SYSTEM ALARMS

- 6.1 **Speed Alarm** – If a speed alarm goes off while a vehicle is driving through the radiation detection system, the vehicle shall be required to drive through the radiation detection systems again with no alarm before it can be accepted in the yard.
- 6.2 **Confirming a Radiation Alarm:**
 - 6.2.1 If a radiation alarm goes off while a vehicle is driving through the radiation detection system, first verify that the driver had not received any radiological treatments.
 - 6.2.2 If the driver has not received any treatments, the vehicle shall be required to drive through the radiation detector up to two (2) more times.
 - 6.2.2.1 If the radiation alarm is triggered by that vehicle twice, it shall be deemed a "Confirmed Radiation Detection".
 - 6.2.2.2 If the radiation alarm is triggered by only one of the three passes, the initial alarm shall be considered a false reading.

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6.3 **Responding to a “Confirmed Radiation Detection”** – The following shall be conducted in response to a confirmed radiation detection.

6.3.1 **Characterize the Approximate Level of Background Radiation**

6.3.1.1 Isolate the vehicle.

6.3.1.2 Get a hand-held radiation detector, check calibration date, turn it on, check battery level indicator, check detector with check source to ensure it is reading correctly.

6.3.1.3 Move to a location at least 50 feet from the vehicle

6.3.1.4 Take the reading from the meter, this is background.

6.3.2 **Characterize the Maximum Level of Detectable Radiation at On the Vehicle**

6.3.2.1 Slowly walk the handheld detector along all accessible sides of the vehicle and identify the approximate location on the vehicle where the radiation level is the highest.

6.3.2.2 Return to the approximate area where the radiation level is the highest, and find the spot where the radiation reading is the highest.

NOTE: If at any time the radiation reading is more than 100 times background or 2,000 µR/hr, STOP screening for radiation and call the Facility Manager and SHEC Manager.

6.3.2.3 Take the reading from the meter at this location. This is the maximum detectable radiation.

Note: Exposure to 2 mR/hour for an entire hour is equivalent to the additional radiation exposure that one would get from visiting Denver for a week. Exposure to 2 mR/hour for an entire hour is equivalent to the additional radiation exposure that one would get from visiting Denver for a week. This additional radiation exposure is caused by increased cosmic radiation, because you are closer to the sun.

6.4 **Make Appropriate Notifications to Company Personnel to Advise them that the Load Will Be Rejected**

6.4.1 Call the Facility Manager and transmit the information.

6.4.2 Call the Buyer for that Supplier.

6.4.3 Call State Radiation Control Office as required by state regulations.


6.4.4 Record all actions on incident report.

6.5 **Reject the Load**

6.5.1 Material Being Transported on a Company-owned or contracted vehicle:

6.5.1.1 Complete the DOT Exemption Paperwork and Submit


6.5.1.1.1 Go to The SHEC Web-Site Scale Page

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- 6.5.1.1.2 Print a DOT Exemption Form
- 6.5.1.1.3 Print the List of State Radiation Officials for your state
- 6.5.1.2 Fill out the DOT Exemption Form
 - 6.5.1.2.1 A completed sample is on the web site for reference.
- 6.5.1.3 Fax the completed DOT Exemption Form to the state official for your state.

NOTE: DOT Exemptions are only issued during normal business hours. Therefore, the vehicle may need to be parked if it is not normal business hours to wait for an approved DOT Exemption. Alternately, if the state authority allows, the Facility may choose to dump the load and isolate the source of the radioactivity. Then, the truck can be immediately put back in service.

- 6.5.1.4 Call the state official, and state that you are: “Calling to follow-up on a DOT Exemption Form that we just faxed”.
- 6.5.2 Material Being Transported on a Supplier owned or contracted vehicle
 - 6.5.2.1 The obligation for the DOT Exemption applies to the transporter, NOT the receiving facility. However, if a significant radiation source is identified, there is an obligation to notify appropriate regulatory agencies of the source so that it can be tracked to assure proper management. Therefore, the following applies. For very low-level sources (<100 times background or <1,000 uRem/hour and there is no visibly identifiable source)
 - 6.5.2.1.1 Ask the supplier if he would like us to obtain the DOT exemption for him.
 - 6.5.2.1.1.1 If he does not ask us to get the exemption, reject the load and give him the letter in Attachment 2.
 - 6.5.2.1.1.2 If he asks us to get the exemption, follow above. Give him the letter in Attachment 1. When the exemption is obtained give a copy to the supplier.
 - 6.5.2.1.2 For other sources (>100 times background or >1,000 uRem/hour or if there is a visibly identifiable source)
 - 6.5.2.1.2.1 Advise the supplier that we will be notifying the state agency of the presence of the radioactive source.
 - 6.5.2.1.2.2 Advise the supplier that we will be obtaining a DOT exemption for him, and give him a copy of Attachment 1.

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6.5.2.1.2.2.1 When the exemption is obtained, forward it to the supplier.

6.5.2.1.2.2.2 Reject the load

NOTE: DOT Exemptions are only issued during normal business hours. Therefore, the vehicle may need to be parked if it is not normal business hours to wait for an approved DOT Exemption. Alternately, if the state authority allows, the Facility may choose to dump the load and isolate the source of the radioactivity with oversight by the state agency. Then, the truck can be immediately put back in service.

6.6 **Receive the DOT Exemption and Reject the Load**

6.6.1 Typically within 30 minutes, the State Radiation Official will return a signed copy of the DOT Exemption Form with an Approval Number.

6.6.2 Make a copy of the paperwork, give it to the vehicle driver, and send the truck on its way.

6.6.3 Record the Rejection on the Detailed Inspection Log, if applicable.

6.7 **Complete Company Incident Report**

6.7.1 Complete an Incident Report in KMI - Attach a copy of the Approved DOT Exemption Form to the Report



**SAFETY, HEALTH, ENVIRONMENTAL & COMMUNITY
MANAGEMENT PROCEDURE**

**RADIATION DETECTION &
RESPONSE – ATTACHMENT 1**

North America

Date of Most Recent Revision: October 2008

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Date: _____

RE: Radiation Load
SMM Obtaining DOT Exemption

Dear Supplier:

Radioactivity was detected in the load of recyclable material you transported to our facility. We rejected this load, because we are not equipped to process radioactive materials at our facilities.

Under U.S. Department of Transportation (DOT) regulations (40 CFR 106, 107 and 171-180), radioactive materials may not be offered or transported by highway or rail without meeting DOT requirements.

Under DOT Exemption E-10656, State Radiation Control Officials authorize the transportation of this material from our facility back to the facility of origin, without meeting all of the requirements for radioactive materials specified in DOT regulations.

SMM will be contacting the State Radiation Control Officials to obtain an exemption, so that you can return this load legally to the facility of origin. After the load is returned to your facility, your state's radiation officials will contact you. The state will be able to provide information on proper handling and ultimate disposal of this source.

If you need additional information, the State Radiation Control Officials can be reached at:

We thank you for your understanding and being patient while we deal with this matter

Sincerely

DISCLAIMER: This scrap metal facility provides this letter as a courtesy, in an attempt to make it easier for our suppliers to manage a radioactive material that was brought to our facility. The information in this letter may be inaccurate or otherwise misleading, and we make no warranty regarding the information in this letter. We strongly recommend that you retain legal counsel to ensure that you are managing all radioactive materials safely, and in accordance with applicable laws and regulations.



**SAFETY, HEALTH, ENVIRONMENTAL & COMMUNITY
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**RADIATION DETECTION &
RESPONSE – ATTACHMENT 2**

North America

Date of Most Recent Revision April, 2009

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Date: _____

RE: Radiation Load
Where SMM did not obtain DOT Exemption

Dear Supplier:

Radioactivity was detected in the load of recyclable material you transported to our facility. We rejected this load, because we are not equipped to process radioactive materials at our facilities.

Under U.S. Department of Transportation (DOT) regulations (40 CFR 106, 107 and 171-180), radioactive materials may not be offered or transported by highway or rail without meeting DOT requirements. Under DOT Exemption E-10656, State Radiation Control Officials authorize the transportation of this material from our facility back to the facility of origin, without meeting all of the requirements for radioactive materials specified within DOT regulations.

You have indicated to us that you do not want us to contact the State Radiation Control Officials to obtain a DOT E-10656 exemption on your behalf. Please be advised that we have no responsibility related to the transportation of these radioactive materials or failure to obtain said DOT Exemption. However, for your information, the State Radiation Control Officials can be reached at:

Feel free to contact us if you have any questions regarding this letter.

Sincerely

DISCLAIMER: This scrap metal facility provides this letter as a courtesy, in an attempt to make it easier for our suppliers to manage a radioactive material that was brought to our facility. The information in this letter may be inaccurate or otherwise misleading, and we make no warranty regarding the information in this letter. We strongly recommend that you retain legal counsel to ensure that you are managing all radioactive materials safely, and in accordance with applicable laws and regulations.

APPENDIX V. INBOUND MATERIAL VOLUMES

Confidential Business Information – Redacted for Public Copy

APPENDIX W. MATERIAL FLOW DIAGRAM

Flow between Yards at Paulina

SHREDDER

Material processed at the shredder is generally Light Iron (LT) and End of Life Vehicles (ELVS) brought into the facility by industrial, commercial, peddler, demo, etc. customers

Periodically, certain grades of NF will be processed at the shredder. This material, once processed, will be sent back to NF and not comingled with steel.

Material processed at shredder produces three streams.

- 1. Product
 - a. Steel Shred (Product) is loaded into **trucks** from Shredder yard and sent to customer
 - b. Product is loaded into shuttle truck and brought down to Ferrous Yard to load into **trucks, barges or rail cars**.
- 2. DNF – Goes to MRP for further processing
- 3. Small amount of ASR – also brought to MRP to ASR pile to landfill

MRP

DNF from Shredder is processed at the MRP. The MRP produces two streams:

- 1. NF Metal sold as product which is loaded into truck or oversee container
- 2. ASR sent to Landfill, by truck, as alternative daily cover.

Non-Ferrous

Material is brought in by industrial-commercial customers as well as by peddler. Material is brought in by truck.

Most material is hand sorted by material type.

Certain metals can be baled – this is done to give the consumer a denser product. Baled material is generally aluminum or copper based.

Once the weight of a full load is achieved for a particular NF Metal it is shipped to a customer via van trailer or oversea container at the shipping side of the warehouse.

Ferrous Yard

The Ferrous yard accepts heavier gauged steel and iron for processing and sale. Processing is done through mobile and stationary shear(s) and torch cutting.

Periodically, light iron is mixed in a heavier metal load. If received, light iron would be transferred to the shredder yard.

Finished product is sold to customers and loaded into trucks, rail cars or barges.

During a shredder outage – the Ferrous yard may temporarily store Light Iron from shredder as a means of reducing fire risks at shredder.

As mentioned above – the Ferrous yard may load product from the shredder into barges and rail cars.



APPENDIX X. SUMMARY OF JOB HAZARD ASSESSMENTS

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
JSA - Inspection of Fall Protection equipment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/06/2021
Grease Roll off trailer	CIM Transport	Risk Assessment / JSA	06/29/2021
Installing new bearing on C001A tail pulley	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/19/2021
Proper loading of light iron and tarp use on dump trailer.	CIM Transport	Risk Assessment / JSA	06/17/2021
JSA - Pressure Washing of Equipment.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/28/2021
Installing UMO floor wear plate	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/27/2021
JSA - Uncoupling a trailer from a tractor.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/27/2021
Securing a Roll off Box on truck	CIM Transport	Risk Assessment / JSA	05/26/2021
Fabricating a Roll Off Door	CIM Transport	Risk Assessment / JSA	05/26/2021
JSA- Operating Pressure Washer	CIM Transport	Risk Assessment / JSA	04/29/2021
JSA-Ladder use	CIM Transport	Risk Assessment / JSA	04/29/2021
Greasing main motor drive bearing	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/24/2021
Fabricating a hatch door	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/29/2021
Trimming the top grate	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/27/2021
JSA for operating high pressure power washer	CIM Transport	Risk Assessment / JSA	03/24/2021
Operating a chop saw	CIM Transport	Risk Assessment / JSA	03/24/2021
Van Trailer Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/01/2021
Fabricating a hatch door	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/25/2021
JSA for Battery replacement in truck.	CIM Transport	Risk Assessment / JSA	02/23/2021
Van Trailer Inspection	CIM Transport	Risk Assessment / JSA	02/23/2021
Shaker Table material sortation	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/02/2021
Accepting Auto Batteries	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/02/2021
Greasing Fan # 1	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/29/2021
JSA - Inspection of Fall Protection equipment	CIM Transport	Risk Assessment / JSA	01/25/2021
Manlift Inspection	CIM Transport	Risk Assessment / JSA	01/25/2021
Replacing electrical motor on OBM2	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/23/2020
Proper use of spill kit	CIM Transport	Risk Assessment / JSA	12/18/2020
JSA for Emptying Trash Dumping Hopper	CIM Transport	Risk Assessment / JSA	12/18/2020
Changing vein pump on HPU # 1	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/28/2020
Electrical Testing - Troubleshooting	CIM Transport	Risk Assessment / JSA	11/25/2020
Use of mobile stairs/platform.	CIM Transport	Risk Assessment / JSA	11/25/2020
Incoming Customer/ Vehicle Proceedure	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/16/2020
Electrical Testing - Troubleshooting	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/16/2020
Emptying Trash Dumping Hopper	CIM Transport	Risk Assessment / JSA	10/28/2020
Refill water tank on water truck	CIM Transport	Risk Assessment / JSA	10/28/2020
JSA use of bench cut off saw	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/27/2020
Refill water tank on water truck	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/27/2020
Tighten bonnet bolts	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/25/2020

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Water Truck Pre-trip Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/03/2020
JSA-Weed Trimmer/Weed Control	CIM Transport	Risk Assessment / JSA	09/30/2020
Proper use of spill kit	CIM Transport	Risk Assessment / JSA	09/30/2020
Emptying Trash Dumping Hopper	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/28/2020
JSA for Changing oil in truck	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/28/2020
Installing a steel floor plate	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/25/2020
Inbound loads JSA	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/09/2020
Replacing the sprockets on the Infeed conveyor	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/27/2020
Proper use of spill kit	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/25/2020
JSA-Weed Trimmer/Weed Control	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/25/2020
Torching wire and cable wrapped on the DFR	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/27/2020
Patching a conveyor belt	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/27/2020
Water Truck Pre-trip Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/13/2020
Welding plate on C001D chute	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/30/2020
Greasing Double Feed Roll	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/30/2020
JSA- Set-Up Prior To Welding	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/30/2020
JSA- Set-Up Prior To Welding	CIM Transport	Risk Assessment / JSA	05/29/2020
Using Hand Electric Grinder	CIM Transport	Risk Assessment / JSA	05/29/2020
Greasing Double Feed Roll	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/21/2020
Removing small round heavies from conveyor chutes	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/24/2020
JSA - Greasing Skid steer	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/24/2020
Operating a bench grinder	CIM Transport	Risk Assessment / JSA	03/31/2020
Spreading Rock/Gravel in the Yard	CIM Transport	Risk Assessment / JSA	03/30/2020
JSA for Changing a forklift tire	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/30/2020
Inbound loads JSA	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/30/2020
JSA - Greasing Skid steer	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/30/2020
Ladder Use	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/26/2020
Patching a conveyor belt	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/25/2020
Using Hand Electric Grinder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/16/2020
Working from Heights	CIM Transport	Risk Assessment / JSA	02/29/2020
Proper use of an Impact Wrench	CIM Transport	Risk Assessment / JSA	02/27/2020
JSA for Changing a forklift tire	CIM Transport	Risk Assessment / JSA	02/27/2020
Spreading Rock/Gravel in the Yard	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/19/2020
Replacing drive belts on conveyor C004	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/18/2020
Manlift Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/18/2020
JSA- Set-Up Prior To Welding	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/14/2020
Spreading Rock/Gravel in the Yard	CIM Transport	Risk Assessment / JSA	01/31/2020
Manlift Inspection	CIM Transport	Risk Assessment / JSA	01/28/2020

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Installing a conveyor superchute	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/23/2020
Loading Production for Sale with a loader	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/30/2019
Loading a lugger box onto a lugger truck.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/27/2019
Preparing Auto Radiators For Shipment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/27/2019
Shred Copper Pick Test	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/26/2019
JSA Trucking - Fueling Trucks in the yard	CIM Transport	Risk Assessment / JSA	12/26/2019
Removing a conveyor Idler	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/20/2019
Transportation JSA-Loading a lugger box onto a lugger truck.	CIM Transport	Risk Assessment / JSA	12/09/2019
Load a lugger box onto a lugger truck.	CIM Transport	Risk Assessment / JSA	12/09/2019
Installing a conveyor Idler	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/04/2019
Working from Heights	CIM Transport	Risk Assessment / JSA	11/27/2019
Adjusting timer for walkway lights	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/27/2019
JSA MRP - Loading Production for Sale	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/22/2019
Manlift Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/12/2019
JSA for safely Backing a truck into a dock.	CIM Transport	Risk Assessment / JSA	11/08/2019
the use of mobile stairs/platform.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/31/2019
Truck shop use of mobile stairs/platform.	CIM Transport	Risk Assessment / JSA	10/31/2019
Forklift Inspection	CIM Transport	Risk Assessment / JSA	10/31/2019
Cleaning Aluminum Rims	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/30/2019
Loading Production For Sale - JSA	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/28/2019
Replacing light bulbs on the walkway	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/24/2019
General Hot work JSA - Rail Yard	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/16/2019
Greasing bearings on magnet #1 and magnet #2	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/26/2019
JSA for Changing a truck tire	CIM Transport	Risk Assessment / JSA	08/29/2019
Electrical Testing - Troubleshooting JSA	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/29/2019
Securing a Roll off Box on truck	CIM Transport	Risk Assessment / JSA	08/28/2019
Cleaning screen for the extractor fan	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/27/2019
MRP- Changing an electric motor	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/22/2019
JSA- Set-Up Prior To Welding	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/20/2019
Refill water tank on the water truck	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/06/2019
JSA - Non routine load driver procedure (Lugger and Roll off)	CIM Transport	Risk Assessment / JSA	07/29/2019
unLoading the flatbed with non ferrous	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/27/2019
Changing oil filters for the rotor bearings	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/26/2019
Securing a Roll off Box on truck	CIM Transport	Risk Assessment / JSA	07/05/2019
Receipt and Inspection of Unacceptable Materials- Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/28/2019
Receipt and Inspection of Unacceptable Materials- Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/28/2019
Receipt and Inspection of Unacceptable Materials- Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/28/2019
Uncoupling a trailer from a tractor.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/15/2019

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Replacing Propane Tank On Forklift.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/15/2019
Replacing Propane Tank On Forklift.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/01/2019
Changing Hydraulic oil in truck	CIM Transport	Risk Assessment / JSA	05/31/2019
Replacing Propane Tank On Forklift.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/31/2019
Coupling a trailer to a tractor.	CIM Transport	Risk Assessment / JSA	05/28/2019
Mobile Elevated Work Platform - Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/28/2019
Daily Truck Scale Check	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/28/2019
Welding on the DFR tips	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/25/2019
Electrical Testing - Troubleshooting	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/13/2019
Site Wide Transportation Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/06/2019
Electrical Testing - Troubleshooting	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/04/2019
Pant Chute Repairs	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/02/2019
Using Hand Electric Grinder	CIM Transport	Risk Assessment / JSA	04/30/2019
Replacing Propane Tank On Forklift.	CIM Transport	Risk Assessment / JSA	04/30/2019
Mobile Elevated Work Platform - Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/29/2019
Removing closed cylinders from the old sheet pile	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/29/2019
Replacing the Shredder Anvils	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/25/2019
Working at Height JSA (General)	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/10/2019
operation of De Walt snipers	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/08/2019
Removing FE and cardboard from 3105 aluminum coils	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/08/2019
Operating a chop saw	CIM Transport	Risk Assessment / JSA	03/27/2019
Removing closed cylinders from the light iron	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/26/2019
General Hot work JSA	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/25/2019
Proper use of an Impact Wrench	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/23/2019
General Maintenance Risk Assessment - Yard 10	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/22/2019
Mobile Elevated Work Platform - Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/12/2019
Inspect and Haul a Roll off Box on truck	CIM Transport	Risk Assessment / JSA	03/04/2019
Yard 1 - Checking block heaters on mobile equipment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/28/2019
Emptying Trash Dumping Hopper	CIM Transport	Risk Assessment / JSA	02/28/2019
JSA for Unloading dump hoppers from barrel truck using	CIM Transport	Risk Assessment / JSA	02/28/2019
Bobcat / Skidsteer Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/26/2019
Yard 10 -Material Scrap Handler (MSH) Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/25/2019
General Maintenance Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/25/2019
JSA use of cut off saw	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/25/2019
Changing drive belts on the Rotary Valve	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/23/2019
Forklift Truck (FLT) Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/11/2019
JSA- Set-Up Prior To Welding	CIM Transport	Risk Assessment / JSA	01/30/2019
Front-end Loader Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/28/2019

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Replacing Discharge Chute 725 Liners	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/24/2019
Material Scrap Handler (MSH) Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/21/2019
Mobile Elevated Work Platform - Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/21/2019
General Maintenance Risk Assessment	CIM Transport	Risk Assessment / JSA	01/18/2019
General Maintenance Risk Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/15/2019
Operating a bench grinder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/14/2019
JSA on cable cutter machine	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/10/2019
Cleaning debris on Shredder fan #2	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/27/2018
Ladder Use	CIM Transport	Risk Assessment / JSA	12/21/2018
JSA for operating high pressure power washer	CIM Transport	Risk Assessment / JSA	12/21/2018
Cleaning Under Retail Platform Scale	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/11/2018
Daily Truck Scale Check	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/11/2018
Front-end Loader Risk Assessment - Yard 10	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/04/2018
General Hot work JSA	CIM Transport	Risk Assessment / JSA	11/28/2018
Unloading Roll off box with Forklift and chains	CIM Transport	Risk Assessment / JSA	11/28/2018
Bobcat / Skidsteer Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/27/2018
Removing debris on Shredder fan #1	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/24/2018
Forklift Truck (FLT) Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/02/2018
Bobcat / Skidsteer Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/02/2018
Forklift Truck (FLT) Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/01/2018
Forklift Truck (FLT) Risk Assessment Template	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/31/2018
JSA - CHASSIS AND DOLLY LEG INSPECTION	CIM Transport	Risk Assessment / JSA	10/31/2018
Tracking a Conveyor Belt	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/26/2018
Installing a conveyor Idler	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/25/2018
Forklift Truck (FLT) Risk Assessment - Transportation	CIM Transport	Risk Assessment / JSA	10/04/2018
Using Hand battery cable cutters	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/02/2018
Using Hand Electric Grinder-Yard 6	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/02/2018
Yard 1 Torquing blades on shear	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/30/2018
Using Hand Electric Grinder-Yard 1	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/30/2018
Proper use of Impact Wrench	CIM Transport	Risk Assessment / JSA	09/28/2018
Removing a conveyor Idler	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/25/2018
Transportation HazID - High Rolloff boxes	CIM Transport	Risk Assessment / JSA	09/12/2018
Site Wide Transportation Risk Assessment Template	CIM Transport	Risk Assessment / JSA	09/11/2018
Shredder - Replacing Mid Section Castings	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/09/2018
Maintenance shop- set-up prior to welding	CIM Transport	Risk Assessment / JSA	08/29/2018
Ladder use-Transportation	CIM Transport	Risk Assessment / JSA	08/28/2018
Preparing Gaylord Box For Use	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/27/2018
Replacing The Rotor Bearing Bolts	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/16/2018

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Shredder - Opening and closing the mill box (Mid Section)	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/13/2018
General Hot work JSA - Non Ferrous	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/07/2018
Shredder - Replacing Entry Liners (997's)	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/01/2018
Trailer Inspection for outbound loads	CIM Transport	Risk Assessment / JSA	07/31/2018
JHA on using Battery Grinder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/30/2018
Shredder - Opening and closing the mill box Bonnet	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/27/2018
Unloading material from a ROLL OFF BOX with use of FORKLIFT AND CHAINING	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/27/2018
JSA for Dumping trailers and rolloff	CIM Transport	Risk Assessment / JSA	07/27/2018
Torquing The Tie Rod Super Nut Bolts	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/26/2018
Shredder - Changing an electric motor	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/18/2018
Ladder Use	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/29/2018
Working from Heights	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/29/2018
Inspection of Fall Protection equipment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/29/2018
Replace broken tie rod on the rotor	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/28/2018
Operating High Pressure Power Washer	CIM Transport	Risk Assessment / JSA	06/28/2018
Making Hydraulic Hose	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/26/2018
Change Oil on Truck	CIM Transport	Risk Assessment / JSA	06/20/2018
Replacing Pin Protectors	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/20/2018
Yard 1 Water Truck Pre-trip Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/31/2018
Yard 1 hooking up water truck to water pump	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/31/2018
Secure Gondola/van trailer for service	CIM Transport	Risk Assessment / JSA	05/31/2018
Manlift Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/26/2018
Operating High Pressure Power Washer	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/25/2018
Replacing Rotor End Disc Caps	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/11/2018
Shut down procedures for welding torches	CIM Transport	Risk Assessment / JSA	04/30/2018
JSA for Battery replacement in truck.	CIM Transport	Risk Assessment / JSA	04/30/2018
Setting up to Torch in Torch field	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/27/2018
Yard 1-Welding Setup	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/27/2018
Shredder -Material Receiving and Inspection (Peddler Side)	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/24/2018
Ladder Use	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/23/2018
Loader Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/21/2018
Shaker Table material binding in a box of yellow brass when	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/13/2018
Yard 1 Taking off grapple cylinder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/29/2018
Spotter spotting a trailer in the dock.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/28/2018
Proper use of spill kit	CIM Transport	Risk Assessment / JSA	03/27/2018
Forklift Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/23/2018
Shredder - Replacing Grates	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/12/2018
JSA Trucking - Non routine driver procedure	CIM Transport	Risk Assessment / JSA	03/08/2018

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
sorting Motors	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/08/2018
Volvo skid steer keeper bolt on boom pin	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/28/2018
Proper use of hand tools	CIM Transport	Risk Assessment / JSA	02/28/2018
JSA Trucking - Fueling Trucks in the yard	CIM Transport	Risk Assessment / JSA	02/28/2018
Shredder - Changing a conveyor belt	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/25/2018
Crane Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/22/2018
Loading Old Cast outside by the bunkers,	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/07/2018
Niton for testing Material	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	02/07/2018
Inspecting a torch bank	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/30/2018
Loading/unloading lugger box	CIM Transport	Risk Assessment / JSA	01/30/2018
JSA for safely Backing a truck into a dock.	CIM Transport	Risk Assessment / JSA	01/30/2018
Skid Steer Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/24/2018
Loading and unloading trailers	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/22/2018
skids steer pushing up material in bins	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	01/22/2018
Loading the flatbed with non ferrous	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/22/2017
Truck shop use of mobile stairs/platform.	CIM Transport	Risk Assessment / JSA	12/22/2017
Paulina Shredder - Inspection of Fall Protection equipment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/20/2017
Working from Heights	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	12/05/2017
Starting the Shredder Motor - Chicago	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/27/2017
Skid Steer Housekeeping Under the Picking Station	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	11/27/2017
Safe Dump Hopper delivery	CIM Transport	Risk Assessment / JSA	11/14/2017
Safe Dump Hopper delivery	CIM Transport	Risk Assessment / JSA	11/14/2017
Making Hydraulic Hose	CIM Transport	Risk Assessment / JSA	11/01/2017
Changing oil in truck	CIM Transport	Risk Assessment / JSA	10/31/2017
Bailing Material HRB	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/31/2017
Inspection Mobile Equipment MH/Loaders	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/26/2017
loading material on the shaker tables with new cages.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/25/2017
Unloading rebar and equipment from tractor trailer	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/10/2017
Installing rebar	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/05/2017
Installing frame work for concrete pour	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/05/2017
Presorting Material to be baled	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/04/2017
Cleaning Inground Truck Scale	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	10/04/2017
Watering the Roadways	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/27/2017
Changing tire on truck	CIM Transport	Risk Assessment / JSA	09/26/2017
Yard 1-Torquing Shear Crane Blade Bolts	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/26/2017
Securing a Roll off Box on truck	CIM Transport	Risk Assessment / JSA	09/25/2017
Loading DNF and Shred Trucks	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/21/2017
Sweeping Warehouse	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/14/2017

Risk Analyses Summary

01/01/2008 - 12/31/2021

Chicago IL Paulina (Main Yard), CIM Transport

Title	Location	Category	Start Date
Recieving and Inbound Inspection.	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	09/13/2017
Refill water tank on the water truck	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/24/2017
Infeed Inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/24/2017
PPE Safety Vest for Truck Shop employees	CIM Transport	Risk Assessment / JSA	08/22/2017
Operating a bench grinder	CIM Transport	Risk Assessment / JSA	08/22/2017
Loading old cast alumiumm	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/07/2017
Cleaning docks area and under dock plates	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	08/07/2017
Bringing Shear Crane into the Weld Shop for Maintenance	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/31/2017
Torchcutting	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/29/2017
Water Truck	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	07/26/2017
Forklift Safety	CIM Transport	Risk Assessment / JSA	07/25/2017
PPE - Assessment	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/29/2017
Removing Non - Conforming Material From Pile	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/22/2017
Material receiving and inspection	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/15/2017
Replacing Spring Boxes at the Shredder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	06/08/2017
Locking up the payloader	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/20/2017
Assembling Infeed flights to chain sections	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	05/11/2017
Forklift Movement	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/20/2017
Shaker Table-Adding hydraulic oil	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/19/2017
Picking at Shredder Downstream	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/16/2017
Bailing all nonferrous material in HRB baler	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/13/2017
Cleaning Dock Area Nonferrous warehouse	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/12/2017
Accessing the Mill Area	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/11/2017
Barging	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	04/07/2017
Replacing Base Section Liners on the Shredder	Chicago IL Paulina (Main Yard)	Risk Assessment / JSA	03/28/2017

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APPENDIX Y. PERSONAL AIR AND NOISE EXPOSURE SAMPLING



Metal Management Midwest, Inc.

2500 S. Paulina Street
Chicago, IL 6068

Industrial Hygiene:

Dan Satterfield has performed, per OSHA's regulations, personal air monitoring as well as respirator fit testing and training at the site for the last 10 years.

Daniel L. Satterfield

Satterfield Consulting y
227 South Water Street
Batavia, Illinois 60510
630-879-9553
dsatt@sbcglobal.net

Hearing Conservation Program

Consulting Audiology Associates has performed annual hearing testing at our facilities also for last 10 years.

Consulting Audiology Associates, LLC

6905 W. North Avenue
Oak Park, IL 60302
www.savhearing.com

APPENDIX Z. RODENT/VECTOR CONTROL

Presto-X

Your Local Pest Control Experts

Integrated Pest Management Service Program

For

Sims Metal Management

2500 S Paulina
Chicago, IL. 60608

November 2020

Scope of Service

Service Area

Areas covered include the areas listed below the interior of the facility and the immediate exterior up to three (3) feet from the structure as necessary for covered pests. Service areas include:

Delivery Area	Lounge Area	Shipping Area	Receiving Area
Dock Area	Processing Area	Shop Area	Break Area
Entrances	Production Area	Lobby Areas	Warehouse
Dumpster Area	Restrooms	Storage Areas	Office areas upon request

Targeted Pests

Presto-X inspects and applies pest management materials as necessary in the above mentioned service areas, to provide control of the following pests:

Rats	Mice	Roaches
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We also assist in control of the management of:

Ants (pavement and thief)	Ground Beetles	Crickets
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Additional pest management services are described in the Ancillary and are available on a cost per service basis.

Routine Service

Following the establishment of a preventive level of control, routine service begins. During routine service, Presto-X inspects interior service portions of Sims Metal facility on a regularly scheduled frequency detailed per target pest in the Service Specifications below.

Your Technical Service Representative evaluates sanitation and structural deficiencies conducive to a pest infestation. Any area of concern is detailed on the service report filed in the Pest Management Program Manual.

A detailed schematic of the facility illustrates the location of any pest management hardware (light traps, multi-catch traps, bait stations, etc.) installed. This schematic is maintained in the Pest Management Program Manual.

All hardware noted on the schematic is labeled and numbered to facilitate dating and initialing during each service rendered.

All applications and procedures are in accordance with industry best practices; as well as requirements and guidelines of relevant third party auditors and inspectors.

Service Specifications

Insect Management

Insect Management

Frequency: Monthly

Service portions of the facility are inspected to determine if insect activity or evidence is present and to identify areas that require corrective sanitation and structural maintenance measures. Insect management procedures includes the use of insect monitoring devices, strategic placement of insect management bait, applications of insect management dust formulations, and/or crack and crevice applications of insect management materials and insect growth regulators.

Rodent Management

Interior Rodent Management

Frequency: Monthly

Service portions of the facility is inspected to determine if any rodent activity or evidence is present and to identify areas that require corrective sanitation and structural maintenance measures.

Rodent management equipment is maintained on the interior of the facility around entry points, along exterior walls, and in other appropriate areas. All traps are inspected and cleaned upon each visit as necessary.

Exterior Rodent Management

Frequency: Monthly

Services are performed per the above mentioned frequency. Multi-catch traps and/or tamper resistant rodent bait stations are maintained in appropriate areas around the immediate exterior foundation of the facility. Exterior rodent bait stations are secured to the ground and/or building to keep them in place and locked to ensure tamper resistance. Rodent bait stations are inspected, cleaned, and maintained with fresh bait as necessary. Also, rodent burrows are baited as necessary. Rodent management device placement are in accordance with all internal, regulatory, outside, and client audit requirements and guidelines.

Documentation and Communication

A Pest Management Program Manual is furnished and maintained by Presto-X. The Program Manual consists of the following information:

- Presto-X contact information
- Certificate of insurance
- Licenses and certifications
- Description of the service program
- Ancillary services
- Laws and regulations
- Labels and Material Safety Data Info
- Structural and sanitation information
- Quality assurance reviews
- Pest sighting reports/ trending reviews and report of findings
- Pest management device map
- Pest activity tracking reports
- Material usage reports
- Service reports
- Annual Facility Assessments
- Trend Reports Survey Analysis

Presto- X places a strong emphasis on maintaining communication with designated personnel to assure proper implementation and success of the pest management program.

Total Quality Assurance

Regularly scheduled contact is maintained between your Service Center Manager and your key personnel to ensure that the described service program is meeting and exceeding expectations. This entails 1 thorough inspection of Sims Metal facility per year and maintaining open lines of communication with key personnel. Client Care Reports are

completed by your Service Center Manager and submitted to our Quality Assurance Manager for review.

Random on-site Quality Assurance audits are performed by our Regional Quality Assurance Manager. This service is designed to ensure that our quality standards are being maintained and are consistent throughout the company.

Insurance

Presto-X maintains adequate insurance coverage; including general liability, worker's compensation, and automobile liability. A copy of the current Certificate of Insurance is available in the 'Information' section of the Program Manual.

Time of Service

Services are rendered at an agreed upon time. Your Technical Service Representative will contact your personnel prior to initiating any work and will check out prior to leaving your premises. A service work order is left with your personnel upon completion of each service.

Calls for Additional Service

In the event additional services are necessary between our regularly scheduled visits, such services will be rendered promptly without an additional charge. It is our procedure to call clients requesting additional service within four hours of the original additional service request.

Materials and Equipment

All labor, materials and equipment required to render the services described herein are be furnished by and remain the property of Presto-X with the exception of equipment already owned by client. Any damaged or missing equipment is replaced and charged to Sims Metal. Materials used and application methods are in accordance with regularly established practices and in compliance with Federal, State and local regulatory agencies. Pesticides used are approved by a designated facility representative before application. In the event of any changes to materials or services the facility will be notified by Presto-X of intended changes.

Training and Orientation

Presto-X, in conjunction with Sims Metal, provides the following training assistance:

- On-site training with each service, effectively communicating structural and sanitation concerns related to maintaining an effective pest management program at your facility.

- Attendance at Sims Meal meetings to create an exchange forum on pest management and sanitation concerns directly related to the success of an effective pest management program.
- Presto-X also offers comprehensive Client Learning Programs and has a large library of videos and information on pest management and safety practices.

Some of these services may require an additional cost. Please contact your local Service Center (847-699-6888) for more details.

GMP Training

Presto-X associates attend documented GMP training on a regular basis. Results are kept in the information section of the log book. Presto-X associates also maintain evidence of competency through organizations such as state certification, Purdue University, AIB, Presto-X Initial Training Program, Presto-X University Online and other continuous and ongoing training in food plant pest management.

Sanitation and Structural Deficiencies

Proper storage, clean up, and pest proofing of facility are factors which effect the quality of your pest management program. Your Technical Service Representative documents situations relevant to the overall success of your pest management program and needing your attention. Correcting these deficiencies will enhance the level of control at your facility and help maintain a pest free environment.

Certification of Applicators

In accordance with the amended Federal Insecticide Fungicide and Rodenticide Act (FIFRA) and in compliance with State Law where required, pest management materials are applied by a Certified Applicator or an individual working under the direct supervision of a Certified Applicator. It is our policy that all of our service and supervisory personnel be certified in all states where pest management materials are applied.

Chemical or Service Emergencies

In case of a Chemical or Service emergency, please call 402-449-0319.

Terms of Contract

This program is accepted with an authorized signature as indicated below, and shall be subject to termination by either party with a 30 day written notice. Our terms of sale are "Net 30 Days" upon receipt of invoice. A 1.5% per month (18% per annum) fee may be charged on all invoices past due.

Presto-X

Your Local Pest Control Experts

Integrated Pest Management Service Program for Sims Metal Management
November 2020

Approved By: _____

Date: _____

Presto-X approval:  **Date:** 10/4/20

Presto-X

Your Local Pest Control Experts

Integrated Pest Management Service Program

For

Sims Metal Management

2425 S Wood St
Chicago, IL. 60608

November 2020

Scope of Service

Service Area

Areas covered include the areas listed below the interior of the facility and the immediate exterior up to three (3) feet from the structure as necessary for covered pests. Service areas include:

Delivery Area	Lounge Area	Shipping Area	Receiving Area
Dock Area	Processing Area	Shop Area	Break Area
Entrances	Production Area	Lobby Areas	Warehouse
Dumpster Area	Restrooms	Storage Areas	Office areas upon request

Targeted Pests

Presto-X inspects and applies pest management materials as necessary in the above mentioned service areas, to provide control of the following pests:

Rats	Mice	Roaches
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We also assist in control of the management of:

Ants (pavement and thief)	Ground Beetles	Crickets
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Additional pest management services are described in the Ancillary and are available on a cost per service basis.

Routine Service

Following the establishment of a preventive level of control, routine service begins. During routine service, Presto-X inspects interior service portions of Sims Metal facility on a regularly scheduled frequency detailed per target pest in the Service Specifications below.

Your Technical Service Representative evaluates sanitation and structural deficiencies conducive to a pest infestation. Any area of concern is detailed on the service report filed in the Pest Management Program Manual.

A detailed schematic of the facility illustrates the location of any pest management hardware (light traps, multi-catch traps, bait stations, etc.) installed. This schematic is maintained in the Pest Management Program Manual.

All hardware noted on the schematic is labeled and numbered to facilitate dating and initialing during each service rendered.

All applications and procedures are in accordance with industry best practices; as well as requirements and guidelines of relevant third party auditors and inspectors.

Service Specifications

Insect Management

Insect Management

Frequency: Monthly

Service portions of the facility are inspected to determine if insect activity or evidence is present and to identify areas that require corrective sanitation and structural maintenance measures. Insect management procedures includes the use of insect monitoring devices, strategic placement of insect management bait, applications of insect management dust formulations, and/or crack and crevice applications of insect management materials and insect growth regulators.

Rodent Management

Interior Rodent Management

Frequency: Monthly

Service portions of the facility is inspected to determine if any rodent activity or evidence is present and to identify areas that require corrective sanitation and structural maintenance measures.

Rodent management equipment is maintained on the interior of the facility around entry points, along exterior walls, and in other appropriate areas. All traps are inspected and cleaned upon each visit as necessary.

Exterior Rodent Management

Frequency: Monthly

Services are performed per the above mentioned frequency. Multi-catch traps and/or tamper resistant rodent bait stations are maintained in appropriate areas around the immediate exterior foundation of the facility. Exterior rodent bait stations are secured to the ground and/or building to keep them in place and locked to ensure tamper resistance. Rodent bait stations are inspected, cleaned, and maintained with fresh bait as necessary. Also, rodent burrows are baited as necessary. Rodent management device placement are in accordance with all internal, regulatory, outside, and client audit requirements and guidelines.

Documentation and Communication

A Pest Management Program Manual is furnished and maintained by Presto-X. The Program Manual consists of the following information:

- Presto-X contact information
- Certificate of insurance
- Licenses and certifications
- Description of the service program
- Ancillary services
- Laws and regulations
- Labels and Material Safety Data Info
- Structural and sanitation information
- Quality assurance reviews
- Pest sighting reports/ trending reviews and report of findings
- Pest management device map
- Pest activity tracking reports
- Material usage reports
- Service reports
- Annual Facility Assessments
- Trend Reports Survey Analysis

Presto- X places a strong emphasis on maintaining communication with designated personnel to assure proper implementation and success of the pest management program.

Total Quality Assurance

Regularly scheduled contact is maintained between your Service Center Manager and your key personnel to ensure that the described service program is meeting and exceeding expectations. This entails 1 thorough inspection of Sims Metal facility per year and maintaining open lines of communication with key personnel. Client Care Reports are

completed by your Service Center Manager and submitted to our Quality Assurance Manager for review.

Random on-site Quality Assurance audits are performed by our Regional Quality Assurance Manager. This service is designed to ensure that our quality standards are being maintained and are consistent throughout the company.

Insurance

Presto-X maintains adequate insurance coverage; including general liability, worker's compensation, and automobile liability. A copy of the current Certificate of Insurance is available in the 'Information' section of the Program Manual.

Time of Service

Services are rendered at an agreed upon time. Your Technical Service Representative will contact your personnel prior to initiating any work and will check out prior to leaving your premises. A service work order is left with your personnel upon completion of each service.

Calls for Additional Service

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Presto-X

Your Local Pest Control Experts

Integrated Pest Management Service Program for Sims Metal Management
November 2020

Approved By: _____

Date: _____

Presto-X approval:  **Date:** 12/4/20



Your Local Pest Control Experts

Integrated Pest Management Service Program

For

Sims Metal Management

2599 S Wood St
Chicago, IL. 60608

November 2020

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Areas covered include the areas listed below the interior of the facility and the immediate exterior up to three (3) feet from the structure as necessary for covered pests. Service areas include:

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We also assist in control of the management of:

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Integrated Pest Management Service Program for Sims Metal Management
November 2020

Approved By: _____

Date: _____

Presto-X approval:  _____ **Date:** 12/4/20

APPENDIX AA. VEHICLES

The table below identifies the different types of vehicles present at the facility as well as the number of employees trained to operate the equipment.

Vehicle	No. Daily Operators	No. Trained Operators
Material Handlers	10	12
Loaders	5	8
Forklifts	7	20
Skid Steer	3	15
Water Truck	2	4
Sweeper	1	2
Aerial Lift	-	11

The table below provides the processing rates for the different materials handled by the various vehicles at the facility. All Numbers are averages and vary widely based on material type. The chart below shows what the equipment is capable of moving. Actual movement is based on material and transportation availability.

Vehicle	Material	Processed Rate	Unprocessed Rate	Units
Material Handlers	Ferrous Other	60-80	20-45	Tons/hr
	Shred	-	180	Tons/hr
Loaders	Ferrous Other	-	-	-
	Shred	150-300	-	Tons/hr
	DNF/ASR	ASR; 100-140	DNF: 35	Tons/hr
Forklifts	Ferrous	3,500	-	Pounds/lift
	Non-Ferrous	3,000 – 4,500	10 – 2,500	Pounds/lift
	Shred	-	-	
Skid Steer	Ferrous	-	-	
	Non-Ferrous	20	-	Tons/hr
	MRP	20	-	Tons/hr
Mobile Shear	Ferrous Other	-	8-10 (processes)	Tons/hr

APPENDIX BB. DAILY HOUSEKEEPING AND STREET SWEEPER

Weekly Plant Inspection

Facility:

Date:

Inspected by:

	Yes	No	N/A
1 Facility Entrance			
a. Clean and free of scrap metal or other forms of debris?			
b. Signs - in place, not faded, at appropriate heights			
2 Roadways/Pedestrian Walkways/Sidewalks			
a. Kept clean and free of materials or debris			
b. Potholes that need to be addressed			
c. Water pooling that needs to be addressed			
d. Dust suppression used to prevent fugitive dust			
e. Cleared of snow or ice			
f. Sidewalks adjacent to facility and clean and free of debris			
3 Scales			
a. Radiation Detectors working properly			
b. No surface cracks or evidence of damage			
c. Clean and free of scrap metal or debris			
4 Yard Rail System			
a. Rail Tracks are in good condition and not needing repair			
b. Switches are operating properly			
c. Brakes set and Wheel chocks in use during loading/unloading.			
5 Fence Condition			
a. Are there rips in opaque material needing repair			
b. Posts and fencing material structurally intact			
c. Gates - opening and closing properly and structurally intact			
d. Reflective material on gates when closed			
6 Stock Pile Storage			
a. Pile height is 30' or less			
b. Material is properly stored by grade			
c. Pile Stability is maintained			
d. Fire Breaks, when necessary, are in place.			
e. Material Piles are appropriately marked or labelled.			
7 Plant Drainage			
a. Practices in place to prevent pooling of stormwater			
b. Catch Basin filters in place and draining properly			
c. Stormwater collection systems operating properly			

	Yes	No	N/A
8 Buildings			
a. Orderly in appearance			
b. Building repairs needed?			
c. Driver Waiting areas clearly marked			
9 Barge Dock			
a. Bollards are in place and in good condition			
b. Barges, if any, are properly secured			
c. Seawall berm intact			
d. 20' setback of material from seawall edge			
e. Dock walls intact			
10 Posted Notices			
a. Material Acceptance signs at scales and in good condition			
b. Stop signs/Rail Road signs in place and in good condition			
c. No Trespassing signs along perimeter fencelines			
d. Speed Limit signs in place			
e. Controlled access area signs posted and in good condition			
f. Scales: CFC notice, Scrap Theft Notices and Alerts, State ID Requirements			
11 Traffic Flow			
a. No Disruptive congestion noted			
b. Queueing Areas open			
12 Employee and Customer Parking			
a. Parking area is clean and free of metal or other debris			
b. Visitor Parking signs, where applicable are in place			
13 Office and Scale Lobbies			
a. Clean and orderly in appearance			
b. No excessive paper buildup in scale lobbies			
c. Files are neat and orderly with only 1-2 months of files in scale at one time			
14 Solid Waste Storage			
a. Containers for the placement of solid waste are labelled			
b. Containers are not overly full allowing waste to spill out.			
c. Recyclable materials are not placed in Solid Waste Containers			
d. Are Pallets stacked neatly and at safe heights			

ELGIN®



INDUSTRIAL PELICAN®

PATENTED FILTRATION SYSTEM



The key to the Pelican's superior waterless dust control, filtration capacity and ability to completely fill the hopper without the dust overwhelming the filter is the patented filtration system. Unlike systems that simply mount a filter in the hopper, the Pelican's integrated system uses the hopper as a key component in the dust removal process.

1. Powerful vacuum fan on sweeper creates air stream through debris hopper, conveyor and skirted areas.
2. Inward rushing air carries airborne dust into debris hopper where it settles out with rest of swept debris.
3. Majority of fugitive dust falls into hopper with only small amount of dust getting to filter because of torturous air flow path, that separates the air from the debris.
4. Hopper capacity is optimized and media filter is required to capture only minimal fugitive dust rather than entire dust load.
5. A long life, low maintenance dry filter element is installed between debris hopper and vacuum fan to prevent dust from being pulled from the hopper and blown out the vacuum fan exhaust.
6. When filter becomes loaded, it can be mechanically cleaned with on-board switch that activates cleaning system so sweeping can continue.



***PM10 Certified**
ISO-9001
Made in the USA



Dry Dust Control



Front Dump Hopper



Easy-Access Center Console



Rear Wheel Suspension

PERFORMANCE

Outstanding Maneuverability

- Tight turning radius for quick turns, sweep extremely close to obstacles.
- Dual tire guide wheels increase stability and steering traction.
- Rear steering allows for better control of main broom position for a more precise sweep path.

Single Engine Powered

- John Deere 4045T, 4 cylinder turbocharged diesel engine.
- Lower cost to operate.

Patented Dry Dust Control

- Control fugitive dust without the use of spray water.
- Patented Torturous air path and filtration system design for outstanding performance.
- Year round sweeping of bulky or small, wet or dry material.

PRODUCTIVITY

Variable Height Front Dump Hopper

- Debris hopper can be dumped from the ground level up to 9 ft. 6 in. high.
- 3.5 cubic yard capacity.
- Capable of lifting up to 9,000 lbs.

Main Broom

- 35 in. x 66 in. hydraulically driven. Polypropylene main broom with variable speed in cab float controls.
- Main broom raises automatically when the sweeper is reversed.

Side Brooms

- 36 in. hydraulically driven rugged side brooms.
- Protrude up to 13 in. outside tire while sweeping to capture more debris.

No-Jam Debris Conveyor

- Heavy duty conveyor system with molded-in chevron cleats, positioned at optimal angle to move large debris without jamming.
- Built-in wash down for quick and easy clean-up.

OPERATOR CONVENIENCE

Comfortable Operator Cab

- Quiet, comfortable and spacious isolation-mounted, pressurized cab.
- Large windows, see through doors and a full width windshield for 360 degree visibility.
- Center console easily accessed from both left and right driving positions.

Rear Wheel Suspension

- Single-sided swing-arm rear suspension increases comfort in the cab.
- Reduces stress on sweeper frame-especially when operating on rough, uneven roads and surfaces.



Dry Disc Brake Wheel Motor



Debris Conveyor



Debris Hose Stored



Debris Hose extended 12'

DRIVABILITY

Servicability

- O-ring hydraulic connectors for long life and leak free operation.
- Waterproof, snap-together electrical connectors and color coded wires with identification stamped for quick troubleshooting.

High Performance Drive System

- Unitized, dry disc brake, wheel motor and planetary gear reduction assembly, delivers outstanding power with minimal maintenance.
- Easily navigates steep grades.
- Large, heavy duty truck tires provide a smooth ride and ample traction.
- Safety backup camera, standard.
- Pelican brake testing completed on a maximum of 30% grade.

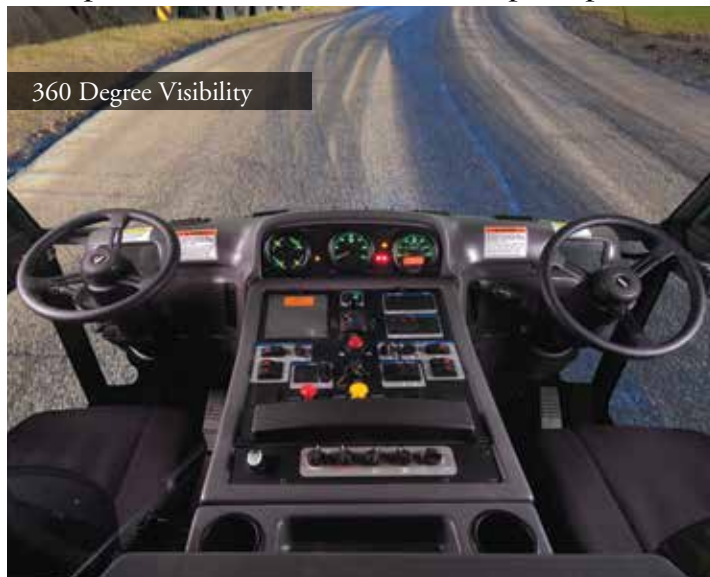
Durable, Purpose-Built Chassis

- Heavy duty construction and compact frame ensures a tight turning radius and years of reliable, low maintenance operation.
- Hopper load is positioned low between the two front wheels for balance and safety.

EASE OF OPERATION

Hydraulic Sweep System

- Controlled by engine RPM and operated independently of ground speed and direction.
- Broom speed provides digging power at slow or zero ground speeds.
- Foot pedal controls speed and sweeper direction through the hydrostatic transmission.
- One button controls the sweeping activation.
- Optional debris hose for remote pickup.



360 Degree Visibility

Pelican[®] Industrial - 4 Season Sweeping

The Elgin Industrial Pelican combines maneuverability, economy, serviceability and variable height front dump capability with a sweep system that easily handles heavy, compacted dirt and bulky debris as well as smaller particles found in industrial sweeping applications. The waterless dust control system allows increased pick-up of fine particles, proven year-round sweeping and safe removal of water reacting materials. It can also sweep through wet material and not damage the filter system.

The Industrial Pelican is an all around robust, outdoor sweeper with incredible digging power and comes standard with:

- Isolation-mounted, pressurized cab for cleaner, quieter and more comfortable operation
- Improved 360 degree visibility
- Enhanced ease of operation with dual operator controls and single switch to activate sweeping mode
- Heavy duty, no jam conveyor for reliability and ability to load bulky material up to 9 inches in diameter
- Efficient waterless dust control system to eliminate use of water for dust suppression
- Variable height front dump hopper
- Single engine - lower cost of operation
- Easy access, without tools, for service and maintenance

And customizable with a wide range of options ensure an industrial sweeper that meets each unique application. Elgin has over 50 dealers in North America to provide after-the-sale service, parts, and support.



Specifications

Frame construction:

Welded box steel, powder coated

Cab: All weather with heater pressurizer. 100% filtered intake air

Max speed: 20 mph

Loaded gradability 30%

Wheelbase: 133.4"

with 15' turning radius

Size: Overall length 16.75'

Height 9.4', Width at tires 8.5'

Diesel fuel capacity: 35 gals, 8 hrs

Operator positions: Left and right

Gauges: Full vehicular with rear view camera and dust control status

Lighting: Full vehicular with halogen headlamps

Tires: Commercial truck 11R22.5 and 215/75R17.5

Drive: Hydrostatic planetary reduction with disc brakes

Suspension: Heavy duty spring on rear guidewheel

Engine: John Deere 4045T diesel 99 HP

Main broom: 35" X 66" Polypropylene tube style

Side broom: 36" Vertical digger, steel wire

Sweep system protection: Raise in reverse

Hopper capacity: 3.5 yds

Hopper lift and dump: 9' 6" and 9,000 lbs

Hopper construction: Steel, with LifeLiner® option

Loading conveyor: 45° Rubber belt with chevron cleats

Broom skirts: Quick release; easy access and cleaning

Dust separation: Torturous path through hopper and filter housing

Dust filter: Long life synthetic media; envelope type

Dust fan: Three speed load sensing

Filter cleaning: In-cab, envelope flexing eccentric with sequence timer

Dumping dust control: Wetting spray bar at dust filter housing exit

Options



LifeLiner® Hopper System

The LifeLiner® Hopper system is a specially designed hopper liner and finish system that greatly improves the life, durability, and functionality of a sweeper hopper.



Front Debris Hose

The optional hand held front debris hose attachment allows remote cleaning into hard to reach areas such as under conveyors and tight corners.



Lighting Packages

The Pelican can be equipped with a variety of lighting options for increased safety and visibility, including rotating beacons and arrowboards.

Additional Options

- Air conditioner
- Air suspension seats
- Sliding rear and side windows
- In-cab side broom tilt
- Auto-Lube Automatic Lubrication System
- Extended warranties
- Poly side broom
- See dealer for additional options

Warranty

Elgin Sweeper Company backs the Pelican sweeper with a one-year limited warranty. The Pelican is warranted against defects in material or workmanship for a period of 12 months from the date of delivery to the original purchaser. Optional extended warranty packages are available. Consult your Elgin dealer for complete warranty information. The ESCO / FSM warranty shall not apply to major components or trade accessories such as, but not limited to, trucks, engines, hydraulic pumps and motors, tires and batteries that have a separate warranty by the original manufacturer.

Follow us on Facebook!

www.facebook.com/ElginIndustrialSweeping

Your Local Elgin Dealer is:



Elgin Sweeper Company
Subsidiary of Federal Signal Corporation
1300 W. Bartlett Road
Elgin, Illinois, U.S.A. 60120-7529
(847) 741-5370 Phone
(847) 742-3035 Fax
www.elginsweeper.com

Specifications subject to change without notice.

Some photos shown with optional equipment.

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ISO-9001 and PM-10 Advantages

The Pelican® is manufactured in an ISO-9001 facility. John Deere is a registered trade mark of Deere & Company. Covered under US Patent # 7,281, 296 B2 & 6,584,157 B2, and Canadian Patent # CA2475362.

APPENDIX CC. CLOSURE PLAN



Metal Management Midwest, Inc.

2500 S. Paulina Street
Chicago, IL 6068

Closure Plan

If a facility is permanently closed,

- Assets such as inventory, stationary and mobile equipment will be removed from the facility;
 - Exception: if a piece of processing equipment is meant to be part of the sale, it will remain on site.
 - Weekly inspections of equipment remaining on-site will be made to prevent/address instances of vandalism.
- Records stored on site will be removed and sent to off-site storage.
- Petroleum products will be removed from the property.
- Tools and other maintenance related equipment will be removed from the property.
- Wastes generated from the operation, if any, will be removed from the facility.
- Permits will remain in place until facility is sold.

The City of Chicago will receive notification of permanent closure from Sims Metal and will be asked to come to the site for a final walkthrough before closure. Items noted during this walkthrough will be addressed.