EXHIBIT K

Evidence of Releases

Releases of hazardous wastes and hazardous constituents have been evidenced in numerous ways. This report summarizes findings established in various studies and reports which are available in the RCRA case file.

First, Master Metals contracted to have an environmental audit conducted. This audit was a prerequisite imposed by the insurance company in order for Master Metals to obtain liability insurance. The report dated February 15, 1991, was prepared by Environmental Strategies Corporation and is entitled Environmental Risk Assessment Final Report. The report indicates that releases of hazardous constituents have been documented in the soil and groundwater. The report is partially based upon groundwater and soil sampling conducted by Compliance Technologies, Inc., which is provided in a report dated January 21, 1991. Results of the groundwater analyses for four groundwater wells indicated concentrations of lead ranging from 450 to 1350 ppb, where the federal drinking water standard is 15 ppb; chromium 20 to 1330 ppb, where the federal drinking water standard is 100 ppb; nickel 40 ppb to 520 ppb, where the (proposed) federal drinking water standard is 100 ppb; cadmium 26 to 87 ppb, where the federal drinking water standard is 5 ppb; and barium 20 to 50 ppb where the federal drinking water standard is 2000 ppb. Also, the groundwater analyses showed that the groundwater exhibited a wide range of pH from 6.8 to 9.86. Hence, releases of heavy metals to the groundwater have been documented.

The study of the soils contamination by Environmental Strategies Corporation is presented in a report entitled Subsurface Investigation Report. In this report, 31 locations at or near the facility were identified for subsurface soil sampling. The results indicated that the facility is predominantly underlain by an industrial slag fill. The slag material shows contamination by heavy metals, and many of samples of the soils show elevated concentrations of heavy metals (four samples also showed a black discoloration). For example, the concentration of lead was detected as high as 14,000 parts per million (ppm). This is considered elevated relative to background in Ohio farm soil where the concentration is known to be less than 40 ppm. In addition, the soils beneath the southeastern corner of the property, the drum storage area, and the battery decasing areas at depths 8 to 10 feet below grade contain concentrations of lead exceeding 500 ppm. Some of the samples exceeded 10,0000 ppm. Hence, releases of heavy metals to the subsurface have been documented.

Next, based upon three ambient lead monitors in close proximity to Master Metals, Inc., and operated by the Cleveland Division of Air Pollution Control, air monitoring results indicated that ambient lead concentrations in the immediate vicinity of the site to be extremely elevated. The National Ambient Air Quality Standard for lead is 1.5 micrograms per cubic meter of air for a calendar quarter average. In 1982, for the monitor closest to the facility, the monthly average for the ambient lead concentrations ranged from 9 to 80 with individual days as high as 117 ug/cubic meter. The quarterly average concentrations for 3 quarters were 37.42, 28.04, 23.12 micrograms (ug) per cubic meter. The same ambient air quality monitor for the first quarter of

1993, measured 16.1 ug/m3. OEPA has reported that similar results were obtained in subsequent monitoring events.

On October 14, 1992, OEPA issued Findings and Orders (F&Os) for violations of hazardous waste and air regulations. The F&Os document releases on-site and off-site in residential properties where it is suspected Master Metals sold slag as fill materials. Based upon continuing violations of the F&Os, OEPA ordered Master Metals to cease operations until it could come into compliance with the F&Os.

Another report which documents releases of hazardous constituents to the environment have occurred is the Site Assessment report, authored by the U.S. EPA Emergency Response Operations in Region 5 and dated August 13, 1992. The report indicated via visual evidence and sampling that releases of hazardous constituents have been detected in soils both on and off-site. In five of the seven surficial soil samples were obtained including two sediment/sludge samples, sample analyses results showed that leachable lead as determined by the toxicity characteristic leaching procedure (TCLP) is present in concentrations greater than 200 times the regulatory level of 5 mg/L. Several of the samples also exceeded the TCLP regulatory limit for arsenic, and cadmium. Lead is also present at high concentrations for all locations as determined by a total constituent analysis. The range of concentrations is 6,020 to 115,000 milligrams per kilogram of soil (parts per million or ppm). As previously stated, the average lead concentrations range between 9 and 39 ppm in Ohio farm soil. The report concluded that the site poses a potential threat to human health and the environment.

In March of April of 1990, an OSHA inspector collected a soil sample approximately 125 feet east of Master Metals Main Gate and found it to contain 2% lead.

A videotape of a site visit to Master Metals by U.S. EPA and OEPA on June 16, 1992, provides visual evidence of releases. The tape documents the site conditions such as uncontained waste materials, waste piles, cracked concrete beneath and adjacent to waste piles and container storage areas, damaged and inappropriately marked bins, direct waste migration routes to the combined/storm/sanitry sewer system, breaches in fences, deteriorated and opened waste containers, and mislabelled containers. (The audio component of the video tape which was created by a U.S. EPA contractor is intelligible due to the use of respirators and high background noise levels.)

In addition, on April 4, 1992, representatives of the Ohio EPA observed slag in a waste storage unit designated as the slag bin which is east of the primary baghouses. The Ohio EPA inspector obtained several samples of the material in the bin and in a pile on the ground in front of the bin. The samples analysis (sample ID K920403-1HW/WP(3)) for the pile of slag indicated that the material was hazardous because it exhibited the toxicity characteristic for arsenic, cadmium, chromium, lead, mercury, selenium, and silver. (Report, lab results and photograph are in Exhibit L). In addition, the inspector was informed by Master Metals that some of the recently generated slag was on several trucks ready to be transported to a sanitary landfill for disposal as solid waste. The Ohio inspector collected several

slag samples from the trucks. The sample analysis (sample ID K920403-1HW/#2(B)) for the slag in truck B indicated that the material was hazardous due to toxicity characteristic for arsenic, cadmium, chromium, lead, mercury, selenium, and silver. The OEPA inspector suspects that those trucks transported the slag to Browning Ferris Industries (BFI), a solid waste landfill for disposal.

U.S. EPA RCRA Enforcement Branch has observed releases of hazardous constituents and practices which would likely contribute to on-going releases. The reports document the site conditions such as uncontained waste materials, waste piles, damaged and inappropriately marked bins, breaches in fences, deteriorated and opened waste containers, among other problems. Several inspection reports including photographs are available.

Lastly, harm caused by the releases of the hazardous constituents is evidenced by the lead poisoning experienced by the workers and even several of the children of the workers as documented by the Occupational Safety and Health Administration and the Ohio Department of Health.

by: Sheri L. Bianchin, Environmental Engineer, U.S. EPA, Region 5, WMD, REB

City of Cleveland

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MASTER METALS, INC.
CLEVELAND, OHIO

ENVIRONMENTAL RISK ASSESSMENT
FINAL REPORT

PREPARED

BY

ENVIRONMENTAL STRATEGIES CORPORATION

FEBRUARY 15, 1991

Vienna, Virginia • San Jose, California • Boxborough, Massachusetts

Contents

	Page
Executive Summary	1
Introduction	4
General	4
Disclaimer	5
Risk Factors	5
Pathways and Controls	5
Populations at Risk	5
Toxicity and Behavior of Materials	6
Management and Practices	6
Overall Risk	7
Description of the Master Metals, Inc., Facility in Cleveland, Ohio	8
General Description	8
Wastewater and Stormwater Systems	13
Solid and Hazardous Waste Systems	17
Air Emission Systems	24
Assessment of Environmental Risks at the Master Metals, Inc., Facility in Cleveland, Ohio	27
Pathways and Controls	27
Pathways and Controls - Surface Water	27
Pathways and Controls - Groundwater	29
Pathways and Controls - Air	35
Pathways and Controls - Summary	36
Populations at Risk	38
Populations at Risk - General	38
Populations at Risk - Summary	39
Toxicity and Behavior of Materials	39
Toxicity and Behavior of Materials - General	39
Toxicity and Behavior of Materials - Summary	42
Management and Practices	42
Management and Practices - General	42
Regulatory Contacts	45
Management and Practices - Summary	45
Table of Risk Rankings	47

Contents
(continued)

	Page
Conclusions and Recommendations	48
Conclusions	48
Recommendations	49
List of Figures:	
Figure 1 - Location of the Master Metals, Inc., facility in Cleveland, Ohio	9
Figure 2 - Layout of the Master Metals, Inc., facility in Cleveland, Ohio	11
Figure 3 - Groundwater monitoring well locations at the Master Metals, Inc., facility in Cleveland, Ohio	30
Figure 4 - December 1990 soil boring locations, at the Master Metals, Inc., facility in Cleveland, Ohio	34
Figure 5 - Wind rose - Cleveland, Ohio	37
List of Tables:	
Table 1 - Metals levels in the Master Metals wastewater	28
Table 2 - Groundwater monitoring results	32
List of Appendices:	
Appendix A - Site photographs	
Appendix B - Administrative order	
Appendix C - NEORSD code of regulations	
Appendix D - Wastewater treatment compliance schedule	
Appendix E - Baseline monitoring report for wastewater discharges	
Appendix F - Consent decree	
Appendix G - Bulk material storage inventory January 1991	
Appendix H - RCRA inspection report	
Appendix I - Ohio EPA report	
Appendix J - Permits to install new air emission source	
Appendix K - Settlement agreement with Ohio environmental board of review	
Appendix L - Wastewater discharge monitoring results	
Appendix M - Soil boring investigation March 1988	
Appendix N - Soil boring investigation December 1990	

Executive Summary

Environmental Strategies Corporation (ESC) performed an environmental risk assessment of the Master Metals, Inc., facility in Cleveland, Ohio. Master Metals operates a secondary lead smelter, which manufactures lead and lead alloys from used industrial batteries, air pollution control dust, lead-containing dross, and other scrap materials. The overall risk of sudden environmental impairment is rated as low-to-moderate, while the nonsudden risk is moderate-to-high.

The site is located on approximately 4.3 acres. The plant was initially constructed by National Lead in 1932 on what was apparently a slag disposal yard for a nearby steel plant. Wastewater generated in the battery decasing area is collected in an aboveground storage tank before being transported to a hazardous waste facility for treatment and disposal. Water collected in the storage tanks includes battery acid and washdown water from the area. All other wastewater, including noncontact cooling water and sanitary wastewater, is discharged to a combined sewer operated by the Northeast Ohio Regional Sewer District (NEORSD). Stormwater runoff and facility washdown water are collected in one of four sumps designed to trap sediments before being released to the combined sewer. In accordance with a compliance schedule approved by the NEORSD, Master Metals intends to install a treatment system for all stormwater runoff, facility washdown, all lead-contaminated wastewaters, and wastewater generated from battery decasing operations.

It is unlikely that operations at the Master Metals facility could affect surface water directly. Indirect affects on surface water could occur as a result of releases of contaminated wastewater or stormwater to the NEORSD sewer treatment plant.

There are several potential sources of groundwater contamination onsite. The property was used as a slag disposal area before National Lead constructed the plant in 1932. Metals may have leached into the groundwater from the slag. The overall poor condition of the unprotected concrete pad beneath the

site combined with historically poor housekeeping practices at the site could have resulted in the contamination of groundwater. However, recently improved housekeeping practices and facility improvements have reduced the risk of releases of lead compounds to soils and groundwater.

A soil and groundwater investigation of the property, conducted in December 1990, indicated that both soils and groundwater beneath the site contain elevated concentrations of lead (i.e., above background). The source of the lead in the groundwater cannot be determined without additional information, although it would appear that the presence of elevated lead concentrations in the soils is attributable to the historical use of the property for lead processing purposes.

Master Metals obtained a U.S. Environmental Protection Agency (EPA) ID number (OHD097613871) and interim status in 1980 for the operation of hazardous waste treatment units, waste piles, and container storage areas. On November 8, 1985, the facility lost interim status for the waste piles, and on January 15, 1990, Master Metals entered into a Consent Decree with the EPA for the closure of the waste piles. The waste piles were removed as of September 1, 1990. The EPA issued fines against Master Metals for the failure to comply with some requirements and deadlines specified in the Consent Decree in September 1990. Master Metals is currently negotiating with the EPA regarding the payment of the fines. Master Metals is also working with the EPA to implement the requirements of the Consent Decree and to obtain a permit for the treatment and storage of hazardous waste.

Master Metals uses two rotary furnaces in its secondary lead smelting process, a 13-foot by 17-foot primary furnace and a 12-foot by 15-foot secondary furnace. Emissions from the furnaces are controlled by three baghouses. A large reworked 38,000-ACFM baghouse is used to filter emissions from hoods over the furnace charge doors. Two new 15,000-ACFM baghouses have recently been installed to control emissions from the 2 furnaces. A smaller baghouse is also used to control emissions from the refining kettles used to refine the ingots obtained from the furnaces.

The major positive features of the facility are as follows:

- The area is served by a central water and sewer system.
- The site runoff is collected and treated before being discharged to the sanitary sewer.
- The facility is scheduled to install a wastewater treatment system for stormwater runoff and battery cracking wastewaters.
- The facility has installed new air pollution control equipment for its point source emissions.
- The plant is in a heavily industrial area that is at least 0.5 mile from residential areas.
- Master Metals has recently employed full-time health and safety and environmental administrators which has resulted in improved housekeeping practices and compliance with applicable health and safety and environmental regulatory requirements.

The major negative features of the facility are as follows:

- The plant's wastewater discharge has not complied with the NEORSD pretreatment requirements.
- Historical lead processing operations and poor housekeeping at the site may have contributed to elevated lead concentrations in the soil and groundwater beneath the property.
- The plant was issued a Notice of Violation for the improper management of its hazardous waste storage units following its most recent Resource Conservation and Recovery Act inspection.
- The U.S. EPA fined the facility for alleged violations of the Consent Decree following inspections of the facility conducted in July and August 1990 (the alleged violations are currently being contested by Master Metals).

Introduction

General

In this report, Environmental Strategies Corporation (ESC) evaluates the potential for the Master Metals, Inc., facility in Cleveland, Ohio, to present a risk of environmental impairment offsite. This report was prepared by ESC to assist Master Metals in obtaining liability insurance. It is based on visits to the Cleveland facility on April 25, 1990, and January 8, 1991. Marc Jones, former Environmental Scientist of ESC, visited the site on April 25, 1990. Scott Van de Mark, Environmental Scientist of ESC, visited the site on January 8, 1991, and is the principal author of the report. He was assisted on the site visit by Mr. Rudy Zupan, Environmental Administrator, and Mr. Douglas Mickey, owner and President of Master Metals. ESC also reviewed documents provided by Master Metals and spoke with representatives of environmental regulatory agencies in the preparation of this report. Photographs of the facility are provided in Appendix A.

The environmental risk presented by a facility is its potential to create environmental exposures, which can be actual or potential impairment, claims, liabilities, or exposures. Four risk factors, Pathways and Controls, Populations at Risk, Toxicity and Behavior of Materials, and Management and Practices, are analyzed and rated from low to high. Integrating the four factors allows a determination of the risk presented by the facility overall.

ESC ranks each factor and the facility separately for the potential to present sudden and nonsudden environmental risks. The difference between sudden and nonsudden impairment is based on the duration of the events that contribute to the risk, which is not necessarily the amount of time necessary for impairment to travel offsite. Sudden impairment results from single, abrupt events, while nonsudden impairment results from gradual events or repeated, abrupt events. For example, a single discharge of a toxic material would result in sudden impairment, but the regular occurrence of the same discharge would

be nonsudden impairment. This evaluation of the duration of risk is conducted for the purpose of insurance underwriting.

Disclaimer

Portions of this report are based on documents and oral information supplied by Master Metals. ESC has not independently verified this information. While this report is accurate to the best of ESC's knowledge and belief, ESC cannot guarantee the completeness or accuracy of any description or conclusions based on the supplied information.

Risk Factors

Pathways and Controls

Pathways and controls examine the routes through which materials could move off the premises of the facility and what controls are in place to inhibit movement through those routes. The pathways evaluated include the surface water, ambient air, groundwater, and soils. The potential for contamination of all groundwater is considered, even that beneath the facility. The existence, design, and effectiveness of any pollution control devices or natural features of the site are evaluated to determine the extent to which they reduce the escape of materials through the pathways.

Populations at Risk

The second factor is an assessment of the risk to the populations at risk from materials escaping the facility. The sensitivity of the environment around the facility is evaluated. While health impacts on human populations are emphasized, the potential for impairment of natural populations or resources also is reviewed. The risk to the populations is evaluated with respect to the existing state of the ambient environment. The impacts from other facilities in the area, the potential to be implicated in local

environmental problems, and the perception of the facility in the community are all part of the determination of the risk to populations.

Toxicity and Behavior of Materials

The materials that are most likely to escape from the facility are evaluated to determine their potential to cause health or environmental problems. The materials assessed include raw materials, intermediates, contaminants, and waste products from past, present, and future operations. ESC evaluates the materials for their health effects through acute and chronic exposures, the quantities present or generated, and their environmental fate. The descriptions of the materials include effects through all modes of environmental exposure, but the risk is based on the pathways of exposures relevant to the facility. The assessments of the materials are based on reviews of the secondary literature. Areas of current controversy concerning health effects are discussed but are not deemed to mitigate the risk.

Management and Practices

Management and practices examine how the operations and personnel of the facility work to exacerbate or diminish the environmental risks. Assessment of this factor also involves examining those areas that could be indicative of the state of environmental practices at the facility. Facility management is rated on how well they understand and evaluate environmental exposures and on their general compliance with environmental regulations. Management's readiness and ability to prevent and respond to accidents that could lead to environmental exposures is assessed. Housekeeping, equipment maintenance, inspection procedures, and workplace safety are used as indicators of management attitudes. Past practices relating to environmental controls and waste disposal are incorporated into the evaluation of current practices. Liabilities arising from the disposal of wastes offsite are not factored into this assessment.

Overall Risk

The four factors interact with each other to determine the risk presented by a facility. The threat from a high risk for one factor can be lessened by low risks for the others or can be reinforced by other high risks. Thus, the overall risk is based on the integration of the data contributing to each individual risk. It is a qualitative assessment of the potential for environmental exposures, impairment, liabilities, or claims from a facility.

Description of the Master Metals, Inc., Facility in Cleveland, Ohio

General Description

Master Metals operates a secondary lead smelter that manufactures lead and lead alloys from lead-bearing dross, spent industrial batteries, and various other lead scrap materials. The company's only facility is located at 2850 West 3rd Street in Cleveland, Ohio (Figure 1). The site consists of approximately 4.3 acres. The plant has a number of contiguous and noncontiguous buildings with approximately 32,000 sq ft under roof. Master Metals typically employs 50 people, 40 of which are production employees and 10 of which are office workers. The plant operates three shifts per day, seven days per week.

Initial operations began at the present location of the facility in 1932. At that time, National Lead built the plant on what was probably a slag disposal area for LTV Steel Company, Inc. The present owner of the plant, Mr. Douglas Mickey, purchased the property from National Lead on September 7, 1979. According to facility personnel, National Lead operated a secondary lead smelter from 1932 until Master Metals purchased the plant in 1979. No specific information concerning National Lead's operations was available.

There have been several modifications to the plant since its purchase in 1979. Most recently, a new rotary furnace along with two new baghouses were installed in 1989. The plant also recently underwent a large-scale improvement project for the control of stormwater in the yard area. In addition, Master Metals recently constructed a 7,000-sq ft building that houses the plant offices as well as employee locker rooms and shower facilities.

The site is located in a heavily industrial area. Rail yards for the Baltimore and Ohio Railroad border the property on the east and west. LTV Steel is the plant's nearest neighbor to the north and south.

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Figure 1
Location of the Master Metals, Inc., Facility in Cleveland, Ohio

Residential housing is located approximately 0.5 mile northwest of the facility. No residences are within one mile of the facility's northern, eastern, and southern borders.

The major features of the site include the following (Figure 2):

- the office building
- the furnace building
- a storage building
- a lead alloying operation building called the white metal building
- two new baghouses for the furnaces and a large brick baghouse
- the shipping and receiving building
- the roundhouse building, which houses the metal extrusion processes
- a small tank farm for petroleum products
- the battery cracking area in the facility yard
- a batch wastewater pretreatment system
- bulk and drum storage areas

The raw materials used by the facility include steel-cased batteries, soda ash, cast iron borings, petroleum coke, silica sand, and various lead-containing materials, including lead solder dross, baghouse dust, and scrap lead.

The soda ash is stored in a silo located north of the furnaces. The petroleum coke, silica sand, and cast iron borings are stored in piles. Baghouse dust is stored in nylon bags in a 90 cu yd steel bin. All other materials are stored in bins and drums. According to facility personnel, the soda ash and cast iron act as flux in the furnace charges. The coal fines act as fuel and are added along with the charges.

Compressed gas stored onsite is located in several areas. A liquid oxygen tank is located at the southeastern corner of the facility. Acetylene, oxygen, and propane are stored in gas cylinders. These gases are used mainly for welding in the plant's maintenance shop located in the roundhouse.

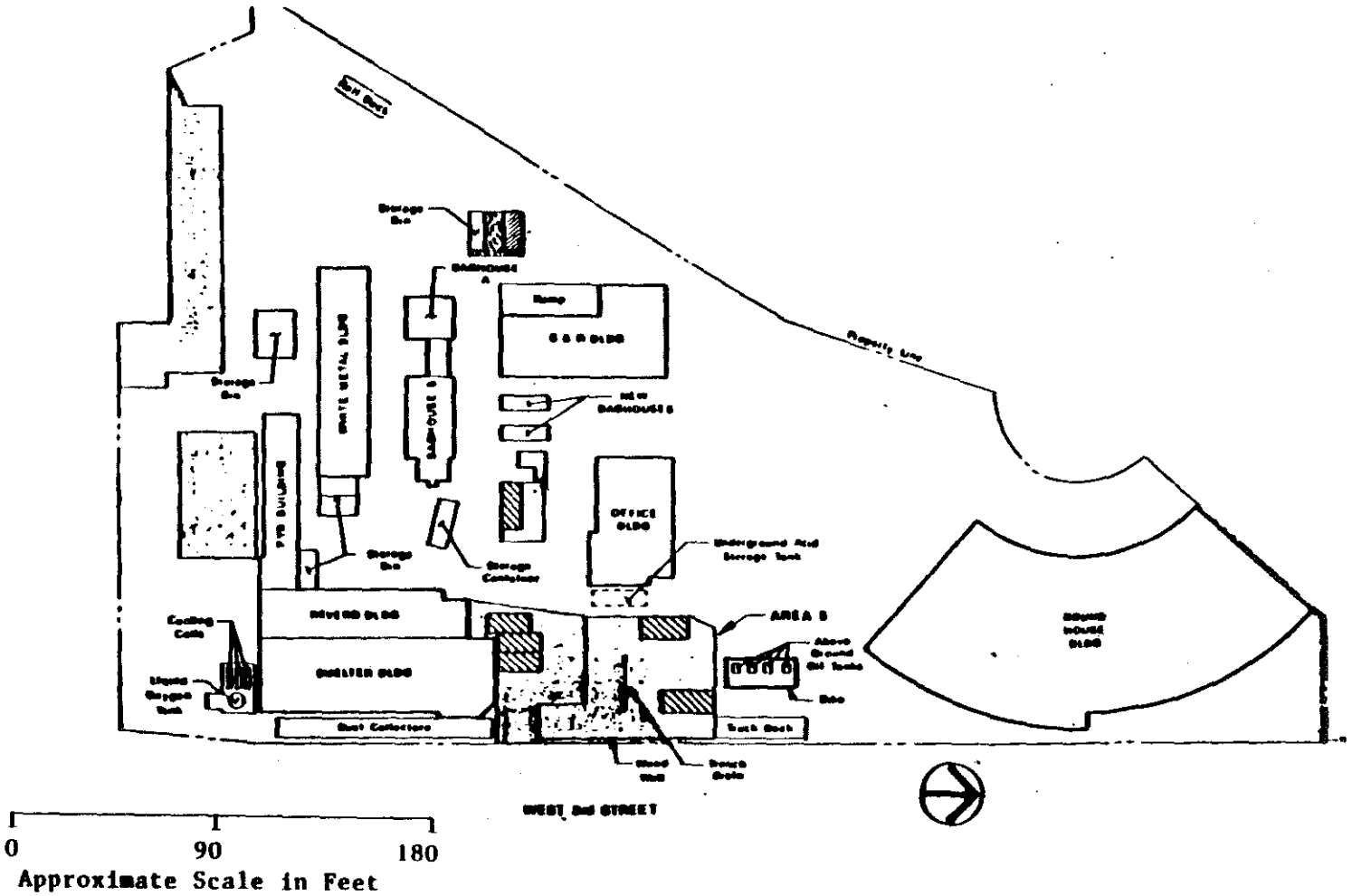

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Figure 2
Layout of the Master Metals, Inc.,
Facility in Cleveland, Ohio

Master Metals is a resource recovery facility that is involved in the operation of a secondary lead smelter and manufactures lead and lead alloys from lead-acid, steel-cased batteries, and various other materials containing lead. The incoming batteries are typically received on wooden pallets. The solder dross, scrap lead, and other lead-containing material are received and stored in bulk and drum storage units. Approximately 25,000 tons of material are received and reclaimed by the facility each year. About one-half of that weight is batteries, and the other half is other lead-containing materials.

The steel-cased batteries are cut open with an acetylene torch, and the lead plates are extracted and staged in outdoor bins located at the northeastern portion of the property for later processing. The battery acid drains out and is handled as discussed below. The lead battery plates and other lead-containing materials are melted down in one of the plant's two rotary furnaces. The furnace charges or feed materials consist of lead-containing materials, soda ash, cast iron borings, petroleum coke, and sand. Master Metals also uses filter bags from the plant's baghouses, baghouse dust, sludge from the wastewater treatment system, and dross from its refining operations as feed stock for its furnaces.

From the furnaces, large round ingots approximately 2 feet in diameter and 10 inches thick are produced. These ingots are melted down further for refining and then shaped into various sizes. Several kettles are located in the white metal building and are used to manufacture the various sized ingots. In addition to the pure lead ingots, the plant produces alloys of lead that range from 2.5% to 6.0% antimony. The antimonial lead is produced in kettles in the white metal building. The facility operates an extrusion process in the roundhouse at the northern end of the property where lead is extruded to different shapes and sizes depending on the customers specifications.

Master Metals does not operate any underground fuel storage tanks. Two 500-gallon underground tanks for diesel fuel and gasoline were operated until December 23, 1988. Master Metals had the tanks excavated and disposed of offsite. According to the company president, the local fire marshal inspected

the excavation pits, but no verification soil samples were collected. No evidence that the tanks had leaked was observed by facility representatives or the fire marshal.

Four aboveground tanks are maintained in a small tank farm north of the battery cracking area. The tank farm is equipped with a concrete secondary containment structure. The secondary containment appeared on observation to have a capacity greater than the total capacity of all four tanks (i.e., 2,000 gallons). The tank farm consists of three 550-gallon tanks storing diesel fuel, hydraulic fluid, and gasoline and one 250-gallon waste oil tank. These tanks store fuel and fluid used by the facility to service its vehicles and lift trucks. No polychlorinated biphenyl (PCB) analyses have been conducted on the hydraulic oil. In addition, a liquid oxygen storage tank is operated at the southeastern corner of the property behind the furnace building. The plant has obtained permits for all of these tanks from the Cleveland Department of Public Safety.

Wastewater and Stormwater Systems

Master Metals obtains its potable and process water from the city of Cleveland. The city draws its water from Lake Erie. The current rate of water use by the facility is 66,000 cu ft (493,680 gallons) per month for the plant and 62,000 cu ft (463,760 gallons) per month for the office for a total of 957,440 gallons per month. The total daily rate for the water use is approximately 31,000 gallons.

Approximately half of the water supply for the plant is used as noncontact cooling water. The remainder is used for showers and other sanitary water. The wastewater and stormwater from the plant, except for battery cracking wastewaters which are collected for offsite treatment and disposal, are discharged to a combined sewer system operated by the Northeast Ohio Regional Sewer District (NEORSD). The district's treatment plant is located approximately five miles from Master Metals. Its effluent is released to Lake Erie.

According to facility personnel, the only sources of the plant's process wastewater are residual battery acid and noncontact cooling water from the casting tables. As part of the facility's procedure for obtaining the lead plates from the batteries, residual sulfuric acid is allowed to drain onto the concrete surface in the battery cracking area. No batteries were decased during the site visits; however, Master Metals described the decasing operation. Facility representatives said that the batteries are cut using an acetylene torch. Employees wear protective clothing, including faceshields, aprons, and gloves, during the decasing operations. The acid flows over the ground to an open concrete channel and is transported by gravity flow through a polyvinyl chloride (PVC) underground pipe to a sump. This material is then pumped to aboveground 1,200-gallon and 1,500-gallon storage tanks. Once per month, the contents of the sump and 2 storage tanks, approximately 4,000 gallons, are collected by Clean Harbors, Inc., of Cleveland, Ohio, as hazardous waste for treatment and disposal. Before October 1990, this wastewater was treated onsite in the facility's former wastewater treatment system. The facility washes down the battery decasing area once each day, and the washwater is allowed to flow into the collection sump where it becomes mixed with the battery acid.

The collection sump consists of a concrete truck scale pit lined with a synthetic liner. The sump has a capacity of approximately 6,000 gallons. The facility began using the pit as a collection sump in 1988. Before 1988, Master Metal's battery cracking operation took place in the area where the new baghouses have been built. This operation was conducted on an unlined concrete pad. The acid was collected in an aboveground tank and neutralized before being released to the city sewer.

Before 1989, the facility had neutralized the wastewater collected in the sump with a manual chemical feed before discharging it to the NEORSD combined sewer. As a result of the exceedences of the sewer use code pretreatment limits by Master Metals, the NEORSD issued an Administrative Order to the facility in the spring of 1989 (Appendix A). According to the Order, the plant had failed to comply with the concentration limits for pH, copper, zinc, cadmium, and lead. The Order indicated that Master

Metal's pretreatment system was inadequate and that rainwater runoff from the facility may contain heavy metals.

Under provisions of the Administrative Order, the NEORSD required Master Metals to install a new wastewater pretreatment system and to provide further engineering controls for its runoff. The order required Master Metals to construct collection sumps at all rainwater catch basins that are large enough to allow for the precipitate of metal solids before overflow to the sewer system. The order also requires Master Metals to maintain the sumps to eliminate the potential of overflow of precipitants to the sewer. Master Metals installed four sedimentation sumps and a pretreatment system as a result of the Order. The pretreatment system was dismantled in October 1990, due to difficulties in meeting the NEORSD pretreatment standard for lead.

The former pretreatment system was a batch type physical-chemical treatment system, and the plant treated approximately 6,000 gallons of water per month. The treatment system consisted of a 6,000-gallon collection sump, a 1,200-gallon mixing tank, a 1,500-gallon clarifier, and a 5-cu ft filter press. The mixing tank and the clarifier are currently used as storage tanks for battery acid and rinsewaters before shipment offsite for treatment and disposal. The former treatment system consisted of elementary neutralization and metals precipitation. Liquid caustic was added to the tank until the pH of the wastewater was between 8 and 9. A coagulant was also added to the water to aid in the sedimentation process. The facility allowed the water to settle in the clarifier for 24 hours and then discharged it to the sewer. The solids generated in the clarifier were pumped to the filter press where they were dewatered. The filter cake was treated in one of the furnaces.

The effluent from the facility is regulated under local ordinances (Appendix C) and federal regulations. The facility monitors the influent and effluent for pH only. According to facility personnel, a pretreatment agreement from the city is not required, and no discharge limits have been set by the district. Master Metals does not routinely monitor the discharge for heavy metal content. The NEORSD

monitors the facility's discharge on a regular basis; however, according to the sewer district, the facility's effluent is not presently in compliance with its standards or federal categorical pretreatment standards.

In an effort to bring the facility's wastewater discharges into compliance with both local and federal pretreatment standards, Master Metals has agreed to a wastewater compliance schedule with the NEORSD (Appendix D). According to the schedule, Master Metals will install an operational treatment system by the end of 1991. Based on the results of a baseline wastewater monitoring program conducted in August 1990, the following waste streams contain levels of lead in excess of the NEORSD standard: truck wash, employee respirator wash, employee handwash, facility washdown, and battery cracking wastewaters (Appendix E). The planned treatment system will be designed to treat these flows as well as stormwater runoff. Master Metals has employed a local engineering firm to conduct an engineering study of the facility in order to develop preliminary design specifications for wastewater treatment system alternatives. The engineering firm was scheduled to complete the study by February 1, 1990. As of February 1, the study had not been completed. The proposed treatment system will reportedly be designed in accordance with federal categorical standards as well as NEORSD standards. The federal pretreatment guidelines are for existing source secondary lead smelters, 40 CFR 421.135.

Depending on the location, stormwater control varies. Within the battery decasing area, all runoff is collected in the area's collection sump for storage before transport to an offsite treatment facility. The other plant areas are sloped toward one of four stormwater catchment basins. These stormwater collection sumps are designed to allow sediments in the runoff to settle out before the water is discharged to the city sewer. According to Master Metals, the solids are routinely cleaned out of the sumps and treated in the furnaces. Eventually, all stormwater runoff will undergo treatment before discharge to the combined sewer system according to the wastewater compliance schedule.

The facility stated that, other than occasional spills of solid materials such as solder dross, no spills have occurred at the plant. On some occasions, a drum may have been knocked over and released dry material onto the pavement. These incidental spills are quickly cleaned up according to Master Metals.

On the day of the site visit, the tank farm was observed to contain stormwater. A visible sheen on the water and staining on the tanks indicated that releases routinely occur while loading the tanks. The facility reportedly intends on contracting with a local oil reclamation facility to remove, treat, and dispose of the accumulated stormwater in the containment structure. After the liquid has been removed, Master Metals intends on steam-cleaning the interior surfaces of the tank farm. The containment should be inspected for integrity and be repaired as necessary. In addition, a drainage valve should be installed at a low point in the tank farm to allow uncontaminated stormwater to drain from the tank farm following storm events.

No liquid wastes are accepted from offsite. The facility accepted chlorinated solvent hazardous wastes (EPA waste no. F001) at one time according to the facility's Resource Conservation and Recovery Act (RCRA) Part A permit application. These materials were a one-time shipment that the facility received by mistake from a customer. Master Metals said that the wastes were removed from the site and disposed of properly by the customer. Master Metals notified the U.S. EPA concerning the mistake. The material was stored in drums onsite for a few months before being removed.

According to Master Metals, there are no complaints, citations, or claims against the company related to its wastewater management.

Solid and Hazardous Waste Systems

Master Metals's EPA ID number is OHD097613871. The facility initially obtained interim status for the operation of hazardous waste treatment units, waste piles, and container storage areas on November 19, 1980. On November 8, 1985, the facility lost interim status for the waste piles, and on January 15,

1990, Master Metals entered into a Consent Decree with the U.S. EPA for the closure of the waste piles (Appendix F).

Master Metals filed a Part B permit application with the Ohio EPA for the operation of a hazardous waste treatment and storage facility. The most recent revision was submitted on April 9, 1990. Master Metals is awaiting comments on the revised application, which includes a partial closure plan for its former waste piles. All of the contents of the waste piles were placed in drums and storage bins by September 1, 1990. The locations of the former waste piles are indicated in Figure 2.

The facility receives baghouse dust (K069), which contains approximately 40% to 60% lead, from offsite lead processing facilities. In addition to the K069 wastes, Master Metals receives and treats materials that are characteristic hazardous wastes because of their leachable lead concentration. These materials include lead dross, industrial batteries, scrap, and other residuals that are lead-bearing wastes. Other nonhazardous recyclable materials are also received at the facility.

Wastes that are generated by the facility include the following:

- fire brick from the two furnaces
- slag
- baghouse dust
- spent baghouse filters
- wooden pallets
- sediments from the stormwater catchment basins
- empty drums
- steel cases from the batteries
- sulfuric acid from the batteries

Of these materials, only the scrap steel cases, drums, and fire brick are not routinely treated in the furnaces. The slag is tested by the Toxicity Characteristic Leaching Procedure (TCLP) method, and if it

passes, the facility disposes of it in either a Browning Ferris Industries (BFI) landfill or the Harry Rock Landfill in Cleveland. If the slag is hazardous, Master Metals uses it as flux in its furnaces.

The scrap steel drums and cases are sold to A. Shaw Scrap and Recycling Company. The fire brick in the furnaces is replaced every five months. If the material is not EP toxic, it is shipped to BFI or Harry Rock. If it is hazardous, it is shipped to Chem-Met Services for land disposal in Wyandotte, Michigan. According to facility personnel, the only liquid waste generated by the facility other than the battery acid and wastewater is used crankcase and hydraulic oil from the forklifts. The used oil is collected and treated by Research Oil Company in Cleveland, Ohio.

ESC reviewed the U.S. EPA's National Priorities List (NPL) and Comprehensive Environmental Response, Compensation, and Liability Information System (CERCLIS) data base to determine the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) status of the facility and the offsite disposal facilities it uses. None of the four facilities that Master Metals used, and Master Metals itself, is listed or proposed for the NPL; however, they are all listed on CERCLIS. A preliminary assessment of Master Metals was conducted in September 1984, and the U. S. EPA determined that no further action was required. A site inspection was conducted at Chem-Met Services in July 1985, and the U.S. EPA determined that no further action was required. Preliminary assessments have been conducted at the BFI and Harry Rock landfills. The Research Oil Company site was first listed on CERCLIS in 1988. A decision has not been made on the need for further action at these three sites. Clean Harbors was not listed or proposed for the NPL or listed on CERCLIS.

Master Metals has developed a waste analysis plan for the wastes received from offsite as part of its Part B application. The plan includes documentation reviews, chemical analyses, and pilot test runs. The most recent revision to the plan was submitted to the Ohio EPA on April 9, 1990. The state has not completed its review of the new plan.

Master Metals has a number of stormwater catch basins designed to collect solids before discharging the stormwater to the city sewer. The sediments in the basins are cleaned out every three months. The solids are treated in the furnaces.

Sulfuric acid is generated as a result of the battery decasing process. As previously mentioned, when the lead plates are removed from the batteries, the acid is allowed to flow onto the ground, through an open concrete channel, and eventually drains into a sump. Stormwater runoff from this area and washdown water are also collected in the sump. The resulting wastewater is currently collected in aboveground tanks before shipment offsite to Clean Harbors for treatment and disposal. The wastewater is manifested as a characteristic hazardous waste (D002). Although this is a temporary practice until a permanent onsite wastewater treatment system can be installed. ESC believes that the collection sump and storage tanks currently qualify as hazardous waste storage tanks pursuant to 40 CFR Part 265 Subpart J. It is recommended that Master Metals comply with these regulations or inquire with the Ohio EPA if the collection sump and storage tanks are subject to RCRA standards, and if the facility is obligated to comply with any other RCRA standards concerning this activity.

Hazardous and solid wastes received at the facility are stored in either bulk or drum storage. The bulk materials are stored in bins. During the January 8, 1991 site visit, all of the storage bins were covered and closed, except for bin no. 5 which contains charge materials including some lead-containing hazardous wastes. This bin is in use on a continual basis. According to the facility, the bins are covered with tarps and their doors are closed except when in use. Under federal regulations found at 40 CFR 260.10, container is defined as a "portable device in which a material is stored, transported, treated, disposed of, or otherwise handled." Many of the bins have a capacity of 90 cu yds and did not appear to be portable. However, the bins are approved by the U.S. EPA as hazardous waste containers as stated in the Consent Decree. Master Metals should cease the storage of hazardous waste in any of the bins that

do not meet the definition of container as specified in the Consent Decree. An inventory, as of January 8, 1991, of the bins and their contents is included in Appendix G.

Requirements for the management of hazardous waste containers under Subpart I of 40 CFR 264 and 265 also require that a container holding hazardous waste must always be closed during storage, except when it is necessary to add or remove waste. The facility should ensure that hazardous waste storage containers comply with this requirement.

The facility is inspected on a routine basis by the Ohio EPA. The most recent inspection was conducted by Mr. Mark Bergman of the Ohio EPA on March 26 and 27, 1990. The inspection report (Appendix H) identified seven violations:

- failure to mark satellite accumulation containers with the words "Hazardous Waste"
- failure to mark each of the hazardous waste bins with signs that indicate "Danger - Unauthorized Personnel Keep Out"
- lack of documentation concerning the acceptance or refusal of the contingency plan from several local emergency services authorities
- failure to include the quantities of lead-contaminated fire brick, lenox waste clay, and battery case waste in the operating record
- improper management of the hazardous waste storage bins
- improper management of the hazardous waste storage drums
- improper management of the lenox clay waste pile and the adjacent lead residue waste pile

Additional concerns expressed by the state included the presence of empty drums placed in various locations around the plant with hazardous waste labels from other facilities on them. The inspector also specifically mentioned that Master Metals was storing spent fire brick in drums that were still marked with labels from previous generators.

Of the violations cited by the Ohio EPA, the last three present the greatest potential environmental risks. On the day of the Ohio EPA inspection, several of the bins were left open allowing dust from the bins to disperse. The Ohio EPA indicated in the report that many of the drums containing hazardous waste were also left open.

A large puddle of battery acid was allowed to stand in the battery decasing area the day of the Ohio EPA inspection. This acid is likely a characteristic hazardous waste.

According to the Ohio EPA report, two existing waste piles remained onsite, the lenox (china clay) waste pile and the old battery case waste pile. The Ohio EPA indicated that the old battery case waste pile had a significant amount of lead residue mixed with the battery cases. The old battery case waste pile was not covered the day of the Ohio EPA inspection. The waste pile was not equipped with engineered controls for stormwater runon and runoff. The Ohio EPA report also stated that it had not been determined whether the underlying base is impermeable. Overflow from the waste pile onto the adjacent railroad siding was noted by the Ohio EPA inspector. Lead-containing material was removed from this area in September 1990.

As of August 1, 1990, all of the materials in the two waste piles were placed in drums or bins for eventual use in the facility's furnaces in accordance with the Consent Decree. According to the current operating record, over 50% of the contents of the china clay waste pile and all of the battery case waste pile had been placed in the furnaces to recover its lead content by December 31, 1990.

The facility has improved its management of hazardous waste storage bins and drums. All of the hazardous waste drums and bins, except for the furnace charge storage bin, as discussed earlier, were observed to be covered and closed during the January 8, 1990 site visit. As a result of improved housekeeping practices, there was little, if any, spilled lead waste observed in any of the hazardous waste storage areas.

Master Metals has included the quantities of lenox waste clay and lead-contaminated fire brick in the facility's hazardous waste operating record. Master Metals has also implemented an internal computerized tracking program for all lead raw material streams except for batteries and identifiable scrap received at the facility. All drums and bins of lead containing hazardous waste are assigned a reference number and are affixed with a sticker to enable proper tracking of the hazardous waste inventory. As material is deposited in the furnaces, the operating record and the computer tracking system are amended accordingly.

The facility is currently awaiting approval from the Ohio EPA for its contingency plan before submitting it to local emergency service authorities for acceptance. The contingency plan is included in the facility's Part B permit application which was most recently submitted to the Ohio EPA on April 9, 1990.

All of the contaminated residue remaining on the rail siding was removed by September 1, 1991, and placed in drums for disposal in the facility's furnaces.

The closure of the hazardous waste piles was conducted in accordance with a proposed partial closure plan as required by the Consent Decree. As part of the closure of the hazardous waste piles, Master Metals conducted a soil and limited groundwater investigation in December 1990 of the soils and groundwater beneath and adjacent to the former waste piles. The concrete pad underlying the former waste piles was observed to be mostly intact except for some minor fractures. The fractures in the concrete pad may have been a pathway for the movement of contaminants to the soils beneath the property. The soils investigation indicated that some of the soils beneath the former waste piles and at other locations on the property contain concentrations of lead as high as 10,000 mg/kg above background concentrations which were observed to be below 500 mg/kg.

According to Master Metals, no land disposal of materials has occurred since the property was purchased in 1979. No information was available concerning the disposal of materials before that date other than the reported disposal of slag on the property before 1932.

Master Metals has stated that there is no equipment containing PCBs onsite and that it is not aware of any asbestos insulation within the facility. A pole-mounted transformer owned by the local utility company is located on the plant property. The utility company reportedly notified Master Metals in writing that the transformer does not contain PCBs.

Air Emission Systems

Master Metals uses 2 rotary furnaces in its secondary lead smelting process, a 13-foot by 17-foot primary furnace and a 12-foot by 15-foot secondary furnace. Emissions from the furnaces are controlled by three baghouses. A large reworked 38,000-ACFM baghouse is used to filter emissions from hoods over the furnace charge doors. Two new 15,000-ACFM baghouses have recently been installed to control emissions from the 2 furnaces. A smaller baghouse is also used to control emissions from the kettles used to refine the ingots obtained from the furnaces.

Master Metals has permits to operate two existing furnaces and the existing baghouse. The two furnaces were designated in the permit as sources P008 and P009. During 1989, the Ohio EPA issued an Order that cited Master Metals for exceeding its permitted emission rates for opacity and dust emissions on numerous occasions (Appendix E). The order required the facility to implement new controls to reduce its emissions of particulate and lead. Under the Order, Master Metals made the following improvements:

- installation of a new furnace and baghouse to replace source P008
- installation of a new baghouse to serve source P009
- installation of a capture system for the fugitive dust emissions from source P009 and the new furnace and venting them to the existing baghouse

Master Metals was also required to rebuild the existing 38,000-ACFM baghouse.

The city of Cleveland Division of Air Pollution Control (DAPC) has been authorized by the Ohio EPA to manage the state air pollution control program for the Cleveland area. Master Metals received the permit to install (PTI) for the equipment changes listed above from the DAPC on March 3, 1989 (Appendix J). The new furnace has been designated source number P010 by the DAPC. The Ohio EPA issued a PTI to Master Metals that includes emission standards for the new and existing sources on February 28, 1990.

The types of emissions that would be anticipated from this facility include lead, antimony, carbon dioxide, sulfur oxides, and particulate. Master Metals conducted a stack test on September 21, 1989, after the installation of the new equipment. The monitoring results indicated a lead emission rate ranging from 0.057 to 0.006 pounds per hours, significantly below the allowable rate of 1.14 pounds per hour. The other emissions were also significantly less than the limits set by the PTI. A permit to operate has not been issued. Master Metals should continue to work with the Ohio EPA and the DAPC to obtain a permit to operate.

The facility has submitted applications to the Ohio EPA for permits to operate the existing sources P009 and P010. However, to obtain final approval for an operating permit for P010 and meet the required standard for sulfur dioxide emissions of 3 pounds per hour and less than 15 ppm in volume, additional emission controls are needed. Master Metals installed additional emission controls in January 1990 to meet the operating permit requirements in accordance with a joint stipulation and settlement agreement with the Ohio Environmental Board of Review that was signed on December 6, 1990 (Appendix K). Master Metals installed an automatic feed system for soda ash for source P010 in January 1990. Master Metals will perform stack tests to evaluate the systems effectiveness in February 1990. Provided the proposed system can achieve compliance with the sulfur dioxide standards, the facility may be granted operating permits from Ohio EPA for P009 and P010 as early as March 1, 1991.

In addition to the point sources, fugitive emissions result from the facility's operations. Of the numerous kettles located throughout the plant, only the refining kettles are equipped with emission controls. According to Master Metals, quarterly monitoring of the ambient air is conducted throughout the facility. The results of the monitoring were not made available for review by ESC. Because of fugitive dust emissions, respirators must be worn by employees inside and outside the plant buildings.

ESC reviewed data available from the facility's 1987 and 1988 Toxic Release Inventory Form (Form R). The facility reported fugitive air emissions of 250 pounds of lead and 250 pounds of sulfuric acid each year. According to the Form R, 5,019 pounds of lead and 3,270 pounds of sulfuric acid were released to ambient air through stack emissions. These quantities account for total releases of 5,269 pounds of lead and 3,320 pounds of sulfuric acid to ambient air.

Pathways and Controls

Pathways and Controls - Surface Water

The Master Metals facility could affect surface water indirectly through its discharge to the local sewer district's sewage treatment plant. The property is drained by storm drains located throughout the facility. The storm drains all connect to the city's combined sewer system. The Cuyahoga River is approximately 0.5 mile east of the plant. It is unlikely that surface water runoff from the facility would flow directly to a receiving surface water body, however, because of the use of a combined sewer system in this area.

The effluent from the plant is regulated under provisions of the U.S. EPA effluent guidelines and standards as well as the pretreatment standards set by the NEORSD. The NEORSD has a sewer use code that sets pretreatment standards for industrial subscribers to prevent the impairment of the sewage treatment plant (Appendix C). The NEORSD conducts quarterly monitoring of Master Metals's discharge. Samples collected from the facility's effluent in April 1990 indicate that Master Metals was not meeting the NEORSD discharge limits at that time (Appendix L). The samples were collected from the facility's new pretreatment system and from the stormwater basin in the plant's process area. The concentrations of lead, copper, zinc, and cadmium (i.e., the contaminants listed in the NEORSD order filed in 1989) found in the two samples are listed in Table 1. The pH of the sample from the stormwater sump was found to be 1.2, which is well outside the required effluent range of 5.0 to 10.0 pH units. More recently, Master Metals conducted a baseline wastewater monitoring program in accordance with the compliance schedule approved by NEORSD. The results of the baseline monitoring program, conducted in August 1990, indicate that several of the facility's wastewater flows contain levels of lead above the NEORSD

Table 1

Metals Levels in the Master Metal, Inc. Wastewater (mg/l)
Cleveland, Ohio

Containment	Catch Basin	Pretreatment System	Effluent Standard
Lead	11.0	1.6	2.0
Cadmium	39.0	10.0	2.0
Zinc	158.0	36.0	15.0
Copper	54.0	0.3	3.0

discharge limits (Appendix E). The cumulative sampling results indicate that Master Metals should install an improved pretreatment system for certain wastewater flows and stormwater runoff to comply with NEORSD limits and federal pretreatment standards. The proposed wastewater treatment system, specific in the compliance schedule, will capture and treat all stormwater runoff as well as process wastewaters from the facility. As part of the proposed improvements to the stormwater collection and treatment system, Master Metals will reportedly improve drainage and repair any and all cracks and fractures in the outdoor concrete pad underlying the storage and process areas.

There are several areas throughout the plant that could cause contamination of runoff. Much of the plant's processes and material storage are conducted outside. As previously discussed, the hazardous waste storage bins may be left uncovered briefly when depositing or removing material. Rain entering any open bins could result in the entrainment of lead and other contaminants in the runoff. Runoff from the process area, as indicated by the NEORSD sampling results, could become contaminated from any dust and debris in this area. The facility has improved its management of hazardous waste drums and bins and general housekeeping practices which should minimize the release of lead and other metals to outdoor surfaces and subsequently stormwater. However, as long as hazardous waste storage and transport is conducted outdoors at the facility, it will be impossible to completely eliminate the release of these materials. Provided that Master Metals installs an adequate treatment system for stormwater and wastewater as proposed, the risk of a release of contaminants to the sanitary sewer and subsequently surface water will be minimized.

Pathways and Controls - Groundwater

Master Metals employed a consultant to install and sample four shallow groundwater monitoring wells at the facility in December 1990. The wells are located in or near former and present hazardous waste storage and handling areas (Figure 3). Groundwater samples from each of the four wells contained concentrations of lead and cadmium which exceed the Ohio maximum contaminant levels (MCL) for

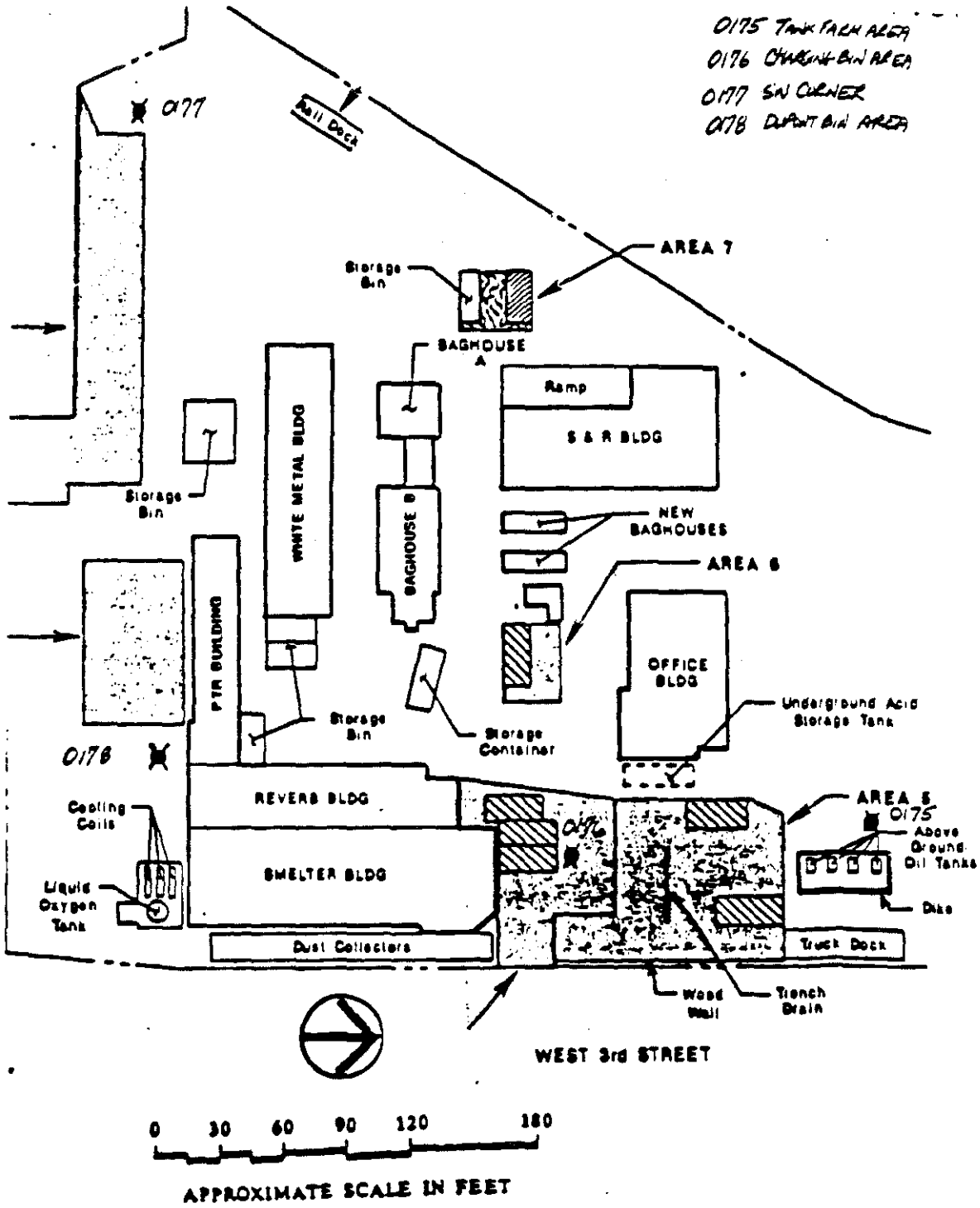

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Figure 3
Groundwater Monitoring Well Locations at the Master Metals, Inc., Facility in Cleveland, Ohio

inorganic chemicals in public drinking water supplies (Table 2). Two of the wells contained concentrations of chromium above the Ohio MCL. As of January 31, 1991, ESC had not received the consultant's draft report of the Phase II investigation or any relevant hydrogeological information. Without this information, it is not possible to determine if the analytical data is valid, if the source of the observed metals is onsite or is merely representative of background conditions, and the actual direction of groundwater flow. Few site-specific hydrogeologic data are available for the property. The location of the Cuyahoga River relative to the site (Figure 1) and the proximity of Lake Erie to Master Metals indicate that groundwater probably flows towards the northeastern direction below the property.

Master Metals installed two soil borings to groundwater during March 1988 (Appendix M). The exact locations of the soil borings were not known by Master Metals, but the data indicate that they were located at the northern and southern ends of the plant property.

Based on data obtained during the investigation, groundwater appears to occur at a depth of about 10 feet below the ground surface. Continuous core samples were collected to a depth of 10 feet in each borehole. The core samples indicate that the property is underlain by cinders and slag. Apparently, the property was used as a slag disposal site by the surrounding steel plant before the lead smelter was constructed in 1932.

Samples of the underlying soils were collected every 0.5 foot and analyzed for EP toxic metals. All of the samples had concentrations below the EP toxicity characteristic levels. Lead and cadmium were very near the characteristic levels (i.e., 5 mg/l and 1 mg/l) in at least 1 of the shallow soil samples. The levels for lead in the sample leachate ranged from 3.4 mg/l to less than 0.05 mg/l. Leachate levels for cadmium ranged from 0.67 mg/l to less than 0.01 mg/l.

Although the samples collected indicate that the concentrations of lead and cadmium in the slag are below the EP toxicity characteristic levels, much of the slag disposed of may have exhibited the characteristic of EP toxicity when it was initially placed onsite. Lead and cadmium, along with other

Table 2

Groundwater Monitoring Results (mg/l)
Master Metals, Inc.
February 1991

Containment	MW 175	MW 176	MW 177	MW 178	Standard (a)
Lead	0.45	0.80	1.35	0.69	0.05
Cadmium	0.026	0.074	0.087	0.03	0.01
Nickel	0.27	0.04	0.08	0.52	N/A (b)
Barium	0.05	0.02	0.04	0.04	1.0
Chromium	0.02	0.02	0.10	1.33	0.05
pH	9.86	9.15	7.44	6.80	

a/ Ohio - Maximum contaminant levels for inorganic chemicals in drinking water

b/ Not assigned

heavy metals leaching from the slag, could affect the quality of groundwater beneath the site. Furthermore, lead could have leached to the groundwater from various operations during the plant's long history as a lead smelter.

In December 1990, Master Metals employed a consultant to install and sample 30 soil borings underneath and near the property (Figure 4). ESC was provided with analytical results of the investigation (Appendix N). The samples were analyzed for pH and total metals concentrations. The result of the investigation indicate that soils beneath the southeastern corner of the property, the drum storage area, and the battery decasing area, as deep as 8 to 10 feet below grade, contain concentrations of lead exceeding 500 mg/kg. Some of the samples contained concentrations of lead exceeding 10,000 mg/kg. A sample collected at a depth of 3 to 5 feet near the southern perimeter of the property, B-10, contained 11,875 mg/kg of lead. Soil samples collected at offsite locations contained substantially lower concentrations of lead (14.7-229.0 mg/kg). The elevated levels of lead observed beneath the property may be attributable to historical onsite lead processing activities, and also may be a continuing source of lead contamination of groundwater. Other metals detected in soils beneath the site included cadmium (0.25-208.0 mg/kg), nickel (0.5-17.0 mg/kg), barium (0.5-88.0 mg/kg), and chromium (0.5-610.0 mg/kg). Soil samples collected in the vicinity of the battery cracking area at a depth of between 2 feet and 10 feet below grade were found to have a pH between 7.1 and 11.2. If any acidic liquids from battery cracking operations in this area have been released to soils beneath the concrete pad, these soils might be acidic and exhibit a low pH.

Other than the lay-down area along the northwestern perimeter of the property and the rail spur, the remainder of the site appeared to be covered with a concrete pad. The concrete pad does not have a protective coating. Numerous cracks and other potential conduits for the release of contaminants in the environment are present in the pad, including the areas used for the former piles. Contaminated runoff could potentially transport heavy metals through the concrete. The contaminated runoff could have

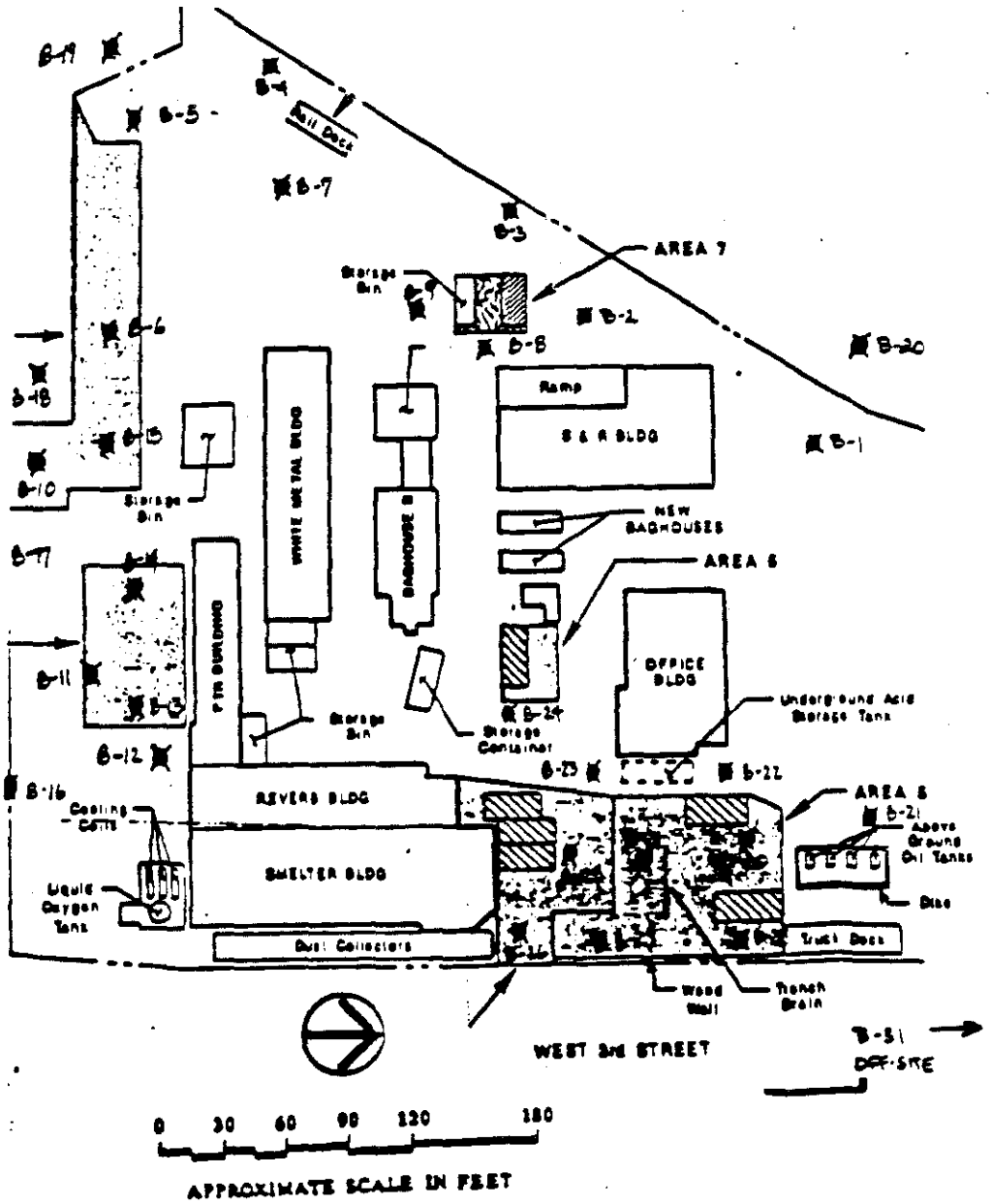

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Figure 4
December 1990 Soil Boring Locations at the Master Metals, Inc., Facility in Cleveland, Ohio

resulted from uncovered hazardous waste storage bins, the uncovered waste pile onsite, and from contaminated dust and debris located throughout much of the property.

Battery acid generated during the battery cracking operation is allowed to flow onto the concrete pad and into a concrete trench. The trench is piped to a 7,000-gallon lined underground concrete tank. The trench and piping are not equipped with secondary containment or leak detection. The integrity of the tank has not been evaluated by Master Metals. Releases from this battery acid transport and storage system could affect the underlying soil and potentially the groundwater. However, the concrete pad, the drainage system, and the collection sump were installed in 1988 and are in good condition. Battery cracking operations were not conducted in this area until after the concrete pad and drainage system were installed. Therefore, it is unlikely that releases of battery acid to the underlying soil and groundwater have occurred in this area. Given the corrosivity of battery acid, it is imperative that the concrete pad, drainage ditch, PVC pipe, and collection sump be routinely inspected and maintained to prevent the release of acidic wastes to the underlying soils.

No underground fuel storage tanks are located on the property. Master Metals removed diesel fuel and gasoline 500-gallon underground tanks in December 1988. According to facility personnel , no evidence of contamination was observed when the two tanks were removed. The tanks were constructed of unprotected steel. Facility personnel indicated that they did not have information concerning the age of the tanks.

Pathways and Controls - Air

Point sources of air emissions at the plant include exhausts from three baghouses associated with the operation of Master Metal's two rotary furnaces and one baghouse associated with the operation of the plant's refining kettles. Other emissions from the facility are fugitive in nature and include dusts from the facility storage containers and emissions from the unhooded kettles operated by the plant.

The types of emissions that could be anticipated from the facility include lead, arsenic, antimony, cadmium, copper, zinc, carbon dioxide, oxides of sulfur, and particulate. A wind rose for the area (Figure 5) indicates that the wind is predominantly from the south to southwest.

The Ohio EPA issued an Order requiring the facility to install new air pollution controls. According to the Order, Master Metals had excessive fugitive dust emissions from its furnaces and had exceeded its permitted opacity from one of the furnaces on numerous occasions during 1987 and 1988. The facility installed new pollution control equipment in 1989. The facility has applied for permits to operate two air pollution sources. Pending the installation of a treatment system for the reduction of sulfur dioxide emissions from the two rotary kilns, the facility should obtain operating permits for the two sources by March 1, 1990.

The facility should implement all necessary management and engineering controls to minimize fugitive dust emissions from the process areas. Air emissions from the facility could have affected the soil, surface water, and indirectly, groundwater offsite.

Pathways and Controls - Summary

The current risk of sudden environmental impairment because of the Pathways and Controls factor is rated as low-to-moderate. The risk rating is due to the installation of improved air pollution control equipment and the collection of battery acid wastewaters for offsite treatment and disposal. The continued risk of sudden environmental impairment should be reduced further pending the installation of an improved wastewater and stormwater pretreatment system combined with proposed improvements to the physical plant.

The risk of nonsudden environmental impairment because of the Pathways and Controls factor is rated as moderate-to-high. The risk rating is due to the occurrence of contaminated discharges to the NEORSD sewer system, and the existence of heavy metal contamination of groundwater and soils beneath the property. However, the observed contamination of groundwater may only be representative of

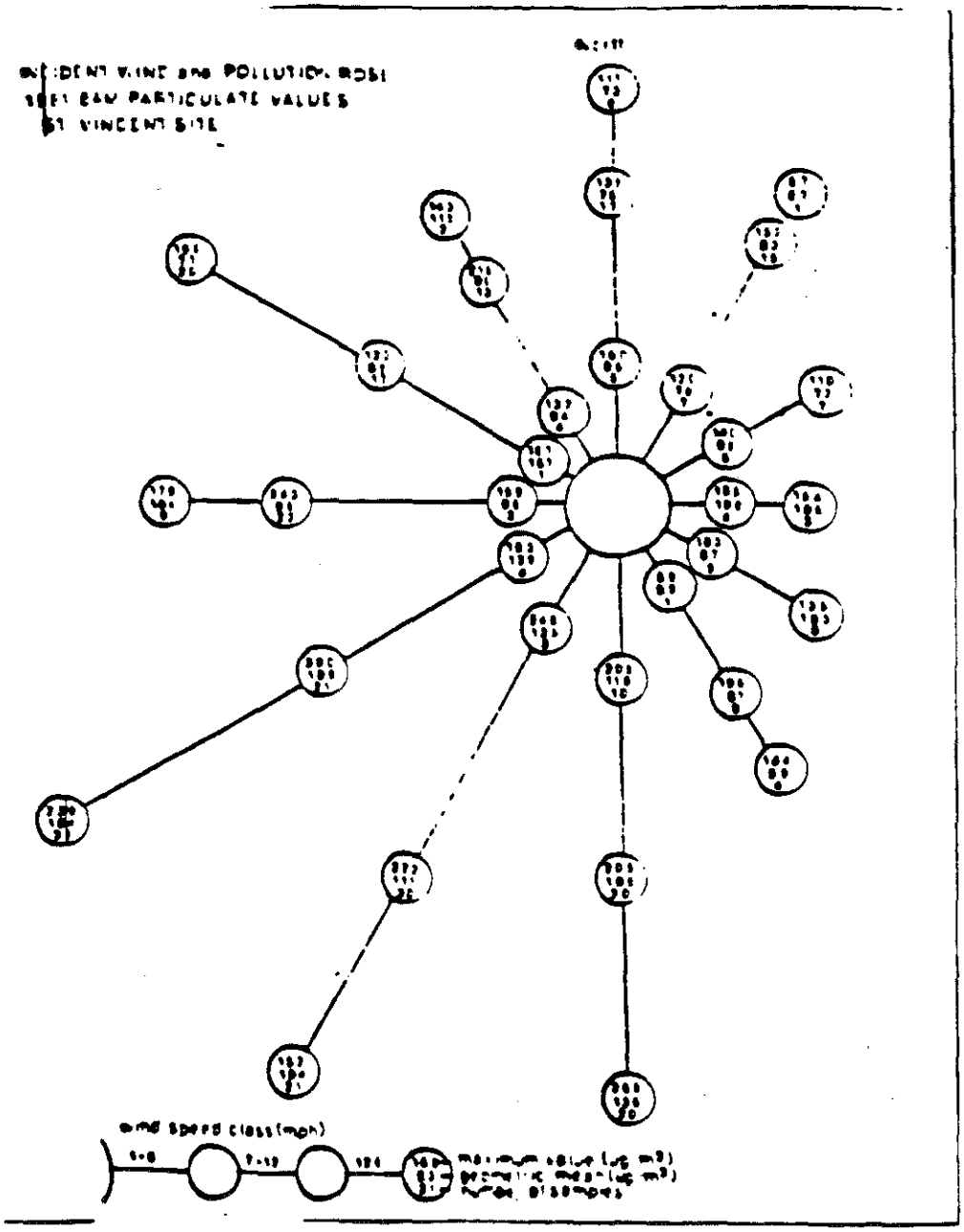

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Figure 5
Wind Rose - Cleveland, Ohio

background conditions. Additional information is required to accurately determine the source of the contamination.

Populations at Risk

Populations at Risk - General

The Master Metals facility is located in a primarily industrial area of central Cleveland. The Baltimore and Ohio Railroad switching yard is to the east and west of the plant property. The property surrounding Master Metals is owned by LTV Steel and includes operating steel manufacturing plants. The nearest residences are approximately 0.5 mile to the northwest of the facility. The nearest residences to the north, south, and east of the plant are more than one mile away. There are no critical ecological areas near the plant.

Master Metals has conducted a limited groundwater investigation. The results indicate that the groundwater beneath the site contains levels of lead, cadmium, and chromium above Ohio drinking water standards. The city of Cleveland supplies potable water for the area and uses Lake Erie as its water source. Groundwater is not used as a potable water source in the area.

The prevailing winds are from the southwest, away from the closest residences. The nearest residences to the northeast are approximately 1.5 miles from the plant property.

The plant is served by a combined sewer system. All stormwater from the site is collected in sedimentation sumps and released to the NEORSD sewer system. Wastewater from the combined sewer is treated by the NEORSD treatment plant and discharged to Lake Erie.

According to Master Metals, there have been no complaints, problems, or claims against the company from organizations in the area.

Master Metals conducts quarterly monitoring of the ambient air. Data from the monitoring were not provided to ESC for review; however, Master Metals has determined that employees working outside

the plant buildings must wear respiratory protection because of the presence of lead contamination in the ambient air. No ambient monitoring of other media is conducted by the facility. It is possible that workers at downwind locations may be exposed to point source and fugitive lead emissions from Master Metals.

Populations at Risk - Summary

The risk of sudden environmental impairment because of the Populations at Risk factor is rated as low. The risk rating is due to the use of a combined sewer system and the distance of the facility from sensitive populations.

The risk of nonsudden environmental impairment because of the Populations at Risk factor is rated as moderate. The risk rating is due to the shallow groundwater beneath the facility.

Toxicity and Behavior of Materials

Toxicity and Behavior of Materials - General

Antimony

Antimony compounds exist in the trivalent or pentavalent states. Most antimony compounds are highly toxic when ingested or inhaled. Major toxic symptoms involve the gastrointestinal tract, heart, respiratory tract, and the liver. The most serious effects are on the heart, including a decrease in heart rate and EKG effects. Death usually is due to heart failure. Inhalation exposures can result in irritation of the mucous membranes and upper respiratory tract and pneumoconiosis. Trivalent antimony compounds are more toxic than the pentavalent compounds. The LD_{50}s from oral administration of antimony trichloride were found to be 675 mg/kg in the rat and 574 mg/kg in the mouse, while for antimony pentachloride they were 1,115 mg/kg in the rat and 900 mg/kg in the mouse. NIOSH has set a 10-hour TWA of 0.5 mg/m^3.

Chronic inhalation exposure to high levels of antimony can result in pneumonitis, fatty degeneration of the liver, and a decrease in blood cell concentrations. Degeneration of the heart muscle

also has been found as a result of chronic exposure to antimony. No evidence was found in the sources searched that antimony is carcinogenic. There is some evidence of reproductive toxicity, but it is inconclusive at present.

Copper

Copper is an essential trace element in animals and plants. It occurs widely in enzymes and is critical to their function. Copper toxicity generally is not a problem in humans because absorption of the metal is poor. For example, far less than 1% of ingested copper is absorbed; practically all ingested copper is excreted in the feces. Mammals and birds generally have barriers to copper absorption. Some fish, some invertebrates, fungi, and algae are less able to control copper absorption and thus are more susceptible to its toxicity. Therefore, copper can inhibit secondary sludge treatment at treatment plants at levels of 1 mg/l, and copper compounds are used sometimes as algicides, fungicides, or antihelminthics. Some plant species have been found to adapt rapidly to locally high concentrations of copper in soils. Concentrations in natural soils generally range from 2 to 100 ppm. The EPA water quality criteria for acute toxicity to fresh water organisms for copper vary from about 12 to 43 mg/l, depending on the hardness of the water.

Copper sulfate and chloride are some of the more toxic salts of the metal. The LD_{50}s for oral administration to rats are 960 mg/kg for the sulfate and 140 mg/kg for the chloride. A number of cases of acute toxicity of copper sulfate in humans have been reported for ingestion of quantities between 1 and 12 g. Symptoms included a metallic taste, epigastric burning, vomiting, and, in severe cases, diarrhea and injury to the gastric mucosa and the liver. Chronic toxicity studies with laboratory animals have found damage to the liver, kidney, and spleen with high levels of exposure. More severe toxic responses to copper in humans can be found in individuals with Wilson's disease, a rare genetic disorder.

Copper fumes, dusts, and mists are irritants. Exposure to copper fumes by industrial workers can result in metal fume fever. The TWA for copper fumes is 0.2 mg/m^3, while for dusts and mists it is 1.0 mg/m^3. The EPA has established a secondary drinking water standard of 1 mg/l for copper.

Lead

Lead is a common metal. Lead is found at an average concentration of 10 ppm in natural soils and of 1-10 ug/l in rivers and lakes. The Ohio EPA recognizes soils containing as much as 39 ppm of lead as not being contaminated. Most lead salts are fairly insoluble in water, although lead nitrate and lead acetate are soluble. The solubility depends on the pH, with solubility increasing in more acidic conditions. Movement of lead in soils depends on its adsorption, chelation with organic matter, and the precipitation of the less soluble salts. In general, lead will react with soil anions or clays to form insoluble complexes, inhibiting its mobility.

Most human exposure to lead comes in food, with an estimated average daily intake of 100-500 mg/day. In adults, only about 8% of ingested lead is absorbed, while in children the fraction is much higher, up to about 50%. Therefore, children are at much greater risk from lead exposures. Lead also can be absorbed by inhalation, although the amount will depend on the solubility of the compound and the particle size. After absorption, lead initially accumulates in soft tissues but later accumulates in the bones. About 95% of the adult body burden of lead is in the bones, while 72% of a child's body burden is.

Poisoning from acute exposure to lead is uncommon. The primary toxic effects from chronic exposure are on the blood and the nervous system. Lead induces anemia by impairing heme synthesis (heme is the functional portion of the hemoglobin molecule) and by causing an increase in the destruction of red blood cells. The nervous system is particularly sensitive to lead, although lead induced nervous system disorders are usually only found in children. Lead also can have renal effects, damaging the proximal tubule and causing a decrease in glomerular filtration. Rats exposed to lead have developed

renal tumors; however, the evidence concerning the carcinogenicity of lead in humans is uncertain. Lead has been shown to be embryotoxic, increasing the number of miscarriages and stillbirths. The OSHA TWA for lead is 0.05 mg/m^3.

The EPA National Ambient Air Quality Standard for lead is 1.5 ug/m^3. The primary drinking water standard is 0.05 mg/l. The EPA has set an acute exposure standard of 74-400 ug/l for freshwater, depending on hardness, to protect aquatic life.

Sulfuric Acid

Sulfuric acid is a colorless, oily liquid. It is a strong acid and is highly corrosive. Its toxic effects result from this corrosivity. Sulfuric acid is a severe irritant, causing rapid tissue destruction and severe chemical burns. It shows no systemic toxicity effects from ingestion. Sulfuric acid is a powerful oxidizer and can ignite or explode on contact with many materials. Because the effects of sulfuric acid are due to its corrosivity, they are diminished with dilution. Impacts on the environment tend to be mainly from large sudden releases.

Toxicity and Behavior of Materials - Summary

The risk of sudden environmental impairment because of the Toxicity and Behavior of Materials factor is rated as moderate. The risk of nonsudden environmental impairment because of the Toxicity and Behavior of Materials factor is rated as moderate-to-high because of the large amounts of lead at the facility.

Management and Practices

Management and Practices - General

The site is enclosed by a 10-foot high chain link security fence. The fence has two gates with the south gate normally locked and the motorized north gate controlled by Master Metals personnel. The facility does not have security guards onsite, but does employ a security service, Regency Security

Systems. Regency patrols the area and makes unscheduled visits to the property between the hours of 8:00 p.m. and 5:00 a.m. each weekday and all day on weekends and holidays. Regency also keeps a security guard on call 24 hours per day.

The plant superintendent is responsible for routine housekeeping of the plant grounds. Housekeeping of the plant grounds is generally quite good, particularly in all of the hazardous waste storage areas. The Environmental Administrator performs a daily inspection of all hazardous waste storage areas. Master Metals has dedicated four personnel to full-time cleanup of all hazardous waste storage and processing areas. Cleanup personnel reportedly work continuously to cleanup spills as soon as they occur. The clean-up crew uses a vacuum sweeper for cleaning up spills on a continuous basis. However, some improvements can be made in some of the indoor processing areas and the maintenance shop. Lead debris was observed on the floors of some processing areas. Scrap machinery and lead scrap in open drums is stored on bare ground in the lay down area adjacent to the northwestern property boundary. Housekeeping practices in these areas should be improved. However, in general, improved management and housekeeping practices have reduced the potential for the release of contaminated runoff from these sources.

Maintenance of the plant's production equipment, including the furnaces, baghouses, and mobile equipment, such as forklifts, is performed by Master Metals personnel. The inspection and maintenance of the plant's fire extinguishers are performed by an outside contractor.

Master Metals has developed a written preventive maintenance plan for the plant's baghouses. The air emission sources are shut down at about 2:00 p.m. each day. Facility employees then inspect the baghouses. Repairs are completed according to the preventive maintenance plan.

Material storage takes place throughout the site. Solder dross, fire brick, and some scrap materials are stored in drums and other small containers in the drum storage yard located at the southwestern corner of the property (Figure 2). Air pollution control dusts and some scrap materials are stored in 90-cu yd

bins near the production area. Batteries are staged in the battery decasing area, and the plates are stored nearby in 90-cu yd bins. Finished products are stored in the shipping and receiving building.

Diesel fuel, gasoline, hydraulic fluid, and waste oil are stored in aboveground tanks inside a secondary containment structure. A liquid oxygen tank is maintained at the southeastern corner of the property. The inground concrete sump which receives characteristic hazardous wastes and the aboveground storage tanks are regulated pursuant to RCRA. Although this is an interim arrangement, Master Metals should comply with the RCRA requirements or obtain a variance from the Ohio EPA.

The facility has developed inspection forms and inspects the plant on a daily basis for waste inventory, transfer equipment condition, and evidence of a release. Personnel also inspect the facility on a weekly basis for the condition and management of the drum storage area, concrete surfaces, the emission control systems, plant security, and safety equipment.

According to Master Metals, an Occupational Safety and Health Administration (OSHA) right-to-know and hazardous waste training program is provided for the plant employees every six months. The training includes the proper use of respiratory equipment. Master Metals has implemented a health monitoring program that includes the analysis of employee blood samples for lead levels and quarterly personal air monitoring. The Health and Safety Director is responsible for administering the health and safety program and complying with all applicable OSHA standards.

According to facility personnel, they submitted all applicable Superfund Amendment and Reauthorization Act (SARA) Title III reports, including those required under Sections 311, 312, and 313. According to the Section 313 report, 5,269 pounds of lead and 3,520 pounds of sulfuric acid are released to the ambient air. Approximately 487,550 pounds of lead-contaminated waste were disposed of in landfills during 1987.

Master Metals has developed an emergency preparedness plan as part of its Part B application. The plan has not been implemented because the incident requiring its use has not occurred. No significant fires or explosions have occurred at the plant since its purchase in 1979.

Master Metals undergoes a number of routine regulatory inspections. The DAPC visits the facility to observe the plant's air emissions approximately every 30 days for opacity. The DAPC observes emissions from Master Metals and the surrounding area on a weekly basis at a minimum. An Ohio EPA RCRA inspector visits the site once every year. The plant is visited by the NEORSD every quarter. The EPA inspected the facility most recently in July and August 1990 to evaluate the facility's compliance with the Consent Decree.

Regulatory Contacts

Larry Adoloff, Supervisor, Northeast Ohio Regional Sewer District, Industrial Waste Section, (216) 641-6000

According to Mr. Adoloff, Master Metal's wastewater and stormwater are discharged to a combined sewer system. The wastewater and stormwater are treated at the sewer district's Westerly plant, which is located approximately five miles from Master Metals and discharges wastewater to Lake Erie. Mr. Adoloff said that samples of the discharge from the facility collected in October 1990 contained concentrations of lead in excess of both the federal categorical and NEORSD pretreatment standards. However, Mr. Adoloff is hopeful that Master Metals will be able to meet all applicable standards with the installation of the planned treatment system.

No other regulatory contact familiar with the site could be reached.

Management and Practices - Summary

The risk of sudden environmental impairment because of the Management and Practices factor is rated as low-moderate. The risk rating is due to the facility's noncompliance with the sewer use ordinance.

The risk of nonsudden environmental impairment because of the Management and Practices factor is rated as moderate. The risk rating is due to historical practices and lessened by improved housekeeping practices in some areas of the plant.

Table of Risk Rankings

	Sudden	Nonsudden
Pathways and Controls	low-to-moderate	moderate-to-high
Populations at Risk	low	moderate
Toxicity and Behavior of Materials	moderate	moderate-to-high
Management and Practices	low	moderate
Overall Facility Risk	low-to-moderate	moderate-to-high

Conclusions and Recommendations

Conclusions

ESC has evaluated the Master Metals facility in Cleveland, Ohio, by means of a site visit, review of documents supplied by Master Metals, and interviews with company representatives and a local regulatory agency. The company operates a secondary lead smelter that manufactures lead and lead alloys from used steel-cased batteries, lead solder dross, lead-contaminated baghouse dust, and other scrap materials. ESC finds that if the facility implements all planned improvements to air emission and wastewater systems, the facility will reduce the environmental risk of its operations. The overall risk of sudden environmental impairment is rated as low-to-moderate, and the risk of nonsudden impairment is moderate-to-high.

The primary risks associated with the facility are the potential release of contaminants to air and groundwater. Indirect contamination of surface water from the facility could occur through seeps of groundwater to surface water and affects to the local sewage treatment plant.

Because of the age and condition of the concrete pad beneath the waste management areas and process areas, as well as the historical management of waste piles, storage bins, and battery decasing area, the risks of soil and groundwater contamination are high.

A soil and groundwater investigation of the facility conducted in December 1990 indicated that soils beneath parts of the property contain elevated concentrations of lead relative to observed background concentrations and that the groundwater beneath the site contains concentrations of lead, cadmium, and chromium at levels exceeding Ohio state drinking water standards. Historical lead processing operations at the facility may have contributed to the elevated lead concentrations in soils, which may be a continuing source of lead in the groundwater beneath the site. However, the metals present in the groundwater beneath the site may only be representative of background concentrations.

The improper historical management of the lead-contaminated materials resulted in a prevalence of fugitive air emissions. These emissions may have contributed to contamination of soil offsite.

Based on ESC's review, current management practices for handling raw and waste materials are a significant improvement over historical practices.

The site is located in a heavily industrial area of central Cleveland. The area is served by a central water and sewer system.

Recommendations

The following recommendations, if implemented, would help minimize the risk of environmental impairment from the Master Metals facility.

1. The company should continue to comply with the requirements of the Consent Decree, including the proper closure of all of the waste piles onsite in accordance with the proposed closure plans which are awaiting approval from the Ohio EPA.
2. Master Metals should manage all of its storage containers bins in accordance with the Consent Decree and RCRA requirements for containers. Bulk storage containers must be managed in a manner to prevent the release of hazardous waste from the bins through fugitive dust emissions, routine spills, and stormwater runoff. The facility should ensure that the management of its containers complies with Subpart I of 40 CFR 264. Storage bins that do not meet the standards for containers, as specified in the Consent Decree, should be replaced.
3. The facility should comply with 40 CFR 265 Subpart J or inquire with the Ohio EPA regarding its current collection of battery cracking wastewaters in the inground sump to ensure it is in compliance with applicable Ohio hazardous waste regulations.

4. Master Metals should review the integrity of the concrete pad underlying the waste storage areas, process areas, and battery decasing area. Any cracks, joints, or other potential conduits should be sealed to prevent migration of lead and other contaminants to the underlying soil. The pad and trench located in the battery decasing area should be provided with a protective coating that will prevent corrosion of the concrete and eventual migration of contaminants to the soil.

5. Master Metals should inspect the battery acid sump and liner for integrity. If the liner or sump is not intact, the facility should repair or reduce the damaged equipment. Integrity inspections of the tank, liner, trench, and associated piping should be included in the facility's inspection schedule.

6. Master Metals should test the sulfur dioxide control system for emission source P010 as planned so that a permit to operate can be obtained as soon as possible.

7. The facility should augment its groundwater monitoring program as part of its closure program to accurately determine what affect the operations of the surrounding facilities, the disposal of the slag, and Master Metal's operations may have had on the groundwater beneath the property.

8. The facility should implement management and, potentially, further engineering controls to reduce the fugitive dust emissions from the process areas.

9. Master Metals should inspect the integrity of the secondary containment structure for the tank farm. Any potential conduits to contamination should be sealed. The facility should make arrangements for the removal and treatment of ponded stormwater in the tank farm. A drain equipped with a valve should be installed at the lowest point in the tank farm to drain uncontaminated stormwater following storm events.

10. Master Metals should proceed with the design and construction of the proposed wastewater treatment system as specified in the compliance schedule approved by NEORSD.

Appendix A - Site photographs

Photo 1 - Hazardous waste in storage bins.

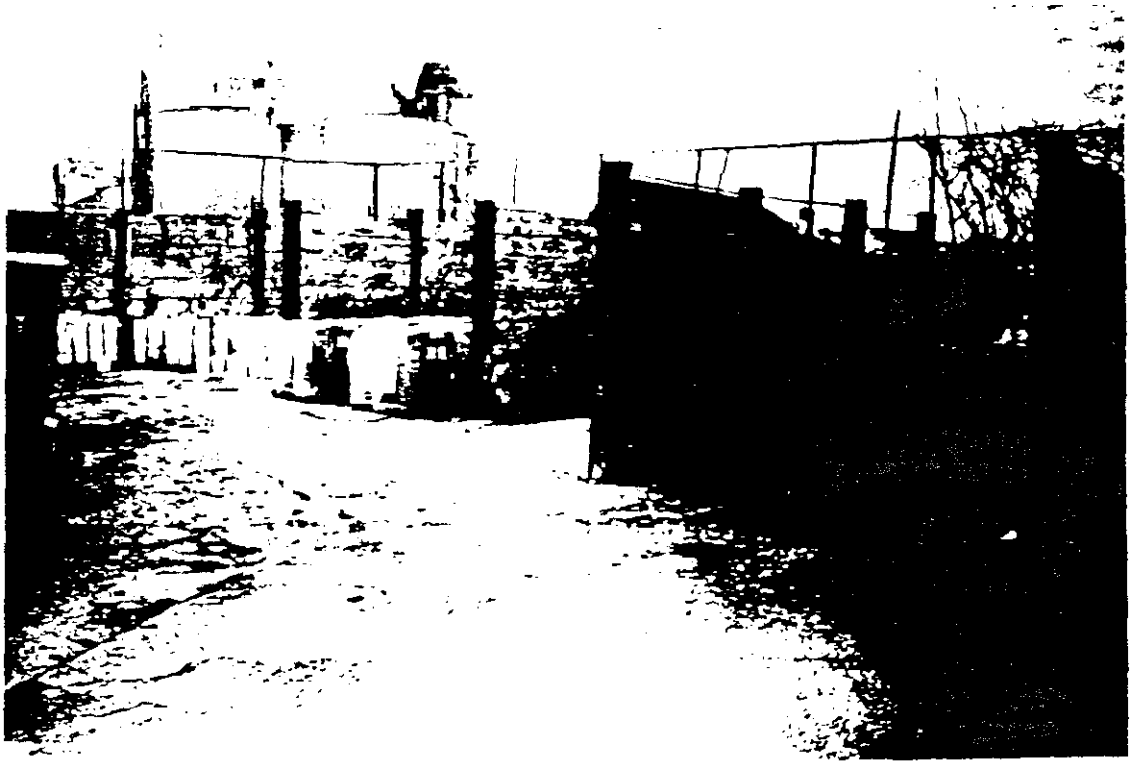


Photo 2 - Former hazardous waste storage bins.

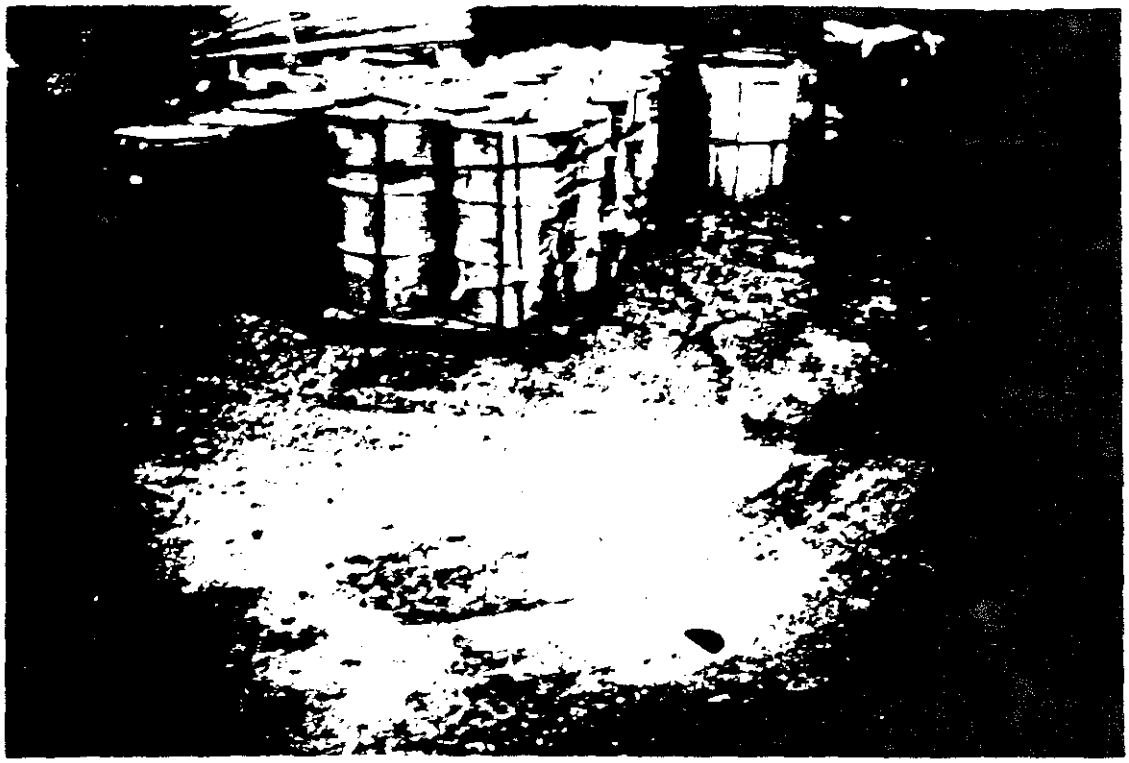


Photo 3 - Nonhazardous waste drum storage, stormwater sump in foreground.

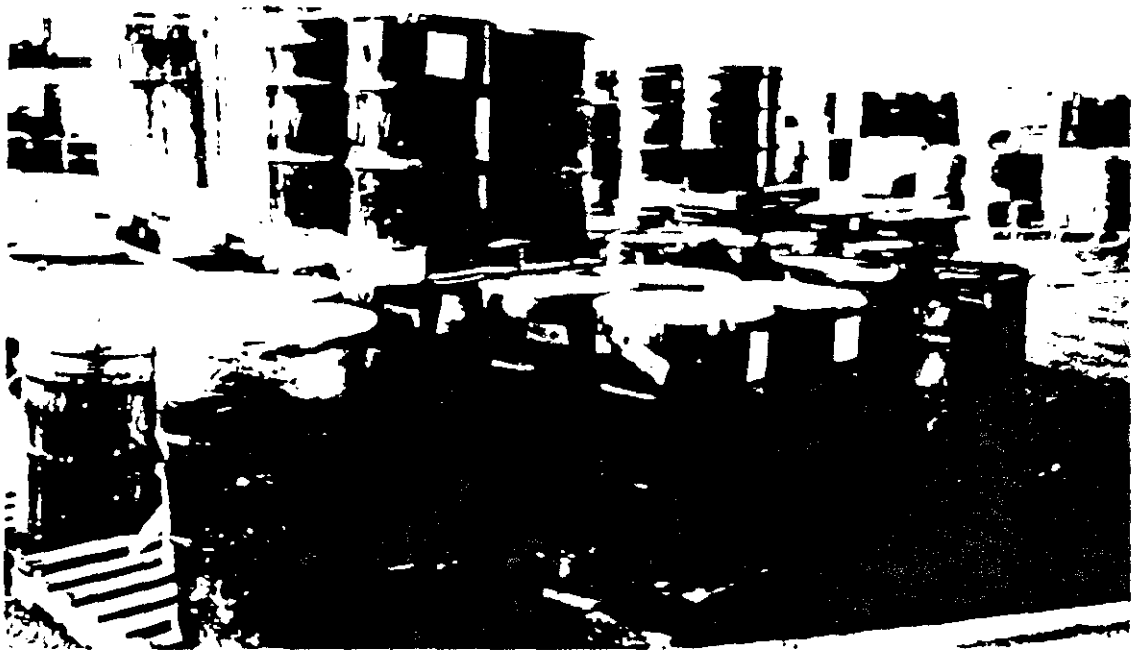


Photo 4 - Hazardous waste drum storage. Note: tracking labels.

Photo 5 - Lead scrap in open boxes upon loading dock.

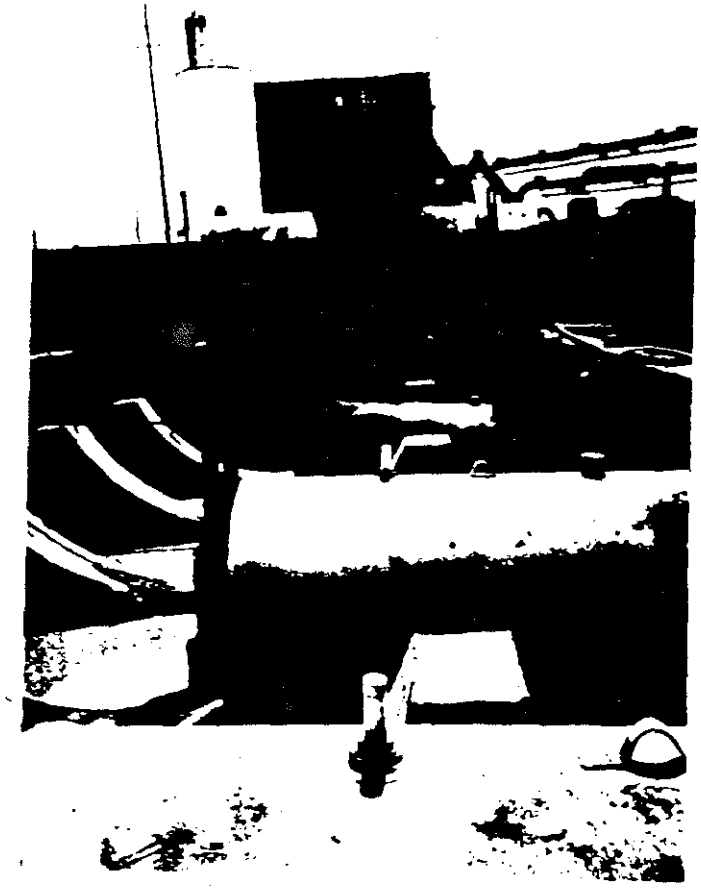


Photo 6 - Tank farm.

Appendix B - Administrative Order

Fax to Keith MAST 349-1514

CERTIFIED MAIL
RETURN RECEIPTS REQUESTED

BEFORE THE
NORTHEAST OHIO REGIONAL SEWER DISTRICT

In the matter of:	:	
Master Metals, Inc. 2850 W. 3rd St. Cleveland, Ohio 44113	:	FINDINGS AND ADMINISTRATIVE ORDERS

Pursuant to the authority of Section 6119.08 of the Ohio Revised Code, the control authority to enforce the federal pretreatment standards granted on September 6, 1985, and the Sewer Use Code, the Northeast Ohio Regional Sewer District, hereby, makes the following findings and issues the following orders:

FINDINGS

1. Master metals, Inc. is discharging to the sewerage facilities operated by the Northeast Ohio Regional Sewer District.

2. The Code of Regulations of the Northeast Ohio Regional Sewer District specifies the requirement to discharge to the sewer system.

3. The entity has failed to comply with the following provisions of the Sewer Use Code:

a. Section 2.0301 .....pH.....Limited from 5.0 to 10.0 standard units.
b. Section 2.0305 .....Copper.....Concentration limit 3 mg/l.
c. Section 2.0305 .....Zinc.....Concentration limit 15 mg/l.
d. Section 2.0305 .....Cadmium.....Concentration limit 2 mg/l.
e. section 2.0305 .....Lead.....Concentration limit 2 mg/l.

4. Master Metals' present acid neutralization and metals removal system is inadequate. The control of pH and liquid solid separation is to difficult to control in this below surface tank and with manual chemical feed.

5. Rain water runoff from Master Metals' property may contain metals at times.

I. Specific Pretreatment Orders

A. Master Metals, Inc. will install collection sumps at all rain water catch basins sufficient to allow for the precipitation of metal solids prior to overflow to the sewer system. These catch basin sumps will be routinely maintained to eliminate the possibility of overflow of precipitants to the sewer system.

B. A process drawing of the proposed pretreatment system will be submitted to the Industrial Waste Section by March 19, 1989.

C. A batch of treated effluent will be discharged and monitored using the present pretreatment system to see if experience with the system has improved the nature of the discharge.

D. If this batch discharge is found to be unacceptable to the NEORSD, all wastewater will be hauled untill the new pretreatment system is installed.

Sincerely,

Frank Schuschu/Investigator
Industrial Waste Section

cc: EPA Report file
Company File
J. Weber
L. Adloff

Appendix C - NEORSD Code of Regulations

NORTHEAST OHIO REGIONAL SEWER DISTRICT

CODE OF REGULATIONS

TITLE II - PRETREATMENT REGULATIONS
[separate printing]

The **Code of Regulations** contains three Titles: the Sewer Use Code, the Pretreatment Regulations, and the Separate Sanitary Sewer Code. This Title has been separately printed for distribution to those entities most affected by the regulations contained herein. The User is advised that the other Titles may be applicable as well.

ADMINISTRATIVE OFFICES
3826 EUCLID AVENUE
CLEVELAND, OHIO 44115-2504

CODE OF REGULATIONS OF THE NORTHEAST OHIO REGIONAL SEWER DISTRICT

TITLE II

PRETREATMENT REGULATIONS

NORTHEAST OHIO REGIONAL SEWER DISTRICT
CODE OF REGULATIONS
TITLE II - PRETREATMENT REGULATIONS

CHAPTER 1	-	TITLE AND DISTRIBUTION	PAGE 46
CHAPTER 2	-	DEFINITIONS	PAGE 49
CHAPTER 3	-	PRETREATMENT REGULATIONS	PAGE 58
CHAPTER 4	-	CHARGES AND FEES	PAGE 62
CHAPTER 5	-	ADMINISTRATION	PAGE 63
CHAPTER 6	-	ENFORCEMENT	PAGE 69
CHAPTER 7	-	CHARGES	PAGE 72
CHAPTER 8	-	RECORDS RETENTION	PAGE 73
CHAPTER 9	-	VALIDITY	PAGE 74
CHAPTER 10	-	ACCEPTANCE	PAGE 75

CHAPTER 1 - TITLE, DISTRIBUTION AND APPLICABILITY

Section 2.0101 — Title and Distribution - This Title of the Code of Regulations of the Northeast Ohio Regional Sewer District shall be known as the Pretreatment Regulations of the Northeast Ohio Regional Sewer District and may be separately printed and distributed.

Section 2.0102 — Applicability - This Title of the Code of Regulations of the Northeast Ohio Regional Sewer District is applicable to any non-domestic user of the public sewer system that discharges substances that may pass through the system or interfere with the operation or performance of the system or may violate any provision of 40 CFR Parts 405 and 406, or is engaged in any of the following industrial processes or other processes which may subsequently be added.

	Category	Federal Regulations	Date
(a)	Adhesives and Sealants	(_____)	(_____)
(b)	Aluminum Forming	40 CFR 467	10/24/83
(c)	Auto & Other Laundries	(_____)	(_____)
(d)	Battery Manufacturing	40 CFR 461	3/9/84
(e)	Coal Mining	40 CFR 434	10/9/85
(f)	Coil Coating	40 CFR 465	12/1/82
(g)	Copper Forming	40 CFR 468	8/15/83
(h)	Electrical & Electrical Components	40 CFR 469	4/8/83
(i)	Electroplating	40 CFR 413	1/28/81
(j)	Explosives Manufacturing	40 CFR 457	(_____)
(k)	Foundries	40 CFR 464	10/30/85
(l)	Gum and Wood Chemicals	40 CFR 457	(_____)
(m)	Inorganic Chemicals	40 CFR 415	6/29/82
(n)	Iron & Steel Manufacturing	40 CFR 420	10/14/83
(o)	Leather Tanning and Finishing	40 CFR 425	11/23/82
(p)	Mechanical Products Manufacturing	(_____)	(_____)
(q)	Metal Finishing	40 CFR 433	7/15/83
(r)	Nonferrous Metals Manufacturing	40 CFR 421	3/8/84
(s)	Ore Manufacturing	40 CFR 440	12/3/82
(t)	Organic Chemicals Manufacturing	40 CFR 414	(_____)
(u)	Paint and Ink Formulation	40 CFR 446,447	(_____)
(v)	Pesticides	40 CFR 455	10/4/85
(w)	Petroleum Refining	40 CFR 419	10/18/82
(x)	Pharmaceutical Preparations	40 CFR 439	10/27/83
(y)	Photographic Equipment and Supplies	40 CFR 459	(_____)

(z) Plastics Processing	(_____)	(_____)
(aa) Plastic and Synthetic Materials Manufacturing	40 CFR 463	12/17/84
(bb) Porcelain Enameling	40 CFR 466	11/24/82
(cc) Printing and Publishing	40 CFR Ch.1	(9/30/83-deleted)
(dd) Pulp & Paper Mill	40 CFR 430,431	11/18/82
(ee) Rubber Processing	40 CFR 428	(_____)
(ff) Soap and Detergent Manufacturing	40 CFR 417	(_____)
(gg) Steam Electric Power Plants	40 CFR 423	11/19/82
(hh) Textile Mills	40 CFR 410	9/2/82
(ii) Timber Products Processing	40 CFR 434	1/26/81

Section 2.0103 Purpose and Policy - These regulations set forth uniform pretreatment requirements for discharges into the Northeast Ohio Regional Sewer District's wastewater collection and treatment system, and enables the District to protect public health in conformity with all applicable Local, State and Federal laws relating thereto.

The purposes/goals of these regulations are as follows:

(a) To satisfy the State and Federal requirements that the Northeast Ohio Regional Sewer District develop and implement an industrial waste control program in compliance with the Clean Water Act of 1977 and the General Pretreatment Regulation for New and Existing Sources, 40 CFR Part 403.

(b) To prevent the introduction of pollutants into the District wastewater system which will interfere with the normal operation of the system or contaminate the resulting municipal sludge.

(c) To prevent the introduction of pollutants into the District's wastewater system which do not receive adequate treatment in the POTW, and which will pass through the system into receiving waters or the atmosphere or otherwise be incompatible with the system.

(d) To improve the opportunity to recycle and reclaim wastewater and sludge from the system.

This Title provides for the regulation of discharges into the District's wastewater system through the enforcement of administrative regulations. This Title does not provide for the recovery of operation, maintenance or replacement costs of the sewerage facilities of the District or the costs associated with the construction of collection and treatment systems used by industrial dischargers, in proportion to their use of the sewerage system, which are included in Title I of the Sewer Use Code.

CHAPTER 2 - DEFINITIONS

Section 2.0201 "Act" - shall mean the Clean Water Act of 1977, and all subsequent amendments thereto (33 U.S.C. 1251 et. seq., as amended).

Section 2.0202 "Applicable Pretreatment Standard" - Any pretreatment limit or prohibitive standard (federal, state and/or local) contained in these regulations deemed to be the most restrictive with which industrial users will be required to comply.

Section 2.0203 "Approval Authority" - shall mean the Director of the Ohio Environmental Protection Agency.

Section 2.0204 "Authorized Representative of Industrial User" - shall mean:

(a) A principal executive officer with written authority to execute documents on behalf of the corporation, if the industrial user is a corporation;

(b) A general partner or proprietor if the industrial user is a partnership or proprietorship, respectively;

(c) A duly authorized representative of the individual designated above if such representative is responsible for the overall operation of the facilities from which the indirect discharge originates.

Section 2.0205 "Average Monthly Discharge Limitations" - The highest allowable average of "daily averages" over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges during the month.

Section 2.0206 "Average Weekly Discharge Limitation" - The highest allowable average of "daily discharges" over a calendar week, calculated as the sum of all daily discharges measured during the calendar week divided by the number of daily discharges measured during the week.

Section 2.0207 "Beneficial Uses" - These uses shall mean but not be limited to, domestic, municipal, agricultural and industrial use, power generation, recreation, aesthetic enjoyment, navigation, and the preservation and enhancement of fish, wildlife and other aquatic resources or preserves, and other uses, both tangible and intangible, as specified by state or federal law.

Section 2.0208 "Categorical Pretreatment Standard" - shall mean the National Pretreatment Standards specifying quantities or concentrations of pollutants or pollutant properties which may be discharged or introduced into the sewerage system by specific industrial discharges.

Section 2.0209 "Composite Sample" - A sample of wastewater which should contain a minimum of eight discreet samples taken at equal time intervals over the compositing period or proportional to the flow rate over the compositing period. More than the minimum number of discreet samples will be required, where the wastewater is highly variable.

Section 2.0210 "Daily Discharge" - Discharge of a pollutant measured during a calendar day or any 24 hour period that reasonably represents the calendar day for purposes of sampling.

Section 2.0211 "Director" - Shall mean the Director of the Northeast Ohio Regional Sewer District or his designated representative.

Section 2.0212 "Discharge" - Shall mean any liquid, solid, or gas flowing out of any domestic, commercial, or industrial establishment.

Section 2.0213 "District" or "NEORSD" - Shall mean the Northeast Ohio Regional Sewer District, its officers and employees.

Section 2.0214 "Easement" - An acquired legal right to use land owned by others for a specific purpose or purposes.

Section 2.0215 "Effluent" - Shall mean sewage, water or other liquid after some degree of treatment, flowing out of any treatment device or facility.

Section 2.0216 "Enforcement Agency" - Shall mean the District, Ohio EPA, State, local and Federal Governments charged with the jurisdiction to protect the general public from harm.

Section 2.0217 "Federal Pretreatment Standard" - Shall mean any regulation containing pollutant discharge limits and/or other requirements promulgated by the U.S. EPA in accordance with Section 307 (b) and (c) of the Act (33 U.S.C. 1251 et seq.) which applies to a specific category of Industrial Users.

Section 2.0218 "Garbage" - Any solid waste from the preparation, cooking or dispensing of food and from the handling, storage, or sale of produce.

Section 2.0219 "Ground Garbage" - Garbage that is shredded to such a degree that all particles will be carried freely in suspension under the conditions normally prevailing in the sewerage system, with no particle being greater than one half (1/2) inch in dimension.

Section 2.0220 "Grab Sample" - A sample which is taken from a waste stream on a one time basis with no regard to the flow in the waste stream and without consideration of time.

Section 2.0221 "Industrial User" - Any industrial or commercial manufacturing or processing facility that discharges industrial waste to a sewerage facility.

Section 2.0222 "Industrial Waste" - Shall mean any liquid, solid, or gaseous substance or form of energy, or combination thereof, resulting from any process of industrial, commercial, governmental, and institutional concerns, manufacturing, business, trades, or research, including the development, recovery, or processing of natural resources.

Section 2.0223 "Indirect Discharge" - The discharge or the introduction of non-domestic pollutant from a source regulated under Section 307 (b) or (c) of the Act.

Section 2.0224 "Influent" - Shall mean water, together with any wastes that may be present, flowing into any sewage treatment device or facility.

Section 2.0225 "Interference" - The inhibition or disruption of the sewage treatment plant processes or operations, or its sludge processes, use or disposal which is a cause of or significantly contributes to either a violation of any requirement of the District's NPDES Permit (including an increase in the magnitude or duration of a violation) or to the prevention of sewage sludge use or disposal by the District in accordance with the following statutory provisions and regulations or permits issued thereunder (or more stringent State or local regulations): Section 406 of the Clean Water Act, the Solid Waste Disposal Act (SWDA) (including Title II, more commonly referred to as the Resource Conservation and Recovery Act (RCRA) and including State regulations contained in any State sludge management plan prepared pursuant to Subtitle D of SWDA), the Clean Air Act, and the Toxic Substances Control Act. An Industrial User significantly contributes to such a permit violation or prevention of sludge use or disposal in accordance with above-cited authorities whenever such user:

(a) Discharges a daily pollutant loading that is in excess of that allowed by regulations of the District or by Federal, State, or local law;

(b) Discharges wastewater which substantially differs from the user's average discharge; or

(c) Knows or has reason to know that its discharge, alone or in conjunction with the discharges from other sources, would result in a District NPDES permit violation or prevent sewage sludge use or disposal in accordance with the above-cited authorities as they may apply to the District's selected method of sludge management.

Section 2.0226 "Laboratory Determination" - Shall mean the measurements, test and analyses of the characteristics of waters and wastes in accordance with the provisions of 40 CFR Part 136 - Guidelines Establishing Test Procedures for the Analyses of Pollutants. These methods are contained in the latest edition of these publications:

(a) Standard Methods for Examination of Water and Wastewater - a joint publication of the American Public Health Association, and the Water Pollution Control Federation;

(b) ASTM - "Annual Book of Standards, Part 23, Water, Atmospheric Analyses, 1972", a publication of the American Society for Testing Materials;

(c) EPA Methods - which means "Methods for Chemical Analyses of Water and Wastes", a publication of the U.S. Environmental Protection Agency; or in accordance with any other equivalent method prescribed by the Director.

Section 2.0227 "Major Contributor" - A contributor that:

(a) Has flow of more than twenty five thousand (25,000) gallons per average workday; or

(b) Has flow greater than five percent of the flow carried to the wastewater treatment plant receiving the waste; or

(c) Has in its waste toxic pollutants as defined pursuant to Section 307 of the Act or State Statutes and rule; or,

(d) Is found by the District, State or U.S. Environmental Protection Agency (EPA) to have significant impact, either singly or in combination with other contributing industries, on the wastewater treatment system, the quality of sludges, the system's effluent quality, or air emissions generated by the system.

Section 2.0228 "Maximum Daily Discharge Limitations" - Highest allowable daily discharge of specific pollutants as limited by District, local, state or Federal regulations whichever is more stringent.

Section 2.0229 "May" - Indicates a discretionary condition.

Section 2.0230 "mg/l" - Shall mean milligrams per liter.

Section 2.0231 "National Categorical Pretreatment Standard or Pretreatment Standard" - Shall mean any regulation containing pollutant discharge limits promulgated by the EPA in accordance with Section 307 (b) and (c) of the Act (33 U.S.C. 1347) which applies to a specific category of Industrial Users.

Section 2.0232 "New Source" - Shall mean any source, the construction of which is commenced after the publication of proposed regulations prescribing a Section 307 (c) (33 U.S.C. 1317) Categorical Pretreatment Standard which will be promulgated within 120 days of proposal in the Federal Register. Where the standard is promulgated later than 120 days after proposal, a new source means any source, the construction of which is commenced after the date of promulgation of the standard.

Section 2.0233 "NPDES Permit" - Shall mean the National Pollutant Discharge Elimination System permit setting conditions for the discharge of any pollutant or combination of pollutants to the navigable waters of the United States pursuant to Section 402 of the Clean Water Act.

Section 2.0234 "Person" - Shall mean any and all persons, natural or artificial, including any individual, firm, company, municipal or private corporation, partnership, co-partnership, joint stock company, trust, estate, association, society, institution, enterprise, governmental agency, the State of Ohio, the United States of America, or other legal entity, or their legal representatives, agents, or assigns. The masculine gender shall include the plural indicated by the context.

Section 2.0235 "Pollution" - Shall mean an alteration of the waters of the State by waste to a degree which unreasonably affects such waters for beneficial uses of facilities which serve such beneficial uses. The man made or man induced alteration of the chemical, physical, biological and radiological integrity of water.

Section 2.0236 "Pollution Parameters" - Shall include but shall not be limited to:

(a) Biochemical Oxygen Demand (BOD) - Shall mean the quantity of dissolved oxygen in milligrams per liter required during stabilization of the decomposable organic matter by aerobic biochemical action under standard laboratory procedures for five (5) days at 20° Centigrade. The laboratory determination shall be made in accordance with procedures set forth in "Standard Methods".

(b) Chemical Oxygen Demand (COD) - Shall mean a measure of the oxygen equivalent of that portion of the organic material in a sample that is susceptible to oxidation by a strong chemical oxidant. The laboratory determination shall be in accordance with procedures set forth in "Standard Methods".

(c) Fecal Coliform - Any of a number of organisms common to the intestinal tract of man and animals, whose presence in sanitary sewage is an indicator of pollution.

(d) Floatable Oil - Oil, fat, or grease in a physical state, such that will separate by gravity from wastewater by treatment in an approved pretreatment facility.

(e) Grease and Oil - A group of substances including hydrocarbons, fatty acids, soaps, fats, waxes, oils or any other material that is extracted by a solvent from an acidified sample and that is not volatized during the laboratory test procedures. Greases and oils are defined by the method of their determination in accordance with procedures set forth in "Standard Methods".

(f) Grease and Oil of Animal and Vegetable Origin - Shall mean substances that are more readily biodegradable in nature such as are discharged by meat packing, vegetable oil and fat companies, food processors, canneries and restaurants.

(g) Grease and Oil of Mineral Origin - Shall mean substances that are less readily biodegradeable than grease and oil of animal or vegetable origin, and are derived from a petroleum source. Such substances include machinery lubricating oils, gasoline station wastes, petroleum refining wastes and storage depot wastes.

(h) pH - Shall mean logarithm (to the base 10) of the reciprocal of the hydrogen ion concentration of a solution expressed in gram atoms per liter of solution.

(i) Suspended Solids - Shall mean solids which either float on the surface of or are in suspension in water, sewage, or other liquid and which are removable by laboratory filtration. Their concentration shall be expressed in milligrams per liter. Quantitative determination shall be made in accordance with procedures set forth in "Standard Methods".

(j) Total Solids - The sum of suspended and dissolved solids.

(k) Volatile Organic Matter - The material in the sewage solids that transforms to gases or vapors when heated at 550° centigrade for 15 to 20 minutes.

Section 2.0237 "Pretreatment" - Shall mean the reduction of the amount of pollutants, the elimination of pollutants, or the alteration of the nature of pollutant properties in wastewater to a less harmful state prior to or in lieu of discharging or otherwise introducing such pollutants to the public sewer system.

Section 2.0238 "Pretreatment Facility" - Shall mean structures, devices or equipment for the purpose of removing deleterious waste from sewage generated from a premises prior to its discharge into the public sewer system.

Section 2.0239 "Receiving Stream" - The watercourse, stream, or body of water receiving the waters finally discharged from the wastewater treatment plant.

Section 2.0240 "Regional Administrator" - Shall mean the USEPA Region V Regional Administrator.

Section 2.0241 "Sewage" - Shall mean a combination of the water carried wastes from residences, business buildings, institutions and industrial establishments, together with such ground, surface, storm or other wastes as may be present.

Section 2.2042 "Sewer" - Shall mean any pipe, conduit, ditch or other device used to collect and transport sewage or storm water from the generating source.

Section 2.0243 "Shall" - Is mandatory ("may" is permissive).

Section 2.0244 "Sludge" - Shall mean any solid, semi-solid or liquid waste generated from a municipal, commercial, or industrial wastewater treatment plant, water supply treatment plant, or air pollution control facility, or any other waste having similar characteristics and effects as defined in the standards issued under Sections 402 and 405 of the Federal Act and in the applicable requirements under Sections 3001, 3004 and 4004 of the Solid Waste Disposal Act PL-94 - 580.

Section 2.0245 "Standard Industrial Classification (SIC) - Shall mean a classification pursuant to the Standard Industrial Classification Manual issued by the Executive Office of the President, Office of Management and Budget, 1972 and any and all amendments added thereto.

Section 2.0246 "System" - Shall mean the sewerage system of the Northeast Ohio Regional Sewer District including all treatment and disposal facilities and interceptor sewers owned and operated by the District and all sewerage collection systems and all other appurtenances connected thereto.

Section 2.0247 "Toxic Substance" - Shall mean any substance whether gaseous, liquid or solid, which when discharged to the sewer system in sufficient quantities may interfere with any sewage treatment process, or may constitute a hazard to human beings or animals, or may inhibit aquatic life or create a hazard to recreation in receiving waters of the effluent from the sewage treatment plant, or substances listed in the Federal Regulations promulgated pursuant to Section 307 of the Clean Water Act.

Section 2.0248 "Unpolluted Water" - Means water discharged in its original state or water discharged after use for any purpose, which is at least equal chemically, physically and biologically, to the water from its original source, i.e. potable water, groundwater, river and stream water.

Section 2.0249 "Upset" - An exceptional incident in which a discharger unintentionally and temporarily is in a state of noncompliance with the standards set forth in the applicable pretreatment requirements due to factors beyond the reasonable control of the discharger, and excluding noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventative maintenance, or careless or improper operation thereof.

Section 2.0250 "User" - Any person that discharges, causes, or permits the discharge of wastewater into the sewerage system.

Section 2.0251 "Wastewater Constituents and Characteristics" - The individual chemical, physical, bacteriological and radiological parameters, including volume, flow rate and such other parameters that serve to define, classify, or measure the contents, quality, quantity and strength of wastewater.

Section 2.0252 "Watercourse" - A channel in which a flow of water occurs either continuously or intermittently.

Section 2.0301 General Discharge Prohibitions - No discharger shall discharge or cause to be discharged, directly or indirectly, any of the following described substances into the wastewater disposal system or otherwise to the facilities of the Northeast Ohio Regional Sewer District:

(a) Any liquids, solids or gases which by reason of their nature or quantity are, or may be, sufficient either alone or by interaction to cause fire or explosion or be injurious in any other way to the operation of the sewer system or wastewater treatment facilities.

(b) Solid or viscous substances which will or may cause obstruction to the flow in a sewer or other interference with the operation of the wastewater system.

(c) Any wastewater having a pH less than 5.0 or higher than 10 or having any other corrosive property capable of causing damage or hazard to structures, equipment, or personnel of the system.

(d) Any noxious or malodorous liquids, gases, or solids which either singly or by interaction are capable of creating a public nuisance or hazard to life or are sufficient to prevent entry into sewers for their maintenance and repair.

(e) Any substance which may cause the sewage treatment plant's treatment residues, sludges, or scums, to be unsuitable for reclamation and reuse or to interfere with the reclamation process.

(f) Any substance which will cause the District's facilities to violate its NPDES and/or other Disposal System Permits.

(g) Any substance with objectionable color not removed in the treatment process, such as, but not limited to, dye wastes and vegetable tanning solutions.

(h) Any wastewater having a temperature which will inhibit biological activity in the District's treatment plant resulting in interference, but in no case, wastewater with a temperature at the introduction into the POTW which exceeds 40°C (104°F).

(i) Any slugload which shall mean any pollutant, including oxygen demanding pollutants (BOD, etc.), released in a single extraordinary discharge episode of such volume or strength as to cause interference to the District's facilities.

(j) Any unpolluted water including, but not limited to non-contact cooling water in areas of the District serviced by separate storm and sanitary sewers.

(k) Any wastewater containing any radioactive wastes or isotopes of such half-life or concentration as exceed limits established by the District in compliance with applicable Local, State or Federal regulations.

(l) Any wastewater which causes a hazard to human life or creates a public nuisance.

Section 2.0302 National Categorical Pretreatment Standards - National categorical pretreatment standards as promulgated by the U.S. Environmental Protection Agency (EPA) pursuant to the Act shall be met by all dischargers of the regulated industrial categories.

Section 2.0303 Right of Revision - The District reserves the right to amend this Code to provide for more stringent limitations or requirements on dischargers to the District's facilities where deemed necessary to comply with the objectives set forth in Section 2.0103 of these regulations.

Section 2.0304 Dilution - No discharger shall increase the use of potable or process water in any way, nor mix separate waste streams for the purpose of diluting a discharge as a partial or complete substitute for adequate treatment to achieve compliance with the standards set forth in this Code.

Section 2.0305 Supplementary Limitations - No discharger shall discharge wastewater containing concentrations of the following enumerated materials, exceeding the following values:

Substance or Material	Concentration mg/l
Metals	
Cadmium	2
Chromium Hexavalent	10
Chromium Total	25
Copper	3
Nickel	10
Iron	50
Zinc	15
Lead	2

Cyanide	
Cyanide (Cl_2 amenable)	2
Total Cyanide	10
Phenols	50
Solvents	
Carbon Tetrachloride	maximum combined
Tetrachloroethylene	concentration is
Trichloroethylene	1 mg/l
Methylene Chloride	25 mg/l
1, 1, 1, Trichloroethane	25 mg/l
Chlorobenzene	25 mg/l
Creosols	25 mg/l
Cresylic acid	25 mg/l
Nitrobenzene	25 mg/l
Toluene	25 mg/l
Carbon disulfide	25 mg/l
Isobutanol	25 mg/l
Spent chlorofluorocarbon solvents	25 mg/l
Methyl Ethyl Ketone	250 mg/l

The maximum combined solvent limitation is 250 mg/l

Section 2.0306 — Mass Limitations - The District may impose mass limitations on discharges where dilution occurs in order to meet the Pretreatment Standards or Requirements of this Code, or in other cases where the imposition of mass limitations is deemed appropriate by the District.

Section 2.0307 — Prevention of Accidental Discharges - Each discharger shall provide protection from accidental discharge of prohibited or regulated materials or substances established by this Regulation. Where necessary, facilities to prevent accidental discharge of prohibited materials shall be provided and maintained at the discharger's cost and expense. Detailed plans showing facilities and operating procedures to provide this protection shall be submitted to the District for review, and shall be approved by the District before construction of the facility.

Section 2.0308 — Accidental Discharge - Notification Required - Dischargers shall notify the District immediately upon the occurrence of a "slugload", as expressed in Section 2.0301 (i), or accidental discharge of substances prohibited by these Regulations. The notification shall include location of discharge, date and time thereof, type of waste, concentration and volume and corrective actions. An industrial user shall be responsible for accidental discharges caused by employees, contractors, subcontractors, or any and all individuals permitted upon the premises. Any discharger who dischargers a slugload of

prohibited materials shall be liable for any expense, loss or damage to the District's facilities or expenses incurred in the clean-up of the substance in addition to the amount of any charges imposed on the District on account thereof under State or Federal law.

Signs shall be permanently posted in conspicuous places on a discharger's premises, advising employees whom to call in the event of a slug or accidental discharge. Employers shall instruct all employees who may cause or discover such a discharge with respect to emergency notification procedure. Charges for accidental discharges of prohibited material may be assessed against the discharger pursuant to Section 1.0919 of this Code.

Section 2.0309 Inspection and Sampling Manhole - All sewers shall have an inspection and sampling manhole or structure with an opening sufficient to permit accurate sampling and gauging of the wastewater flow, to assure compliance with these Regulations.

CHAPTER 4 - CHARGES AND FEES

Section 2.0401 Purpose - It is the purpose of this chapter to provide for the payment of charges and fees from dischargers to the District's waste disposal system, to compensate the District for the cost of administration of the pretreatment program established herein.

Section 2.0402 Charges and Fees - The District may adopt charges and fees which may include:

(a) Charges and fees for monitoring, inspections, and surveillance procedures, including all costs associated with sampling and analyses for Total Toxic Organics (TTO's) which are required pursuant to the categorical pretreatment requirements;

(b) Charges and fees for permit applications;

(c) Charges and fees for filing appeals;

(d) Charges and fees for reviewing accidental discharge incidents and their associated investigation analyses;

(e) Charges and fees for discharge in violation of the standards set forth herein;

(f) Charges and fees for violation of procedural requirements set forth herein;

(g) Charges and fees for reviewing plans for the construction of new facilities relating to this title.

CHAPTER 5 - ADMINISTRATION

Section 2.0501 Wastewater Dischargers - It shall be unlawful to discharge sewage, industrial wastes or other wastes to any sewer within the jurisdiction of the District, and/or to the District's facilities without first having complied with the terms of this Code.

Section 2.0502 Baseline Report Requirement - All industrial dischargers shall complete and file with the District a baseline report in the forms provided therefor, upon request of the District. Industries regulated under the Categorical Pretreatment Standards shall submit this baseline report to the District within 180 days after the promulgation of their respective categorical standard as required by 40 CFR Part 403.

Section 2.0503 Baseline Report Form - The baseline report to be made by the discharger shall be made in writing and shall include, at a minimum, the following:

(a) Disclosure of name, address and location of the discharger;

(b) Disclosure of Standard Industrial Classification (SIC) number according to the Standard Industrial Classification Manual, Bureau of the Budget, 1972, as amended;

(c) Disclosure of wastewater constituents and characteristics including but not limited to those mentioned in these Regulations, as determined by bonafide chemical and biological analyses. Sampling and analysis shall be performed in accordance with procedures established by the U.S. EPA and contained in 40 CFR, Part 136, as amended;

(d) Disclosure of the party who prepared the analysis;

(e) Disclosure of time and duration of discharges;

(f) Disclosure of average daily wastewater flow rates, in gallons per day, including daily, monthly and seasonal variations, if any;

(g) Disclosure of site plans, floor plans, mechanical and plumbing plans and details to show all sewers, sewer connections, inspection manholes, sampling chambers and appurtenances by size, location and elevation;

(h) Description of activities, facilities and plant processes on the premises including all materials which are or may be discharged to the District's facilities;

(i) Disclosure of the nature and concentration of any pollutants or materials prohibited by these Regulations in the discharge, together with a statement regarding whether or not compliance is being achieved with these Regulations on a consistent basis and if not, whether additional operation and maintenance activities and/or additional pretreatment is required for the discharger to comply with these Regulations;

(j) Where additional pretreatment and/or operation and maintenance activities will be required to comply with these Regulations, the discharger shall provide a declaration of the shortest schedule by which the discharger will provide such additional pretreatment and/or implementation of additional operational and maintenance activities. This schedule shall be prepared within the following parameters:

1. The schedule shall contain milestone dates for the commencement and completion of major events leading to the construction and operation of additional pretreatment required for the discharger to comply with the requirements of these regulations including, but not limited to dates relating to:

   a) hiring an engineer;

   b) hiring other appropriate personnel;

   c) completing preliminary plans;

   d) completing final plans;

   e) executing contract for major components;

   f) commencing construction;

   g) completing construction; and

   h) all other acts necessary to achieve compliance with these regulations

2. Under no circumstances shall the District permit a time increment for any single step directed toward compliance which exceeds 9 months.

3. Not later than 14 days following each milestone date in the schedule and the final date for compliance, the discharger shall submit a progress report to the District, including a statement as to whether or not it complied with the increment of progress represented by that milestone date and, if not, the date on which it expects to comply with this increment of progress, the reason for delay and the steps being taken by the discharger to return the construction to the approved schedule. In no event shall more than 9 months elapse between such progress reports to the District.

4. Failure to meet the milestones established in Section 2.0503(i)(1) shall be subject to Chapter 6 of this Title when deemed to be in bad faith.

(k) Disclosures of each product produced by type, amount, process or processes and rate of production;

(l) Disclosure of the type and amount of raw materials utilized (average and maximum per day);

(m) All disclosure forms shall be signed by a principal executive officer of the discharger and such signature shall be properly notarized;

(n) Disclosure of a list of all environmental permits held by user;

(o) Disclosure of the location of all disposal activities related to the pretreatment process.

The District will evaluate the complete baseline report and data furnished by the discharger and may require additional information. Within a reasonable time after full evaluation and acceptance of the data furnished, the District shall notify the discharger in writing of the District's acceptance or rejection thereof.

Section 2.0504 Standards Modification - The District reserves the right to amend these regulations and the terms and conditions hereof in order to assure compliance by the District with applicable laws and regulations. Within 9 months of the promulgation of a National Categorical Pretreatment Standard, which contains regulations which would necessitate amendments, these regulations will be amended to require compliance by

the Dischargers with such standards within the timeframe prescribed by such standards. All National Categorical Pretreatment Standards adopted after the promulgation of these regulations shall be adopted by the District as part of these regulations. Citing the Code of Federal Regulations and the date of promulgation in Section 2.0102 will constitute adoption of a categorical standard. Where a Discharger, subject to a National Categorical Pretreatment Standard, has not previously submitted a baseline report as required by Section 2.0502, the Discharger shall file a baseline with the District within 180 days after the promulgation of the Applicable National Categorical Pretreatment Standard by the U.S. EPA. In addition, any Discharger operating on the basis of a previous filing of a baseline report shall submit to the District within 180 days after the promulgation of an applicable National Categorical Pretreatment Standard the additional information required by paragraphs (h) and (i) of Section 2.0503. Any changes or new conditions in these regulations shall include a reasonable time schedule for compliance.

Section 2.0505 — Compliance Date Report - Within 90 days following the date for final compliance by the Discharger with applicable Pretreatment Standards set forth in these regulations or 90 days following commencement of the introduction of wastewater into the District facilities by a new Discharger, any Discharger subject to these regulations shall submit to the District a report indicating the nature and concentration of all prohibited or regulated substances contained in its discharge, and the average and maximum daily flow in gallons. The report shall state whether the applicable Pretreatment Standards or Requirements are being met on a consistent basis and, if not, what additional operation and maintenance and/or pretreatment is necessary to bring the Discharger into compliance with the applicable Pretreatment Standards or Requirements. This statement shall be signed by an authorized representative of the Discharger and such signature shall be properly notarized.

Section 2.0506 — Periodic Compliance Reports - Any Discharger subject to a Pretreatment Standard set forth in these regulations, after the compliance date of such Pretreatment Standard, or a New Discharger after commencement of the discharge to the District, shall submit to the District during the months of June and December, unless required more frequently by the

District, a report indicating the nature and concentration of prohibited or regulated substances in the effluent which are limited by the Pretreatment Standards hereof. In addition, this report shall include a record of all measured or estimated average and maximum daily flows during the reporting period as set out in Section 2.0505 and 2.0506. Flows shall be reported on the basis of actual measurement, provided however, where cost of feasibility conditions justify, the District may accept reports of average and maximum flows estimated by verifiable techniques.

The District, for good cause shown, considering such factors as local high or low flow rates, holidays, budget cycles, or other extenuating factors, may authorize the submission of said reports on months other than those specified above. All modifications will be made in writing by the District and shall not be applicable until received by the discharger.

Reports of dischargers shall contain all results of sampling and analysis of the discharge, including the flow and the nature and concentration, or production and mass where required by the District. All analyses shall be performed in accordance with 40 CFR Part 136 and amendments thereto. Where 40 CFR, Part 136 does not include a sampling or analytical technique for the pollutant in question, sampling and analysis shall be performed in accordance with the procedures set forth in the EPA publication, Sampling and Analysis Procedures for Screening of Industrial Effluents for Priority Pollutants, April, 1977, and amendments thereto, or with any other sampling and analytical procedures approved by the Administrator of the U.S.E.P.A.

Section 2.0507 Inspection and Sampling - The District may inspect the facilities of any discharger to determine compliance with the requirements of these regulations. The discharger shall allow the District or its representatives, without prior notice, upon presentation of credentials of identification, to enter upon the premises of the discharger at all hours for the purposes of inspection, sampling, or records examination. Delays in permitting access by District personnel in excess of ten minutes shall be considered an indication of noncompliance. The District shall have the right to set up on the discharger's property such devices as are necessary to conduct sampling, inspection, compliance monitoring and/or metering operations.

Section 2.0508 Confidential Information - Information and data furnished to the District with respect to the nature and frequency of discharge shall be available to the public or other governmental agency without restriction unless the discharger specifically requests and is able to demonstrate to the satisfaction of the District that the release of such information would divulge information, processes, or methods of production entitled to protection as trade secrets or proprietary information of the discharger. All requests to keep information confidential must be made in writing.

Said confidentiality shall be honored provided the discharger is in compliance with these regulations. Said information shall be made available to enforcement agencies (i.e., Ohio EPA, U.S.E.P.A.) where the discharger has failed to comply with the standards established herein.

Said information shall not be transmitted to said enforcement agencies by the District until and unless a ten (10) day notification is given to the discharger. Wastewater constituents and characteristics will not be recognized as confidential information under any circumstances.

Section 2.0509 Reporting is Required - The discharger is required to report as per Chapter Five of these regulations and failure to comply shall constitute a violation of this Code and result in action as per Chapter Six and charges as per Chapter Seven of these regulations.

CHAPTER 6 - ENFORCEMENT

Section 2.0601 Revocation of Treatment Services - The District may terminate the wastewater treatment services to any discharger which fails to:

(a) Factually report the wastewater constituents and characteristics of its discharge;

(b) Report significant changes in wastewater constituents or characteristics;

(c) Provide reasonable access to the discharger's premises by representatives of the District for the purpose of inspection or monitoring;

(d) Meet the conditions of Title I or Title II of the Code; or

(e) Comply with any final administrative or judicial order entered with respect thereto.

Section 2.0602 Notification of Violation - Administrative Order - Whenever the District finds that any discharger has engaged in conduct which justified revocation of treatment services, pursuant to Section 2.0601 hereof, the District shall serve or cause to be served upon such discharger, a written notice delivered personally or by certified or registered mail, return receipt requested, stating the nature of the alleged violation. Service may be made on any agent, officer or authorized representative of a discharger or to the discharger's principal place of business. Within seven (7) consecutive calendar days of the date of receipt of the notice, the discharger shall respond in writing to the District, advising of its position with respect to the allegations. Thereafter, the parties shall meet to ascertain the veracity of the allegations and where necessary, establish a plan for the satisfactory correction thereof. Upon reviewing the information presented at the aforementioned meeting the District shall order the discharger to provide additional information or to design and install pretreatment equipment in a prescribed timeframe and manner.

Section 2.0603 Show Cause Hearing - Where the violation of Section 2.0601 hereof is not corrected by timely compliance by means of Administrative Order, the District may order the discharger which causes or allows conduct prohibited by Section 2.0601 hereof, to show cause before the Board of Trustees or its designated hearing examiner convened pursuant to Section 1.0303 of this Code, why the revocation of service, termination action and/or application of charges

should not be taken. A written notice shall be served on the discharger by personal service or certified mail, return receipt requested, specifying the time and place of a hearing to be held by the Board of Trustees or its designated hearing examiner regarding the violation, the reasons why the enforcement action is to be taken, the proposed enforcement action, and directing the discharger to show cause before the Board of Trustees or its designated hearing examiner why the proposed enforcement action should not be taken. The notice of the hearing shall be served no less than seven days before the hearing. Service may be made on any agent, officer or authorized representative of a discharger or to the discharger's principal place of business. The proceedings at the hearing shall be in accordance with Section 1.0303 of this Code, and the determination by the Board of Trustees shall be made in the manner prescribed in that Section.

Section 2.0604 — Emergency Suspension of Service - The Director may for good cause shown suspend the wastewater treatment service of a discharger when it appears to the District that an actual or threatened discharge presents or may present an imminent or substantial danger to the health or welfare of persons, substantial danger to the environment, may interfere with the operation of the POTW, or may violate any pretreatment limits imposed by Title I or Title II of the Code of Regulations. Any discharger notified of the suspension of the District's wastewater treatment service shall cease all discharges. In the event of failure of the discharger to comply with the suspension order within the specified time, the District shall take all actions necessary, including but not limited to judicial proceedings, to compel the discharger's compliance with such order. The discharger shall be responsible for all costs associated with said action. The District shall reinstate the wastewater treatment service upon receipt of proof of the elimination of the noncomplying discharge or conditions creating the threat of imminent or substantial danger as set forth above.

Section 2.0605 — Judicial Proceedings - Following the final appeal to the District permitted under this Chapter by a discharger, the General Counsel of the District may, following the authorization of such action by the District, commence an action for appropriate legal and/or equitable relief in the appropriate local court.

Section 2.0606 Enforcement Actions - Annual Publication - A list of all dischargers which were the subject of enforcement proceedings pursuant to Chapter 6 of this Code during the twelve (12) previous months, shall be annually published by the District in the largest daily newspaper published in the municipality in which the District is located, summarizing the enforcement actions taken against the dischargers during the same twelve (12) months whose violations remained uncorrected 45 or more days after notification of noncompliance, or which have exhibited a pattern of noncompliance over that twelve (12) month period, or which involve failure to accurately report noncompliance.

Section 2.0607 Operating Upsets - Any discharger which experiences an upset in operations which places the discharger in a temporary state of noncompliance with this Code shall inform the District thereof within 12 hours of the first awareness of the commencement of the upset. Where such information is given orally, a written follow-up report thereof shall be filed by the discharger with the District within five days. The report shall specify:

(a) Description of the upset, the cause thereof and the upset's impact on discharger's compliance status.

(b) Duration of noncompliance, including exact dates and times of noncompliance and if the noncompliance continues, the time by which compliance is reasonably expected to occur.

(c) All steps taken or to be taken to reduce, eliminate and prevent recurrence of such an upset or other conditions of noncompliance.

CHAPTER 7 - CHARGES

Section 2.0701 — Failure to Comply with Regulations - Charges - Any failure to comply with the provisions of this Title shall result in a minimum charge of $100, but not to exceed $2,000 for each violation.

Section 2.0702 — Civil Penalties - Any discharger who is found to have violated an Order of the District or who has failed to comply with any provision of this Code, and the regulations or rules of the District or orders of any court of competent jurisdiction shall be subject to the imposition of a civil penalty.

Section 2.0703 — Recovery of Costs Incurred by the District - Any discharger violating any of the provisions of this Code, or who discharges or causes a discharge producing a deposit or obstruction, or causes damage to or impairs the District's wastewater disposal system, shall be liable to the District for any expense, loss or damage caused by such violation or discharge. The District shall bill the discharger for the costs incurred by the District for any cleaning, repair, or replacement work caused by the violation or discharge. Refusal to pay the assessed costs shall constitute a violation of this Code enforceable under the provisions of Chapter 6 of this Code. In addition, charges specified under Section 1.0919 may apply.

Section 2.0704 — Falsifying Information - Any person who knowingly makes any false statement, representation or certification in any application, record, report, plan or other document filed or required to be maintained pursuant to this Code, or who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required under this Code, shall be charged $500 per violation.

CHAPTER 8 - RECORDS RETENTION

Section 2.0801 Records Retention - All dischargers subject to this Code shall retain and preserve for no less than three (3) years any records, books, documents, memoranda, reports, correspondence, and any and all summaries thereof, relating to monitoring, sampling and chemical analyses made by or on behalf of a discharger in connection with its discharge. All records which pertain to matters which are the subject of Administrative Adjustment or any other enforcement or litigation activities brought by the District pursuant hereto shall be retained and preserved by the discharger until all enforcement activities have concluded and all periods of limitation with respect to any and all appeals have expired.

CHAPTER 9 - VALIDITY

Section 2.0901 Conflicts With Other Titles - The provisions of this Title of the Code of Regulations of the Northeast Ohio Regional Sewer District are intended to be read in conjunction with and complement the provisions of Title I. If any provision of Title II conflicts with any provision of Title I, the provisions of Title II shall govern.

Section 2.0902 Severability - If the provisions of any paragraph, section or article of this Title are declared unconstitutional or invalid by the final decision of any court of competent jurisdiction, the provisions of the remaining paragraphs, sections or articles shall continue in full force and effect.

CHAPTER 10 - ACCEPTANCE

Section 2.1001 Acceptance - By discharging to the system of the District, the discharging party agrees to comply with all terms and regulations of the District and to be bound by said terms, conditions and regulations.

Appendix D - Wastewater Treatment Compliance Schedule

MASTER METALS, INC., 2850 W. THIRD ST., CLEVELAND [illegible]

Lead Smelter and Refiner [illegible]

FAX TRANSMITTAL SHEET

XED TO: NEORSD DATE: 12/19/90

Attention Dan McCowell/L. Sellaff FROM: Rudy Zupan

No. pages (including cover) 3

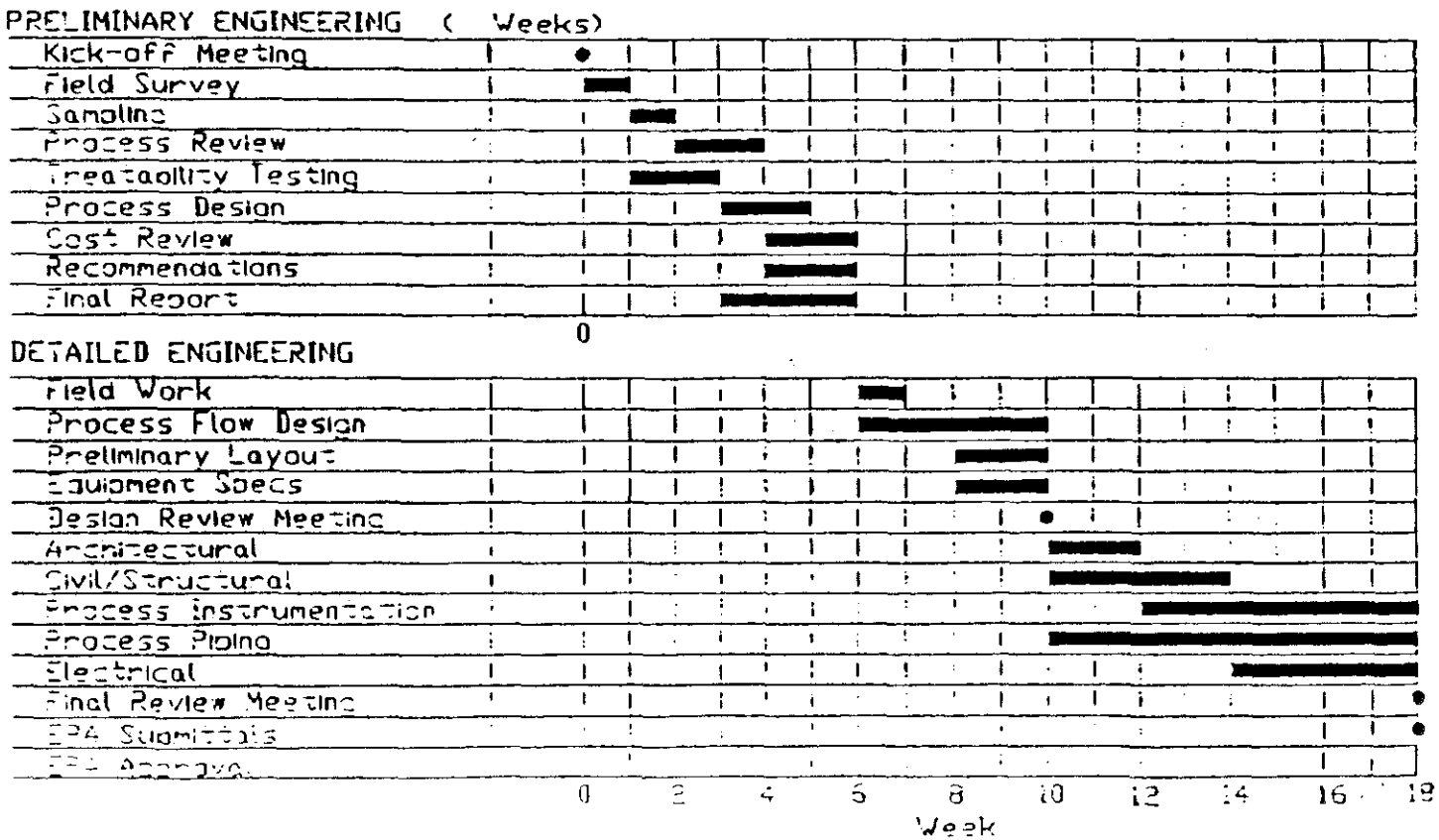
If all pages are not received, please call (216) 621-2361

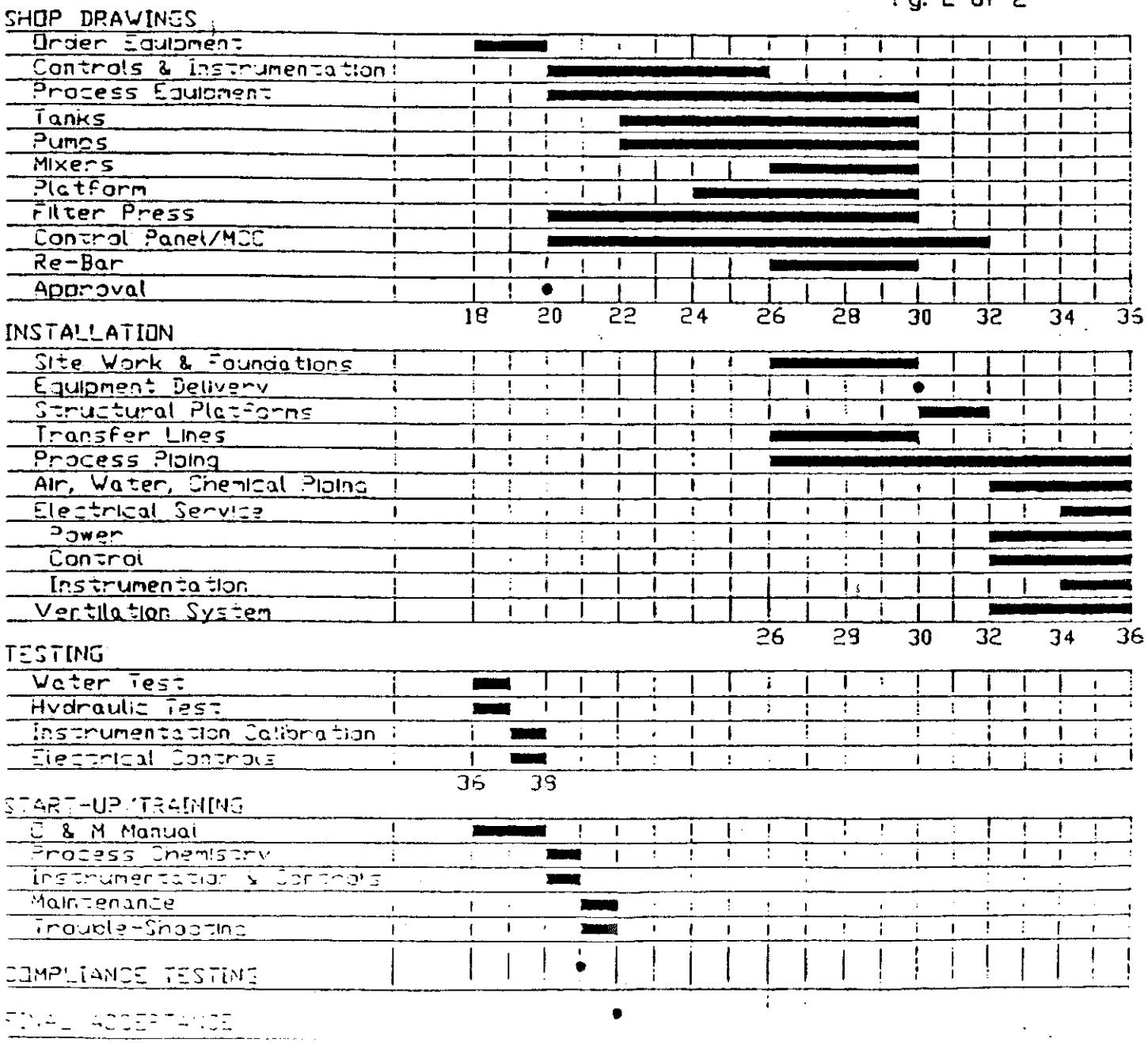
****

ssage:

Project Name: MASTER METALS
Project No.: 900911-Rev. 1
Project Mgr.: Mr. Rudy Zupan
Schedule Date: December 13, 1990

PROJECT SCHEDULE
CONSTRUCTION/START-UP PHASE




SHOP DRAWINGS
Order Equipment
Controls & Instrumentation
Process Equipment
Tanks
Pumps
Mixers
Platform
Filter Press
Control Panel/MCC
Re-Bar
Approval
18 20 22 24 26 28 30 32 34 36
INSTALLATION
Site Work & Foundations
Equipment Delivery
Structural Platforms
Transfer Lines
Process Piping
Air, Water, Chemical Piping
Electrical Service
Power
Control
Instrumentation
Ventilation System
26 28 30 32 34 36
TESTING
Water Test
Hydraulic Test
Instrumentation Calibration
Electrical Controls
36 38
START-UP/TRAINING
O & M Manual
Process Chemistry
Instrumentation & Controls
Maintenance
Trouble-Shooting
COMPLIANCE TESTING
FINAL ACCEPTANCE

Appendix E - Baseline Monitoring Report for Wastewater Discharges

NON-FERROUS METALS MANUFACTURING **Hand** Delivered to Dan McGrew NEORSD on Sept 6, 1990 3:30

INDUSTRIAL USER - PRETREATMENT BASELINE REPORT FORM

NOTE: Please read instructions thoroughly before completing form.

1. A. Facility Name: Master Metals Inc.

   Address: 2850 West Third Street

   Cleveland, Ohio 44113

   B. Owner's Name: same

   Address:

   C. Operator's Name: Douglas K. Midey

   Address: 2850 West Third St.

   Cleveland, Ohio 4411

2. Current environmental control permits. Attach additional sheets.

3. Describe process waste streams to sanitary sewer: (See Attachment A)

4.

Description of Operation	Production Rate (million lbs. of lead produced) Average	Maximum	SIC Code
Truck Wash	1,400,000 lbs. per month	2,200,000 lbs. per month	3332
Facility Washdown	"		"
Employee Respirator Wash	"		"
Employee Handwash	"		"
Battery Cracking	648,000 lbs. per month	300,000 lbs. per month	"

5. Wastewater Flows (gallons/day): (Also see Attachment B)

	Average	Maximum	Type Discharge
Total Plant Flow	---	1,460	continuous
Cooling Water Flow (Non-contact)	6,300	9,000	Continuous for 6-10 hrs./day
Contact Water Flow	2,700	--	Intermittent

5. Wastewater Flows (Gallons per Week)

	Average	Maximum	Type Discharge
Non-regulated Process Flows	(See non-contact cooling water flow rate)		
Regulated Flows			
Truck Wash	30/week	60/week	1-2 trucks/week
Employee Respirator Wash	35	35	Twice/Day
Employee Handwash (includes showers)	1650	1650	Continuous
Facility Washdown	720	720	Intermittent
Battery Cracking	1200/week	2400/week	Batch

A. Attach a schematic of Regulated Processes with Accompanied Flows.

6. Nature and Concentration of Pollutants (concentration in mg/l).

Regulated Process:	Sb	As	Pb	Zn	NH4(as Nitrogen)
(See Attachment C) Pollutant:					
Maximum:					
Average:					

Sample Type (Explain) _____

Number of Samples Collected (Explain) _____

7. Certified Statement

Pretreatment standards are _____ are not X being met on a consistent basis. Additional operation and maintenance under consideration for compliance is as follows: Truck washing will only be conducted at the battery breaking area to ensure capture of washwaters in the collection tank; battery acid wastewaters will be collected in the collection tank and is to be disposed by an approved disposal firm; a facility wastewater pre-treatment system will be installed to pre-treat regulated wastewaters prior to discharge.

8. Estimated schedule of compliance (attach an additional sheet) (see 1/28/81 Federal Register Sec. 403.12 (b) (7) & (c))

I certify under penalty of law that I have personally examined and I am familiar with the information in this application and all attachments and that, based on my inquiry of those persons immediately responsible for obtaining the information contained in the application, I believe that the information is true, accurate and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment.

Douglas K. Mickey President 621-2361

NAME - OFFICIAL TITLE Phone No. SIGNATURE Date

ATTACHMENT A
PROCESS WASTE STREAMS

Master Metals, Inc. in Cleveland, Ohio, is a secondary lead smelting facility. The major operation at the plant consists of smelting of materials containing lead. Master Metals reclaims lead by using two rotary furnaces. The plant accepts: lead-bearing dross; battery manufacturer's scrap; spent industrial batteries; and various other lead scrap. In addition, Master Metals recycles flue dust and captured baghouse emissions from its furnace operations.

Wastewater from the plant is discharged to a combined sewer system. The current rate of water usage by the facility is 433,840 gallons per month. The average daily rate of water consumption is approximately 14,460 gallons per day. Approximately half of the water is used as non-contact cooling water for the casting tables.

Additional sources of wastewater include: residual battery acid from the battery breaking operation; employee handwash and showers; employee respirator wash; truck wash; and facility washdown.

ATTACHMENT B
WASTEWATER FLOWS

1. Total Plant Flow:

Total plant flow is based on water usage from 4/27/90 to 7/30/90. this will approximate water usage for the near future.

2. Cooling Water Flow:

Non-contact cooling water flow is based on the following;

- three casting tables utilizing 5 gallons per minute of water per table
- each table is in use for 6 to 10 hours per day

3. Regulated Flows:

a. Truck Wash

Plant vehicles are periodically washed but there is no defined area or schedule for such operations. On an average one to two vehicles are hosed down once per week. Master Metals has a fleet of twelve vehicles ranging from front-end loaders to sweepers. No employee vehicles are washed on site.

b. Employee Respirator Wash

One sink in the office building is used for the cleaning of all respirators.

c. Employee Handwash

Employee hand washing and showering occurs in the employee locker room located in the office building.

d. Facility Washdown

Facility washdown consists of wetting surface areas to prevent fugitive dust emissions. Cleaning of plant surface areas is done by sweeper/vacuum vehicles.

e. Battery Cracking

In the past, Sulfuric Acid from the battery cracking area was gravity fed to an underground collection tank. The waste stream was then periodically pumped to a batch type physical-chemical treatment system.

Until further engineering solutions are considered, Master Metals has discontinued use of the treatment system. Collected wastewater from the battery cracking operations will be removed from the premises by an approved disposal/treatment firm.

3. Sanitary Water Flow:

Sanitary water flow has been estimated by subtracting cooling water usage and regulated process flows from the total estimated plant flow.

ATTACHMENT C
NATURE AND CONCENTRATION OF POLLUTANTS

1. Truck Wash mg/l

	Sb	As	Pb	Zn	NH4 (N)
	230	18	1110	2.8	12.7
	0.9	0.10	103	5.93	7.6
Average	115	9	606.5	32	10.5

Two vehicles were chosen for washing: a front end loader and rider sweeper. Each vehicle was washed for a period of five minutes. A sample of the waste stream was obtained at the initiation of the washing operation, at the 2.5 minute interval, and at the end of the wash cycle. The wastewater was then combined into one sample.

2. Employee Respirator Wash

	Sb	As	Pb	Zn	NH4 (N)
	<0.2	0.10	18.3	1.68	0.50
Average	<0.2	0.08	10.5	1.44	0.50

All respirators are washed with a detergent prior to rinsing. Grab samples of the detergent wash and rinsewater was taken. Twenty-five respirators are washed twice per day.

3. Employee Handwash

	Sb	As	Pb	Zn	NH4 (N)
	1.85	0.50	14.47	.60	0.55
Average	1.03	0.16	12.25	1.12	0.55

The trap of the sink was removed and washwater was captured. Grab samples were taken from three events. In addition, the shower drain was plugged and a grab sample was taken from two events.

4. Facility Washdown

	Sb	As	Pb	Zn	NH4 (N)
	2.5	1.5	69.4	1.96	3.55
Average	1.60	1.8	43.7	1.51	3.73

Sewer drains were chosen to reflect areas were least and most load is assume to take place. An area of approximately 500 square feet was washed down for 10 minutes. The flow rate was six gallons per minute. A

Sample of the waste stream was obtained at initiation of the washdown, at the five minute interval, and at the conclusion of the activity. The wastewater was then combined into one sample for analysis.

Two samples were taken on two separate days at the process area drain. One sample was taken at the drain by the office building.

5. Battery Cracking

SB	AS	PB	[illegible]	NH4 (N)
0.4	0.19	47.8	[illegible]	3.2

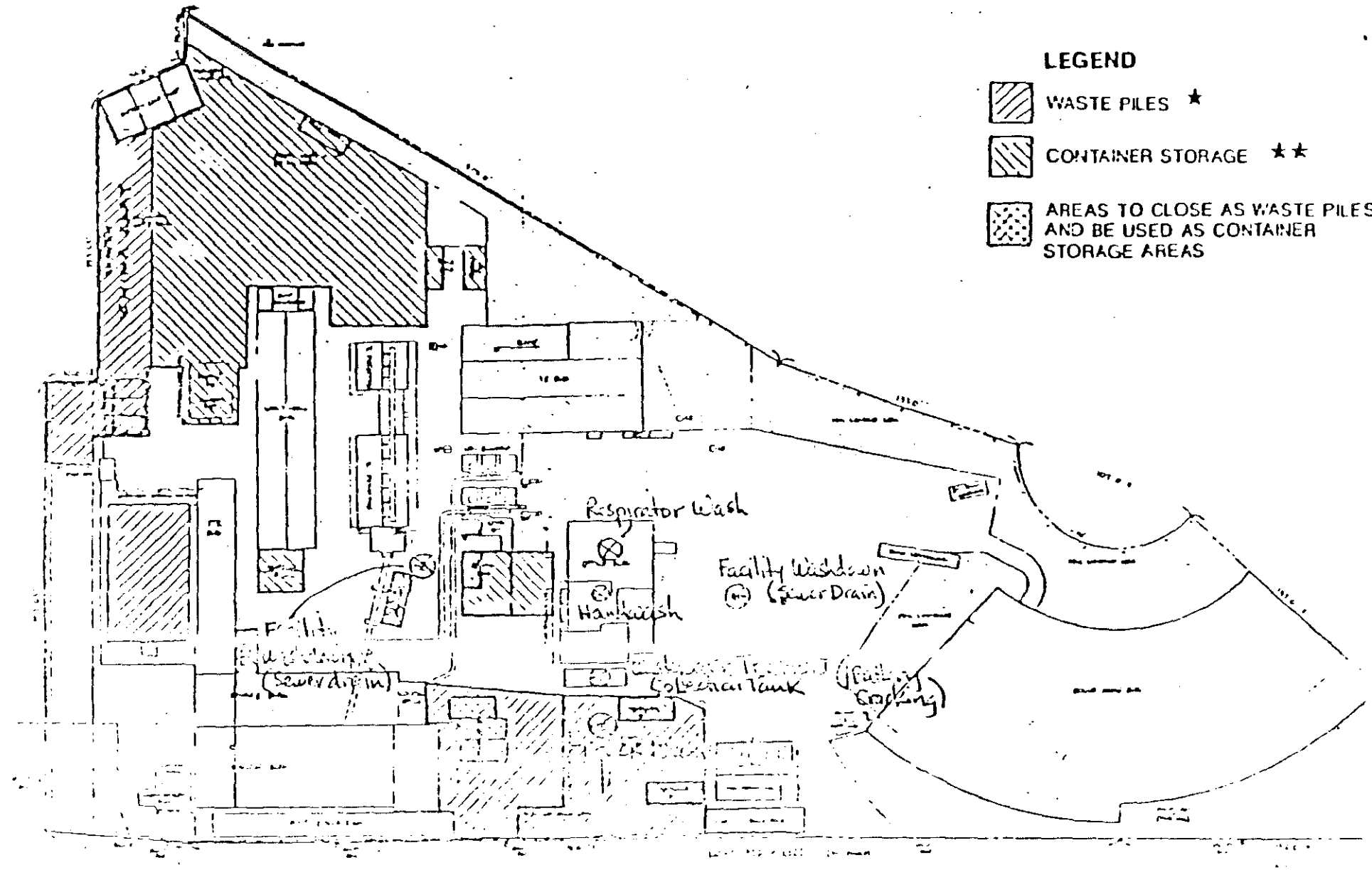
One grab sample was taken from the collection tank. The battery acid treatment system will not be used until further engineering studies are completed. All collected battery acid will be disposed of by an approved disposal/treatment firm.

MASTER METALS, INC., 2850 W. THIRD ST., CLEVELAND, OHIO 44113 • (216) 621-2361

Lead Smelter and Refiner

COMPLIANCE SCHEDULE

1. Discontinue use of battery wastewater treatment system. Obtain approved firm for disposal of collected wastewaters.	Immediately
2. Select engineer and/or consulting firm.	November 1, 1990
3. Complete preliminary plans.	January 1, 1991
4. Complete final plans.	March 1, 1991
5. Commence construction.	April 1, 1991
6. Complete construction.	November 1, 1991
7. Pre-treatment system start-up	December 1, 1991



NOTES

★ ALL WASTE PILES, EXCEPT [illegible] CLOSE IN SHORT TERM [illegible] BE USED UNTIL JULY 31, 1990.

★★ SEE EXHIBIT C FOR CLOSING CONTAINER STORAGE AREA

SCALE, FT.

0 32 [illegible]

Appendix F - Consent Decree

D.1.4

A

Master Metals Site Visit 2/10/87
OHD 097 613 871

Attendance:
Mary Logan - US EPA
Elaine Gray } - Harding Lawson Assoc.
Joe Hofbauer }
Doug Mickey - Master Metals
Dave Munson } - Environmental Envisage

We met Mr Mickey at 8:30 in the office. I explained that Joe and Elaine would be performing the VSI portion of the visit as agents of the USEPA. I was there for oversight purposes and to discuss the permit status of the facility.

Joe was the leader for HLA for the VSI. He reviewed in depth the process information and waste management practices and history of Master Metals. (see pages 1 to 3 for notes from this discussion). He also reviewed areas specified in the PR as SWMUs in need of further information.

We then proceeded w/ the site inspection. During the inspection we

saw all areas of the facility, production areas as well as waste management areas. The results of the inspection will be found in the VSI report that will be prepared by HLA.

After the inspection we concluded with some discussion of the permit status of Master Metals. Environmental Envirogas and Mr Mickey were wondering whether permit review was ongoing. I reviewed the requirements of HSWA regarding LOIS and explained that because of their inability to certify compliance w/ financial requirements they had lost interim status for their waste piles. I also stated that this made those piles illegal storage. Mr Mickey stated that he was completely unaware that they were a LOIS facility. He wanted to know what they could do about the situation. I told them there was no way they could regain interim status for those waste piles and that they should talk to enforcement about LOIS.

I also told them that LOIS does not preclude them from pursuing a

RCRA permit. I explained that the units would be treated as new units (the waste piles). The drum storage units still have interim status and will work into the storage permit schedual. I explained that w/out adequate financial requirements there was not much point in pursuing a permit since the permit would be denied.

Site Inspection 2/10/87

me
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K069 - They say they have gone for a year w/out having a bulk supplier. They have one supplier in cardboard boxes that gets processed w/in 24 hrs. They put box + all into furnace

Baghouses are not continuous generators of flue dust. They shut down 2-3 x a year to clean out the baghouses and store it to reuse in the furnace

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Quaterly monitoring for Pb + As for OSHA - they used to do ambient and now do personal monitoring

They recycle most waste w/in 45 days of receipt. 20-25 tons / finished material / day but ~ 40 tons / day

They have as many as 20 trailer loads of drums (30-45 drums / load).

W/in the last couple of years has been the only time that they've considered K069 as a seperate material (since the "regulations have flared up")

Facility age 1933
furnace → baghouse in 1935
kettles → W 3rd baghouses in 1968 10 cells / 5 per section
They have an air permit: 3 yrs, they resample
- particulate
- SO_2
- metals

There are 2 permits - city + state
Cleveland has their own codes. Cleveland has contractual authorization for the state program.

Every quarter they clean out ~ 6 x 30 x 20 ft^3 of flue dust from the material.
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Installed in mid - 60's

They use Na Nitrate to remove aniline from the pots (catalyst storage?) 100 lb bags on a skid. Induces oxidation of antimony out of the material

NE Ohio Sewer District - do the discharge tests

There are some underground storage tanks
- 500 gal gas that is used
- 500 gal diesel not used
- fuel not used

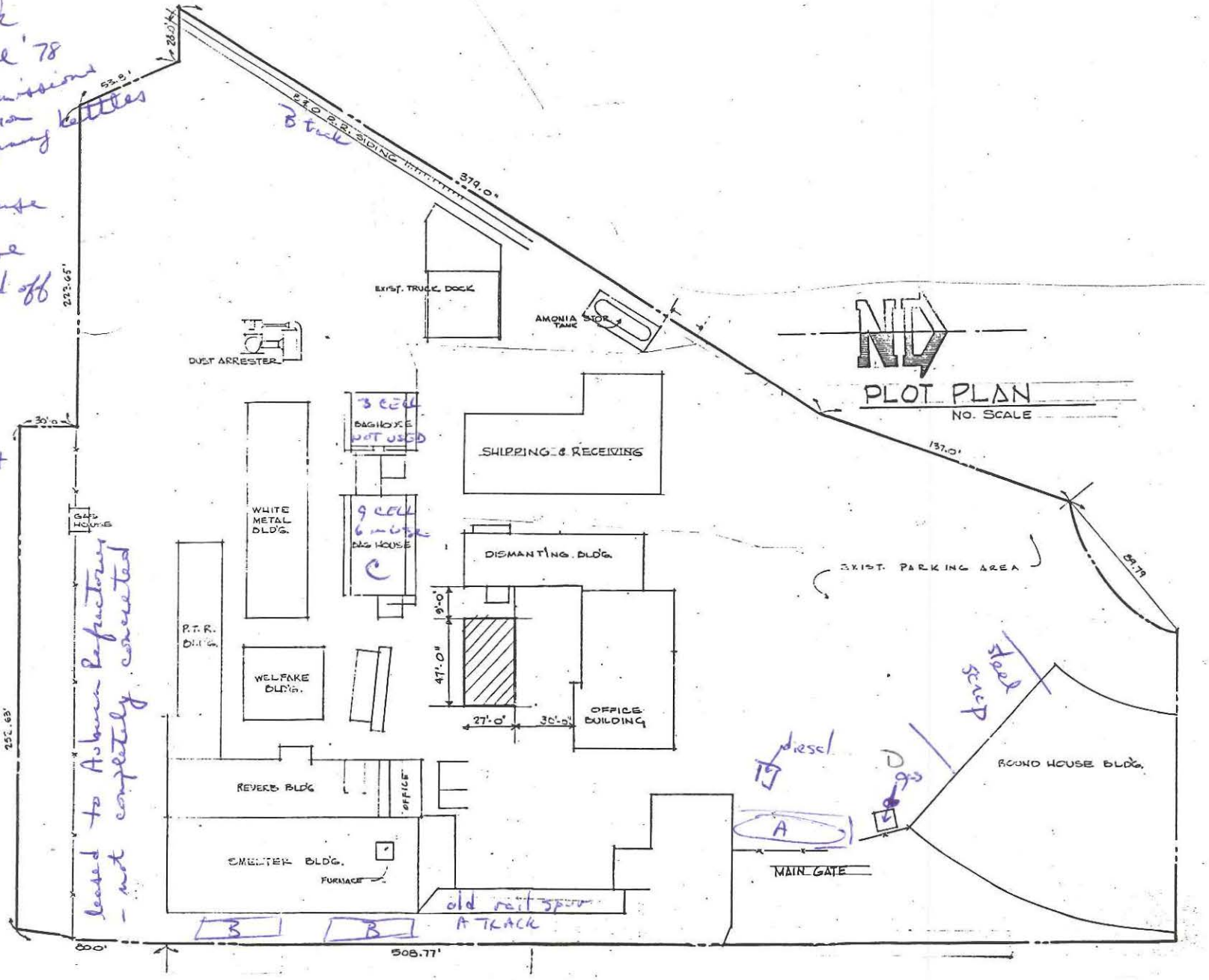
He said he believed that the oil suppliers ~~had~~ filed a notification about the tank

A - fuel oil tank empty since '78

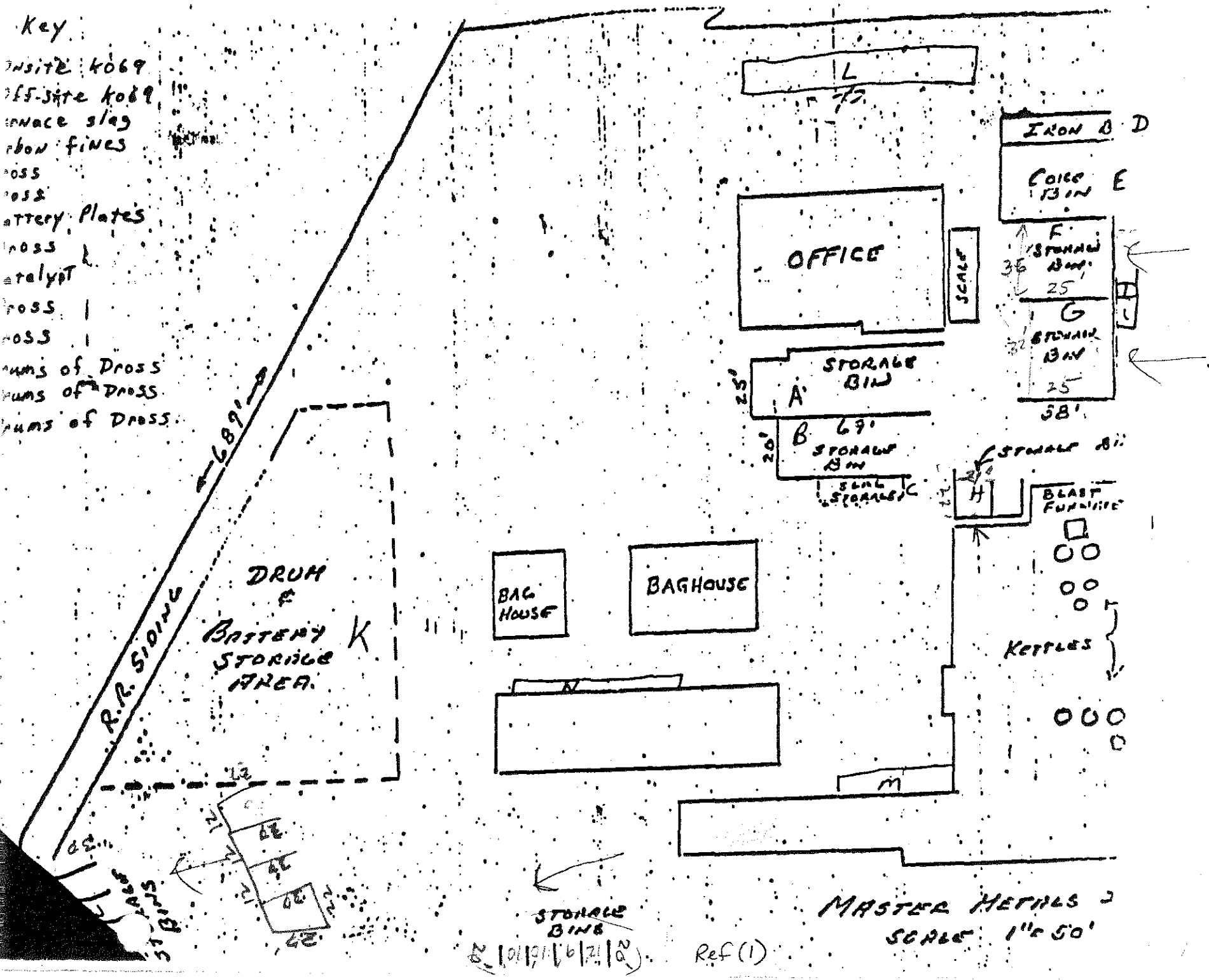
B - sanitary baghouses - emissions from refining kettles

C - 9 cell baghouse 3 not in use and dampered off

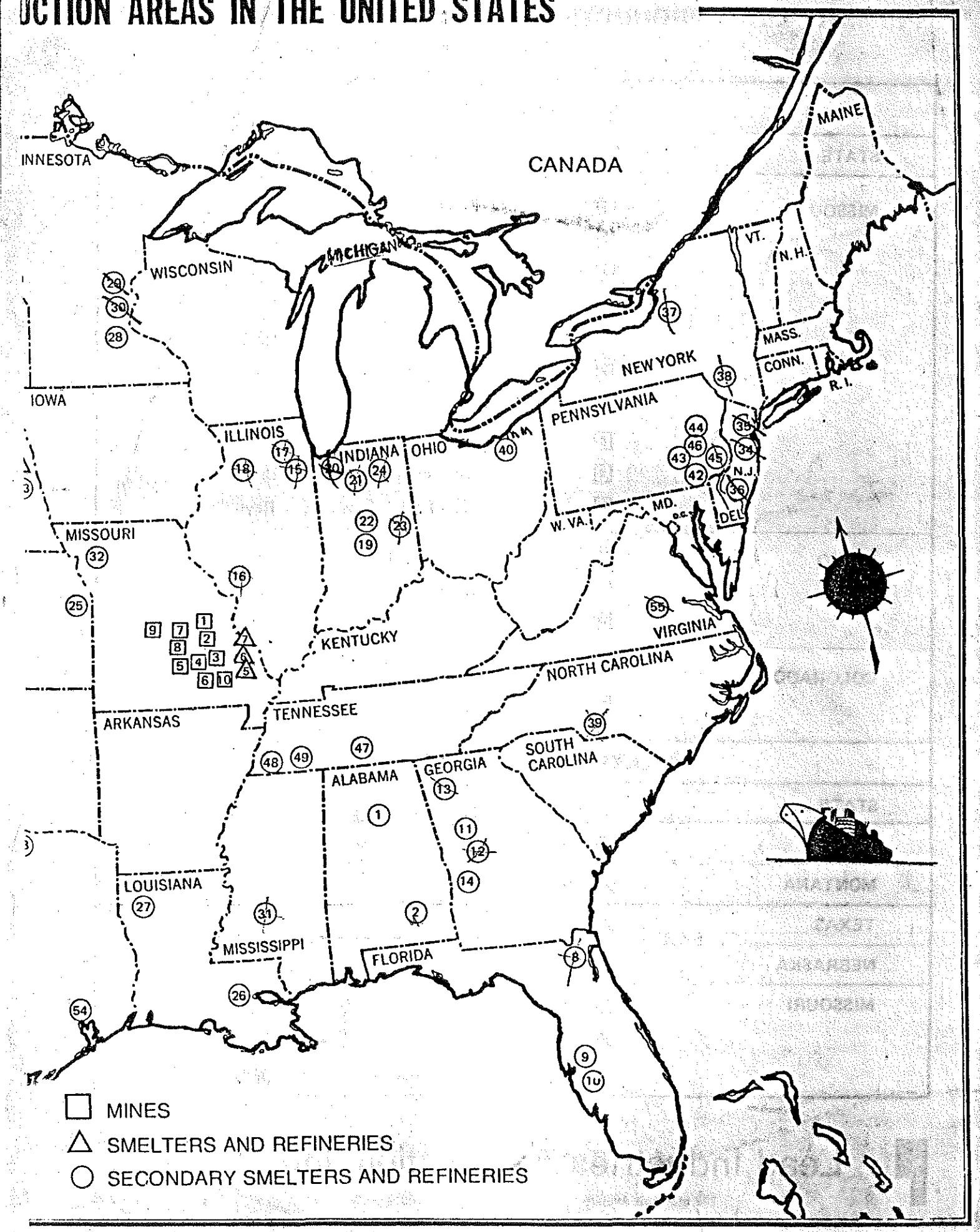
D 500 gal UST for gas fuel (also another fuel tank - not used)



FACILITY DRAWING (see page 4)



UCTION AREAS IN THE UNITED STATES



SECONDARY SMELTERS AND REFINERIES IN THE UNITED STATES

STATE	NO.	CITY
ALABAMA	1	Leeds
	2	Troy
CALIFORNIA	~~3~~	Carson
	4	City of Industry
	5	City of Industry
	6	Los Angeles
	~~7~~	San Francisco
FLORIDA	~~8~~	Jacksonville
	9	Tampa
	10	Tampa
GEORGIA	~~11~~	Atlanta
	~~12~~	Atlanta
	~~13~~	Cedartown
	~~14~~	Columbus
ILLINOIS	~~15~~	Chicago
	~~16~~	Granite City
	~~17~~	McCook
	~~18~~	Savanna
INDIANA	19	Beech Grove
	~~20~~	East Chicago
	~~21~~	East Chicago
	22	Indianapolis
	~~23~~	Muncie
	~~24~~	Whiting
KANSAS	~~25~~	Olathe
LOUISIANA	26	Baton Rouge
	~~27~~	Heflin
MINNESOTA	28	Eagan
	~~29~~	St. Louis Park
	~~30~~	St. Paul
MISSISSIPPI	~~31~~	Florence
MISSOURI	32	Forest City
NEBRASKA	~~33~~	Omaha
NEW JERSEY	~~34~~	New Brunswick
	~~35~~	Newark
	~~36~~	Pedricktown
NEW YORK	~~37~~	DeWitt
	~~38~~ O	Walkill MIDDLETOWN
NORTH CAROLINA	~~39~~	Charlotte
OHIO	40	Cleveland
OREGON	~~41~~	St. Helenes
PENNSYLVANIA	~~42~~	Lancaster
	43	Lyons Station
	~~44~~	Nesquehoning
	~~45~~	Philadelphia
	46	Reading
TENNESSEE	47	College Grove
	48	Memphis
	49	Rossville
TEXAS	~~50~~	Dallas
	~~51~~	Dallas
	~~52~~	Dallas
	53	Frisco
	~~54~~	Houston
VIRGINIA	~~55~~	Richmond
WASHINGTON	~~56~~	Seattle

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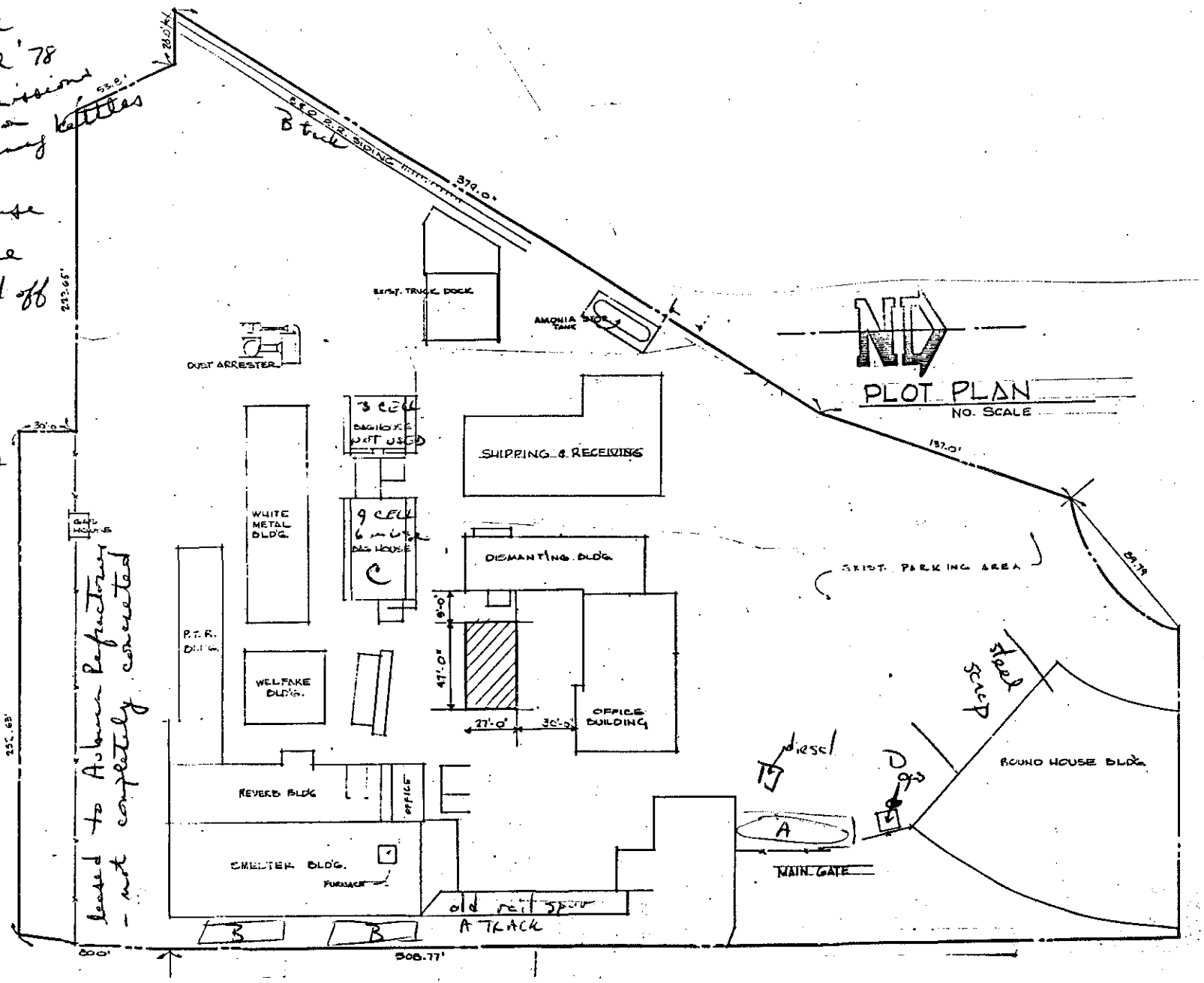
A - fuel oil tank
empty since '78

B - baghouses - emissions from refining kettles
sanitary

C - 9 cell baghouse
3 not in use
and dampered off

D 500 gal UST
for gas fuel
(also another
fuel tank - not
used)



:ility Name : Master Metals

Acility ID # : OHD 097 613871

FMP APPROVAL

We have completed our review of the draft Facility Management Plan (FMP) for the subject facility. We have notified the Hazardous Waste Enforcement Branch (HWEB) and the Emergency and Remedial Response Branch (ERRB) that the FMP is under review, in accordance with Edith Ardiente's memos of December 2 and 6 1985.

(Check one)

☐ A corrective action order (or other enforcement action) was recommended, and HWEB concurs.

☒ No corrective action order was recommended, and HWEB did not object.

☐ A corrective action order was recommended, but HWEB did not concur at this time; we have revised the FMP accordingly.

(Check one)

☐ Action involving ERRB was recommended, and ERRB concurs.

☒ No ERRB action was recommended, and ERRB did not object.

☐ Action involving ERRB was recommended, that ERRB did not concur; we have revised the FMP accordingly.

(Check one)

☐ Based on our review, the FMP is hereby approved as drafted by OEPA.

☐ Based on our review, the FMP as drafted by OEPA is hereby approved as amended.

☒ The FMP is hereby approved as drafted by Ohio Permits Unit, U.S. EPA Region V.

Signature Mary P. Logan (EPA Staff) Date: 7/8/86

395-8

Attachment 19 (Revised 1/15/86)
(New Version)

Name of Preparer: Mary Logan
Date: _____

Model Facility Management Plan

1. Facility Name: Master Metals Inc
2. Facility I.D. Number: OHD 097613871
3. Owner and/or Operator: Mr. Douglas Mickey
4. Facility Location: 2950 W. Third St
   Street Address

Cleveland	Cuyahoga	OH	44113
City	County	State	Zip Code

5. Facility Telephone (if available): (216) 621-2361

6. Recommendation for Regional Approach to the Facility: Check one

_____ Site Investigation

_____ Permit Compliance Schedule

_____ Corrective Action Order (may include compliance schedule)

_____ Other Administrative Enforcement

X Federal Judicial Enforcement

_____ Referral to CERCLA for Federally Financed or Enforcement Activity

_____ Voluntary/Negotiated Action

X State Action - to do RFA

Brief narrative in explanation of selection: This facility did not certify for financial assurances by Nov 8 1985. They have been referred to DOJ for LOIS activity

a) If site investigation alternative is selected:

anticipated inspection date _____

State or Federal inspection _____

b) If Permit Alternative is Selected: Projected Schedule

Date of Part B Submission: _____

Date of Completeness Check: _____

Date for Additional Submissions (if required): _____

Date of Completion of Technical Review: _____

Completion of Draft Permit/Permit Denial: _____

Public Notice for Permit Decision: _____

Date of Hearing (if appropriate): _____

Date of Final Permit or Denial Issuance: _____

Description of any corrective action provisions to be included in permit -

1. Plan of Study of Remedial Investigation: _____

_____

2. Remedial Investigation Report/Corrective Action Plan Cost Estimate/Financial Mechanism: _____

_____

3. Completion of Corrective Action: _____

_____

c) If Corrective Action Order Alternative is Selected:

Estimated Date for Order Issuance: _____

Date of Finalization of Settlement if Negotiation Successful:

_____

h) If State Action Alternative is Selected:

Date for Referral to State: _____

Name of State Contact: _____

Phone: _____

7. EPA Concurrence (to be completed by Region V, TPS staff)

(Check one)

☐ A corrective action order (or other enforcement action) was recommended, and HEEB concurs.

☐ No enforcement action was recommended, and HEEB did not object.

☐ Enforcement action was recommended, but HEEB did not concur at this time; we have revised the FMP accordingly.

(Check one)

☐ Action involving ERRB was recommended, and ERRB concurs.

☐ No ERRB action was recommended, and ERRB did not object.

☐ Action involving ERRB was recommended, that ERRB did not concur; we have revised the FMP accordingly.

(Check one)

☐ Based on our review, the FMP is hereby approved as drafted by the State

☐ Based on our review, the FMP is hereby approved as amended.

Signature _____ Date: _____
(EPA Staff)

Facility name: Master Metals Inc.
EPA ID # OHD 097 613 871
Name of Preparer: Mary Logan
Date: _____

Preliminary Assesment Report

The questions constituting this Preliminary Assesment (P.A.) Report must be filled out prior to completion of recommendation elements of the Plan. The purpose of this P.A. is to provide a summary documentation of the State and/or U.S. EPA review of available information on the subject facility. The intent is that a comprehensive file review will be conducted as the basis for selection of the recommended approach to a given facility. If the P.A. is completed by State personnel, questions referring to available data reference information in State files; for Federal personnel the reference is to Federal files. Where questions refer to "all" available data or information and such material is columinous, the response should indicate that files are voluminous, and then reference most telling information, for example, groundwater contaiminants found frequently or at extremely high concentrations should be specifically listed, and information most directly supporting recommended approach to facility should be described. If no information is available in facility files, the response should so indicate. It is also anticipated that this P.A. may be updated periodically as more information becomes available.

1. Interim Status and/or Permitted Hazardous Waste Units and Capacities of Each Unit:

	Type of Units	Size or Capacity	Active or Closed
X	Storage in Tanks or Containers	1520 g	active
	Incinerator		
	Landfill		
	Surface Impoundment		
X	Waste Pile	1848 yds.	active
	Land Treatment		
	Injection Wells		
X	Others (Specify)	T04 rotary furnace T04 pot furnace	132 U gal/day active

- [ ] State Air Permit files/inspection reports
- [ ] TSCA Inspection Reports
- [ ] OSHA Inspection Reports
- [ ] Municipal/Country/City Public Health Agencies
- [ ] Local Well Drillers
- [ ] State/Country Road Commissions
- [ ] Utilities
- [ ] Local Airports/Weather Bureaus
- [ ] Naturalist/Environmental Organizations
- [ ] Employees
- [ ] Colleges/Universities
- [ ] Interviews with local residents
- [ ] Public Notice

4. The facility is on the National Priorities List or proposed update of the List or proposed update of the List or ERRIS list

   _____ Yes - indicate List or update

   _____ No

   ___X___ Yes - ERRIS list

Prior to completion of the Recommendation portion of the Facility Management Plan, the attached Appendix must be completed.

Description of Enforcement Status:

5. Type of Action | Date | Local, State or Federal | Result or Status

10. During inspection of this facility did the inspector note any evidence of past disposal practices not currently regulated under RCRA such as piles of waste or rubbish, injection wells, ponds or surface impoundments that might contain waste or active or inactive landfills?

_____ Yes- give date if inspection and describe observation

_____

_____

_____

_____ No _____ Don't know

11. Do inspection reports indicate observations of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituent?

_____ Yes - indicate date of report and describe observations

_____

_____

_____ No

_____ Don't know

12. Do inspection reports indicate the presence of any tanks at the facility which are located below grade and could possible leak without being noticed by visual observation?

_____ Yes - date of inspection and describe information in report

_____

_____

_____

_____ No

_____ Don't know

13. Does a groundwater monitoring system exist at the facility? No

19. Has a CERCLA Preliminary Assessment/Site Investigation (PA/SI) been completed for this facility?

__X__ Yes

_____ No

20. If answer to question 14 is yes, briefly describe conclusions of the PA/SI focusing on types of environmental contaimination found, wastes and sources of contaimination.

_____

_____

_____

_____

_____

21. If available, having reviewed the CERCLA notification, RCRA Part A and RCRA Part B, it appears that: (CERCLA Unit refers to units or area of concern in CERCLA response activity)

_____ RCRA and CERCLA units are same at this facility

_____ RCRA and CERCLA units are clearly different units

_____ There is an overlap between the RCRA and CERCLA units (some are the same, some are different)

22. Description of Any Past Releases or Environmental Contamination:

Type/Source of Release	Date	Material Released	Quantity	Response

25. SUMMARY

List the solid waste management units at this facility (other than tanks and container storage areas for holding wastes with no hazardous constituents):

Unit	Are hazardous constituents present in the waste (yes/no)?	Is it reasonable to suspect a release (yes/no)?	Next Step (a) site investigation workplan (b) plan of study for remedial investigation (c) corrective action plan (d) no further action required
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Complete and attach the "Assesment of Unit" form for each unit with "yes" answers in both of the first two columns.

Assessment of Unit

Description of Unit: _____

_____

Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Unit: (may attach Part A or permit list or reference those documents if listing of wastes is exceptionally long - in that case, to complete this question list wastes of greatest interest and/or quantity and note that additional wastes are managed)

Type of Waste	Quantity	Generated, a treated, Stored or Disposed (note appropriate categories)

Exhibit 3-2 (continued)

Checklist for Ground Water Releases

	Yes	No	Need SI to determine
o Waste characteristics			
- Does the waste in the unit exhibit high or moderate characteristics of mobility (e.g., tendency not to sorb to soil particles or organic matter in the unsaturated zone)?	—	—	—
- Does the waste exhibit high or moderate levels of toxicity?	—	—	—
2. Evidence of Ground Water Releases			
o Existing ground-water monitoring systems			
- Is there an existing system?	—	—	—
- Is the system adequate?	—	—	—
- Are there recent analytical data that indicate a release?	—	—	—
o Other evidence of ground water releases			
- Is there evidence of contamination around the unit (e.g., discolored soils, lack of or stressed vegetation) that indicates the potential for a release to ground water?	—	—	—
- Does local well water or spring water sampling data indicate a release from the unit?	—	—	—
Determining the Relative Effect of the Release on Human Health and the Environment			
1. Exposure Potential			
o Conditions that indicate potential exposure			
- Are there drinking water well(s) located near the unit?	—	—	—
- Does the direction of ground water flow indicate the potential for hazardous constituents to migrate to drinking water wells?	—	—	—

Exhibit 4-1 (cont.)

Checklist for Surface Water/Surface Drainage Releases

	Yes	No	Need SI to determine
o Waste Characteristics			
- Is the volume of discharge high relative to the size and flow rate of the surface water body?	___	___	___
- Do constituents in the discharge tend to sorb to sediments (e.g., metals)?	___	___	___
- Do constituents in the discharge tend to be transported downstream?	___	___	___
- Do waste constituents exhibit moderate or high characteristics of persistence (e.g., PCBs, dioxins, etc.)?	___	___	___
- Do waste constituents exhibit moderate or high characteristics of toxicity (e.g., metals, chlorinated pesticides, etc.)?	___	___	___
2. Evidence of Surface Water/Surface Drainage Releases			
o Are there unpermitted discharges from the facility to surface water that require an NPDES or a Section 404 permit?	___	___	___
o Is there visible evidence of uncontrolled run-off from units at the facility?	___	___	___
<u>Determining the Relative Effect of the Release on Human Health and the Environment</u>			
1. Exposure Potential			
o Are there drinking water intakes nearby?	___	___	___
o Could human and/or environmental receptors come into contact with surface drainage from the facility?	___	___	___
o Are there irrigation water intakes nearby?	___	___	___
o Could a sensitive environment (e.g., critical habitat, wetlands) be affected by the discharge (if it is nearby)?	___	___	___

Exhibit 5-1 (cont.)

Checklist for Air Releases

	Yes	No	Need SI to determine
o Do certain environmental and geographic factors affect the concentrations of airborne contaminants?			
- Do atmospheric/geographic conditions limit constituent dispersion (e.g., areas with atmospheric conditions that result in inversions)?	___	___	___
- Is the facility located in a hot, dry area?	___	___	___
2. Evidence of Air Releases			
o Does on-site monitoring data show that releases have occurred or are occurring (e.g., OSHA data)?	___	___	___
o Have particulate emissions been observed at the site?	___	___	___
o Have there been citizen complaints concerning odors or observed particulate emissions from the site?	___	___	___

Determining the Relative Effect of the Release on Human health and the Environment

1. Exposure Potential			
o Is a populated area located near the site?	___	___	___

Facility name: _____
EPA ID # _____
Name of Preparer: _____
Date: _____

Site Investigation Report

1) During the inspection of this facility did the inspector note any evidence of past waste disposal practices not currently regulated under RCRA such as piles of waste or rubbish, ponds or surface impoundments that might contain waste, active or inactive landfills?

_____ a) Yes, Explain _____

_____

_____ b) No

_____ c) Cannot Respond to this Question

2) Was there any evidence of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituents?

_____ a) Yes, Explain _____

_____ b) No

_____ c) Cannot Respond to this Question

3) Are there any tanks at the facility which are used for waste storage (solid or hazardous) which are located below grade and could possibly leak without being noticed by visual observation?

_____ a) Yes

_____ b) No

_____ c) Cannot Respond to this Question

4) Based on an inspection or inspections that have been done at this facility there is no reason to question or doubt the information which the applicant has submitted on the questionnaire regarding Solid Waste Management Units and the possibility of prior or continuing releases of hazardous wastes or constituents.

_____ a) I concur with this statement

_____ b) I do not concur with this statement for the following reasons:

_____

_____

_____

10. If the answer to No. 7 above is "Yes", the priority and manner for requiring the applicant to conduct the Remedial Investigation (R.I.) is as follows:

_____ a) Require R.I. in compliance schedule that is part of RCRA permit.

_____ b) Issue Compliance Order requiring R.I. to be done.

11. Did the SI address all items that the PA "Assessment of Unit" forms indicated the SI should address?

_____

_____

12. Based on my review of this S.I. report, it is hereby:

☐ approved

☐ not approved

Signature _____ Date: _____
(EPA Staff)

ATTACHMENT 7

NAME OF PREPARER Mary Logan

PREPARER IS: USEPA EMPLOYEE [X]

STATE EMPLOYEE [ ]

DATE 1/2/86

TREATMENT, STORAGE, DISPOSAL FACILITY
INITIAL SCREENING
FOR
ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Master Metals Inc.

FACILITY ID # OHD 097 613 871

FACILITY LOCATION 2850 W. 3rd St.
STREET ADDRESS

Cleveland	Cuyahoga	Ohio	44113
CITY	COUNTY	STATE	ZIP CODE

LIST ALL CURRENT INTERIM STATUS PROCESS CODES

S01, S03 T04

LIST ALL PROCESS CODES PROPOSED IN PART B APPLICATION (IF APPLICABLE)

INSTRUCTIONS

FOR EACH OF ITEMS 1 THROUGH 11 BELOW, MARK ONE AND ONLY ONE BOX, BASED ON YOUR KNOWLEDGE OF THE FACILITY. USE THE "RATING DISCUSSION" TO ELABORATE, IF DESIRED. NOTE THAT ANY ENVIRONMENTAL CONCERN RATING OF HIGH CONSTITUTES YOUR RECOMMENDATION THAT THIS FACILITY IS "SUFFICIENTLY ENVIRONMENTALLY SIGNIFICANT" TO WARRANT PREPARATION OF A FACILITY MANAGEMENT PLAN. IN ORDER FOR YOU TO RECOMMEND THAT A FACILITY MANAGEMENT PLAN NEED NOT BE PREPARED, EACH AND EVERY ITEM MUST BE MARKED EITHER LOW OR N/A.

Environmental Concern Rating

	HIGH	LOW	N/A
1. Rate concern relative to the CERCLA Program, and discuss -(National Priority List sites should automatically be high concern; significant past handlers of CERCLA cleanup wastes should automatically be high concern; facilities that have absolutely no 'CERCLA connection' should be rated N/A)			X
2. Rate concern relative to status as a commercial handler, and discuss -- (facilities that handle significant amounts of waste from a variety of sources should be rated high; (facilities that handle only their own company's off-site waste could be rated low; facilities that only handle on-site generated wastes should be rated N/A)	X		
3. Rate concern relative to facility's financial condition (facilities which have or are expected to declare financial insolvency should be rated high)	X		

RATING DISCUSSION: They handle waste from various off-site sources

RATING DISCUSSION: They are working under chapter 11 - trying to get out of bankruptcy

Environmental Concern Rating

	HIGH	LOW	N/A
4. Rate concern relative to facility's 40 CFR Part265 compliance status/history, (High Priority Violators and Significant Non-Compliers should be rated high; for proposed facilities, rating is N/A)	☐	☐	☒
5. Based on the waste management processes employed (to be employed) at the facility, rate the concern, and discuss -- (processes subject to ground water monitoring will most often dictate a rating of high; incinerators will most often dictate a rating of high; "contained" storage/treatment such as in drums/tanks will most often rate low)	☐	☒	
6. Based on the presence, absence, significance of old Solid Waste Management Units & whether releases from old or current units are known, suspected, corrected; rate the concern, and discuss -- (known & seriously suspected releases should dictate a rating of high, unless felt to be insignificant/de minimis)	☒	☐	

RATING DISCUSSION: They are trying to get a Part B permit to help get out of bankruptcy - they had withdrawn so no RCRA inspections were done for several years

RATING DISCUSSION: This is a storage facility with an enclosed waste pile + storage in drums

RATING DISCUSSION: There is possible GW contamination from the Pb dust + scrap which was on the facility long before RCRA was enacted. The facility is still messy

Environmental Concern Rating

	HIGH	LOW	N/A
7. Rate concern, based only on the volume and type of waste handled, and discuss -- (low volumes of extremely toxic wastes could rate a high; very heavy volumes of waste could rate a high, though wastes are not particulary dangerous)	X		
8. Rate concern relative to facility's NON-hazardous waste general environmental regulatory status/history, and discuss --	X		
9. Rate concern relative to facility's physical location(proximity to population or to sources of accidents or dangers which would tend to increase the facility's inherent danger)	X		

RATING DISCUSSION: They handle a high vol. of Pb waste

RATING DISCUSSION: Investigated for ERRIS (EPA) compliance problems by OEPA

RATING DISCUSSION: The facility is located in a mixed industrial / residential area in Cleveland

Environmental Concern Rating

	HIGH	LOW	N/A
10. Rate public concern, for whatever reason		X	
11. Other			X

RATING DISCUSSION: _____

_____

_____

DISCUSS: _____

_____

_____

_____

_____

BASED ON ABOVE ANALYSIS, RECOMMENDATION IS THAT

Master Metals Inc.

FACILITY NAME

IS ENVIRONMENTALLY SIGNIFICANT AND A FACILITY MANAGEMENT PLAN WILL BE PREPARED ☒

IS NOT, AT THIS TIME, CONSIDERED TO BE ENVIRONMENTALLY SIGNIFICANT, AND A FACILITY MANAGEMENT PLAN WILL NOT BE PREPARED ☐

SUMMARY OF FACILITY SCREENING FOR ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Master Metals Inc.

FACILITY ID # OHD 097 613 871

	Environmentally Significant YES	NO
STATE'S RECOMMENDATION OF _____ DATE	☐	☐
U.S. EPA RECOMMENDATION OF 12/31/85 DATE	☒	☐
JOINT STATE - U.S. EPA DETERMINATION	☐	☐

Discussion of resolution of issues, if any, in arriving at joint recommendation. Include date(s), location, participants at any resolution meetings.

Facility Name : Master Metals

Facility ID # : OHD 097 613871

FMP APPROVAL

We have completed our review of the draft Facility Management Plan (FMP) for the subject facility. We have notified the Hazardous Waste Enforcement Branch (HWEB) and the Emergency and Remedial Response Branch (ERRB) that the FMP is under review, in accordance with Edith Ardiente's memos of December 2 and 6 1985.

(Check one)

☐ A corrective action order (or other enforcement action) was recommended, and HWEB concurs.

☒ No corrective action order was recommended, and HWEB did not object.

☐ A corrective action order was recommended, but HWEB did not concur at this time; we have revised the FMP accordingly.

(Check one)

☐ Action involving ERRB was recommended, and ERRB concurs.

☒ No ERRB action was recommended, and ERRB did not object.

☐ Action involving ERRB was recommended, that ERRB did not concur; we have revised the FMP accordingly.

(Check one)

☐ Based on our review, the FMP is hereby approved as drafted by OEPA.

☐ Based on our review, the FMP as drafted by OEPA is hereby approved as amended.

☒ The FMP is hereby approved as drafted by Ohio Permits Unit, U.S. EPA Region V.

Signature Mary P. Logan (EPA Staff) Date: 7/8/86

395-8

Attachment 19 (Revised 1/15/86)
(New Version)

Name of Preparer: Mary Logan
Date: _____

Model Facility Management Plan

1. Facility Name: Master Metals Inc.
2. Facility I.D. Number: OHD 097 6[illegible]
3. Owner and/or Operator: Mr. Douglas Mickey
4. Facility Location: 2850 W. Third St.
   Street Address

Cleveland	Cuyahoga	OH	44113
City	County	State	Zip Code

5. Facility Telephone (if available): (216) 621-2361

6. Recommendation for Regional Approach to the Facility: Check one

_____ Site Investigation

_____ Permit Compliance Schedule

_____ Corrective Action Order (may include compliance schedule)

_____ Other Administrative Enforcement

X Federal Judicial Enforcement

_____ Referral to CERCLA for Federally Financed or Enforcement Activity

_____ Voluntary/Negotiated Action

X State Action - to do RFA

Brief narrative in explanation of selection: This facility did not certify for financial assurances by Nov 8 1985. They have been referred to DOJ for LOIS activity

a) If site investigation alternative is selected:

anticipated inspection date _____

State or Federal inspection _____

b) If Permit Alternative is Selected: Projected Schedule

Date of Part B Submission: _____

Date of Completeness Check: _____

Date for Additional Submissions (if required): _____

Date of Completion of Technical Review: _____

Completion of Draft Permit/Permit Denial: _____

Public Notice for Permit Decision: _____

Date of Hearing (if appropriate): _____

Date of Final Permit or Denial Issuance: _____

Description of any corrective action provisions to be included in permit -

1. Plan of Study of Remedial Investigation: _____

_____

2. Remedial Investigation Report/Corrective Action Plan Cost Estimate/Financial Mechanism: _____

_____

3. Completion of Corrective Action: _____

_____

c) If Corrective Action Order Alternative is Selected:

Estimated Date for Order Issuance: _____

Description of Provisions of the Order to be Completed by Facility: _____

_____

_____

Description of Compliance Schedule to be Contained in Order:

_____

_____

_____

d) If Other Administrative Enforcement Action is Selected:

Projected Date for Issuance of the Order: _____

Description of Provisions or Goals of the Order: _____

_____

_____

e) If Judicial Enforcement Alternative Selected:

Date of Referral to Office of Regional Counsel: _____

f) If Referral to CERCLA for Action Selected:

Date of Referral to CERCLA Sections: _____

g) If Voluntary/Negotiated Action Alternative if Selected:

Date of Initial Contact with Facility: _____

Description of Goals of Contact or Discussions with Facility: _____

_____

_____

_____

Date for Termination of Discussions if Not Successful:

_____

Date of Finalization of Settlement if Negotiation Successful:

_____

h) If State Action Alternative is Selected:

Date for Referral to State: _____

Name of State Contact: _____

Phone: _____

7. EPA Concurrence (to be completed by Region V, TPS staff)

(Check one)

☐ A corrective action order (or other enforcement action) was recommended, and HEEB concurs.

☐ No enforcement action was recommended, and HEEB did not object.

☐ Enforcement action was recommended, but HEEB did not concur at this time; we have revised the FMP accordingly.

(Check one)

☐ Action involving ERRB was recommended, and ERRB concurs.

☐ No ERRB action was recommended, and ERRB did not object.

☐ Action involving ERRB was recommended, that ERRB did not concur; we have revised the FMP accordingly.

(Check one)

☐ Based on our review, the FMP is hereby approved as drafted by the State

☐ Based on our review, the FMP is hereby approved as amended.

Signature _____ Date: _____
(EPA Staff)

Facility name: Master Metals Inc.
EPA ID # OHD 097 613 871
Name of Preparer: Mary Lassen
Date:

Preliminary Assesment Report

The questions constituting this Preliminary Assesment (P.A.) Report must be filled out prior to completion of recommendation elements of the Plan. The purpose of this P.A. is to provide a summary documentation of the State and/or U.S. EPA review of available information on the subject facility. The intent is that a comprehensive file review will be conducted as the basis for selection of the recommended approach to a given facility. If the P.A. is completed by State personnel, questions referring to available data reference information in State files; for Federal personnel the reference is to Federal files. Where questions refer to "all" available data or information and such material is columinous, the response should indicate that files are voluminous, and then reference most telling information, for example, groundwater contaiminants found frequently or at extremely high concentrations should be specifically listed, and information most directly supporting recommended approach to facility should be described. If no information is available in facility files, the response should so indicate. It is also anticipated that this P.A. may be updated periodically as more information becomes available.

1. Interim Status and/or Permitted Hazardous Waste Units and Capacities of Each Unit:

	Type of Units	Size or Capacity	Active or Closed
X	Storage in Tanks or Containers	1520 g	active
	Incinerator		
	Landfill		
	Surface Impoundment		
X	Waste Pile	1848 yds	active
	Land Treatment		
	Injection Wells		
X	Others (Specify)	T04 rotary furnace, T07 pot furnace } 132 gal/day	active

2. Permit Application Status:

- [x] completeness review underway
- [ ] technical review underway
- [ ] complete and technically adequate
- [ ] draft permit public noticed
- [ ] final permit issued

3. Sources of data used in developing this document:

- [x] RCRA Part A & B permit application
- [ ] Certification Regarding Potential Releases Solid Waste Management Units
- [ ] Interim Status inspection Reports/Information from Letters of Warning and Compliance Orders
- [ ] Exposure Information Report
- [ ] Other RCRA submittals: ACL submissions, closure plans, post-closure permit applications, etc
- [x] CERCLA PA/SI Reports
- [ ] CERCLA Hazard Ranking System (HRS) Information
- [ ] CERCLA RI/FS Studies
- [ ] CERCLA 103(c) Notifications (check this even if the absence of a notification was verified)
- [ ] Aerial Photography
- [ ] USGS data: maps, geological atlas, monitoring well data
- [ ] USDA Soil Conservation Service maps/data
- [ ] Graphic Exposure Modelling System
- [ ] State Hazardous Waste Management Permit files/ inspection reports
- [ ] State Wastewater Treatment Discharge Permit files/inspection reports

- [ ] State Air Permit files/inspection reports
- [ ] TSCA Inspection Reports
- [ ] OSHA Inspection Reports
- [ ] Municipal/Country/City Public Health Agencies
- [ ] Local Well Drillers
- [ ] State/Country Road Commissions
- [ ] Utilities
- [ ] Local Airports/Weather Bureaus
- [ ] Naturalist/Environmental Organizations
- [ ] Employees
- [ ] Colleges/Universities
- [ ] Interviews with local residents
- [ ] Public Notice

4. The facility is on the National Priorities List or proposed update of the List or proposed update of the List or ERRIS list

_____ Yes - indicate List or update

_____ No

_____X_____ Yes - ERRIS list

Prior to completion of the Recommendation portion of the Facility Management Plan, the attached Appendix must be completed.

Description of Enforcement Status:

5. Type of Action | Date | Local, State or Federal | Result or Status

from discussion w/ state

6. Review of Response to Solid Waste Management Questionaire indicates: (check one)

   X Solid Waste Management Units exist (other than previously identified RCRA units)

   _____ No Solid Waste Mangement Units exist (other than previously identified RCRA units)

   _____ It is unclear from review of questionaire whether or not any Solid Waste Management Units exist

   _____ Respondent indicates that does not know if any Solid Waste Management Units exist

7. If the response to question 9 is that Solid Waste Management Units exist, then check one of following:

   X Releases of hazardous waste or constituents have occurred or are thought to have occurred

   _____ Releases of hazardous waste or constituents have not occurred

   _____ Releases of hazardous waste or constituents have occurred or are thought to have occurred but have been adequately remedied

   _____ It is not known whether a release or hazardous waste or constituents has occurred

8. Description of Any Complaints from Public:

Source of Complaint	Date	Recipient	Subject and Response

9. Description of All Inspection Reports for Facility:

Date of Inspection	Inspector (Local, State, Federal)	Conclusions or Comments

10. During inspection of this facility did the inspector note any evidence of past disposal practices not currently regulated under RCRA such as piles of waste or rubbish, injection wells, ponds or surface impoundments that might contain waste or active or inactive landfills?

_____ Yes- give date if inspection and describe observation

_____

_____

_____

_____ No _____ Don't know

11. Do inspection reports indicate observations of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituent?

_____ Yes - indicate date of report and describe observations

_____

_____

_____ No

_____ Don't know

12. Do inspection reports indicate the presence of any tanks at the facility which are located below grade and could possible leak without being noticed by visual observation?

_____ Yes - date of inspection and describe information in report

_____

_____

_____

_____ No

_____ Don't know

13. Does a groundwater monitoring system exist at the facility? No

14. If an answer to question 8 is yes, is the groundwater system capable of monitoring both regulated RCRA units and other Solid Waste Management Units? _____

Explain - _____

_____

_____

15. Is the groundwater monitoring system in compliance with applicable RCRA groundwater monitoring standards? _____

If no, explain deficiency _____

_____

_____

16. Describe all information on facility subsurface geology or hydrogeology available.

Type of Information	Author	Date	Summary of Conclusions

17. Did the facility submit a 103(c) notification pursuant to CERCLA?

_____ Yes Date of Notification _____

_____ No

18. If answer to 12 is yes, briefly summarize content of that notification. (waste management units identified, type of waste concerned)

19. Has a CERCLA Preliminary Assessment/Site Investigation (PA/SI) been completed for this facility?

__X__ Yes

_____ No

20. If answer to question 14 is yes, briefly describe conclusions of the PA/SI focusing on types of environmental contaimination found, wastes and sources of contaimination.

_____

_____

_____

_____

_____

21. If available, having reviewed the CERCLA notification, RCRA Part A and RCRA Part B, it appears that: (CERCLA Unit refers to units or area of concern in CERCLA response activity)

_____ RCRA and CERCLA units are same at this facility

_____ RCRA and CERCLA units are clearly different units

_____ There is an overlap between the RCRA and CERCLA units (some are the same, some are different)

22. Description of Any Past Releases or Environmental Contamination:

Type/Source of Release	Date	Material Released	Quantity	Response

23. Identification of Reports or Documentation Concerning Each Release Described in Item 17.

Title/Type of Report	Date	Author	Recipients	Contents

24. Highlight any information gaps relating to the existence of solid waste management units additional needed information.

25. SUMMARY

List the solid waste management units at this facility (other than tanks and container storage areas for holding wastes with no hazardous constituents):

Unit	Are hazardous constituents present in the waste (yes/no)?	Is it reasonable to suspect a release (yes/no)?	Next Step (a) site investigation workplan (b) plan of study for remedial investigation (c) corrective action plan (d) no further action required
1.			
2.			
3.			
4.			
5.			
6.			
7.			
8.			
9.			
10.			

Complete and attach the "Assesment of Unit" form for each unit with "yes" answers in both of the first two columns.

26. Summary of exposure potential

Yes	No	
☐	☐	Public is now drinking water contamination with wastes from the facility;
☐	☐	Public is at risk of exposure through direct contact to wastes contained at or releasing from the facility; and
☐	☐	Public is at risk from exposure from breathing hazardous wastes releasing from the RCRA facility.
☐	☐	The following information is needed to determine whether the public is at risk:

_____

_____

_____

☐	☐	The solid waste management units at this facility do not appear to present a threat to public health at this time.

27. Based on my review of this Preliminary Assesment, it is hereby

☐ approved

☐ not approved

Signature: _____ Date: _____
(EPA Staff)

Assessment of Unit

Description of Unit: _____

_____

Identification of Hazardous Waste Generated, Treated, Stored or Disposed at the Unit: (may attach Part A or permit list or reference those documents if listing of wastes is exceptionally long - in that case, to complete this question list wastes of greatest interest and/or quantity and note that additional wastes are managed)

Type of Waste	Quantity	Generated, a treated, Stored or Disposed (note appropriate categories)

Exhibit 3-2

Checklist for Ground Water Releases

Identifying Releases	Yes	No	Need SI to determine
1. Potential for Ground Water Releases from the Unit			
o Unit type and design			
- Does the unit type (e.g., land-based) indicate the potential for release?	___	___	___
- Does the unit have engineered structures (e.g., liners, leachate collection systems, proper construction materials) designed to prevent releases to ground water?	___	___	___
o Unit operation			
- Does the unit's age (e.g., old unit) or operating status (e.g., inactive, active) indicate the potential for release?	___	___	___
- Does the unit have poor operating procedures that increase the potential for release?	___	___	___
- Does the unit have compliance problems that indicate the potential for a release to ground water?	___	___	___
o Physical condition			
- Does the unit's physical condition indicate the potential for release (e.g., lack of structural integrity, deteriorating liners, etc.)?	___	___	___
o Locational characteristics			
- Is the unit located on permeable soil so the release could migrate through the unsaturated soil zone?	___	___	___
- Is the unit located in an arid area where the soil is less saturated and therefore a release has less potential for downward migration?	___	___	___
- Does the depth from the unit to the uppermost aquifer indicate the potential for release?	___	___	___
- Does the rate of ground water flow greatly inhibit the migration of a release from the facility?	___	___	___
- Is the facility located in an area that recharges surface water?	___	___	___

Exhibit 3-2 (continued)

Checklist for Ground Water Releases

	Yes	No	Need SI to determine
o Waste characteristics			
- Does the waste in the unit exhibit high or moderate characteristics of mobility (e.g., tendency not to sorb to soil particles or organic matter in the unsaturated zone)?	___	___	___
- Does the waste exhibit high or moderate levels of toxicity?	___	___	___
2. Evidence of Ground Water Releases			
o Existing ground-water monitoring systems			
- Is there an existing system?	___	___	___
- Is the system adequate?	___	___	___
- Are there recent analytical data that indicate a release?	___	___	___
o Other evidence of ground water releases			
- Is there evidence of contamination around the unit (e.g., discolored soils, lack of or stressed vegetation) that indicates the potential for a release to ground water?	___	___	___
- Does local well water or spring water sampling data indicate a release from the unit?	___	___	___
Determining the Relative Effect of the Release on Human Health and the Environment			
1. Exposure Potential			
o Conditions that indicate potential exposure			
- Are there drinking water well(s) located near the unit?	___	___	___
- Does the direction of ground water flow indicate the potential for hazardous constituents to migrate to drinking water wells?	___	___	___

Exhibit 4-1

Checklist for Surface Water/Surface Drainage Releases

	Yes	No	Need SI to determine
Identifying Releases			
1. Potential for Surface Water/Surface Drainage Releases from the Facility			
o Proximity to Surface Water and/or to Off-site Receptors			
- Could surface run-off from the unit reach the nearest downgradient surface water body?	___	___	___
- Could surface run-off from the unit reach off-site receptors (e.g., if facility is located adjacent to populated areas and no barrier exists to prevent overland surface run-off migration)?	___	___	___
o Release Migration Potential			
- Does the slope of the facility and intervening terrain indicate potential for release?	___	___	___
- Is the intervening terrain characterized by soils and vegetation that allow overland migration (e.g., clayey soils, and sparse vegetation)?	___	___	___
- Does data on one-year 24-hour rainfall indicate the potential for area storms to cause surface water or surface drainage contamination as a result of run-off?	___	___	___
o Unit Design and Physical Condition			
- Are engineered features (e.g., run-off control systems) designed to prevent releases from the unit)?	___	___	___
- Does the operational history of the unit indicate that a release has taken place (e.g., old, closed or inactive unit, not inspected regularly, improperly maintained)?	___	___	___
- Does the physical condition of the unit indicate that releases may have occurred (e.g., cracks or stress fractures in tanks or erosion of earthen dikes of surface impoundments)?	___	___	___

Exhibit 4-1 (cont.)

Checklist for Surface Water/Surface Drainage Releases

	Yes	No	Need SI to determine
o Waste Characteristics			
- Is the volume of discharge high relative to the size and flow rate of the surface water body?	___	___	___
- Do constituents in the discharge tend to sorb to sediments (e.g., metals)?	___	___	___
- Do constituents in the discharge tend to be transported downstream?	___	___	___
- Do waste constituents exhibit moderate or high characteristics of persistence (e.g., PCBs, dioxins, etc.)?	___	___	___
- Do waste constituents exhibit moderate or high characteristics of toxicity (e.g., metals, chlorinated pesticides, etc.)?	___	___	___
2. Evidence of Surface Water/Surface Drainage Releases			
o Are there unpermitted discharges from the facility to surface water that require an NPDES or a Section 404 permit?	___	___	___
o Is there visible evidence of uncontrolled run-off from units at the facility?	___	___	___
Determining the Relative Effect of the Release on Human Health and the Environment			
1. Exposure Potential			
o Are there drinking water intakes nearby?	___	___	___
o Could human and/or environmental receptors come into contact with surface drainage from the facility?	___	___	___
o Are there irrigation water intakes nearby?	___	___	___
o Could a sensitive environment (e.g., critical habitat, wetlands) be affected by the discharge (if it is nearby)?	___	___	___

Exhibit 5-1

Checklist for Air Releases

	Yes	No	Need SI to determine
Identifying Releases			
1. Potential for Air Releases from the Facility			
o Unit Characteristics			
- Is the unit operating and does it expose wastes to the atmosphere?	___	___	___
- Does the size of the unit (e.g., depth and surface area) create a potential for air release?	___	___	___
o Does the unit contain waste that exhibits a moderate or high potential for vapor phase release?			
- Does the unit contain hazardous constituents of concern as vapor releases?	___	___	___
- Do waste constituents have a high potential for volatilization (e.g., physical form, concentration, and constituent-specific physical and chemical parameters that contribute to volatilization)?	___	___	___
o Does the unit contain waste and exhibit site conditions that suggest a moderate or high potential for particulate release?			
- Does the unit contain hazardous constituents of concern as particulate releases?	___	___	___
- Do constituents of concern as particulate releases (e.g., smaller, inhalable particulates) have potential for release via wind erosion, reentrainment by moving vehicles, or operational activities?	___	___	___
- Are particulate releases comprised of small particles that tend to travel off-site?	___	___	___

Exhibit 5-1 (cont.)

Checklist for Air Releases

	Yes	No	Need SI to determine
o Do certain environmental and geographic factors affect the concentrations of airborne contaminants?			
- Do atmospheric/geographic conditions limit constituent dispersion (e.g., areas with atmospheric conditions that result in inversions)?	___	___	___
- Is the facility located in a hot, dry area?	___	___	___
2. Evidence of Air Releases			
o Does on-site monitoring data show that releases have occurred or are occurring (e.g., OSHA data)?	___	___	___
o Have particulate emissions been observed at the site?	___	___	___
o Have there been citizen complaints concerning odors or observed particulate emissions from the site?	___	___	___

Determining the Relative Effect of the Release on Human health and the Environment

1. Exposure Potential			
o Is a populated area located near the site?	___	___	___

Exhibit 6-3

Checklist for Subsurface Gas Releases

	Yes	No	Need SI to determine
Identifying a Release			
1. Potential for Subsurface Gas Releases			
o Does the unit contain waste that generates methane or generates volatile constituents that may be carried by methane (e.g., decomposable refuse/volatile organic wastes)?	___	___	___
o Is the unit an active or closed landfill or a unit closed as a landfill (e.g., surface impoundments and waste piles)?	___	___	___
2. Migration of Subsurface Gas to On-site or Off-site Buildings			
o Are on-site or off-site buildings close to the unit?	___	___	___
o Do natural or engineered barriers prevent gas migration from the unit to on-site or off-site buildings (e.g., low soil permeability and porosity hydrogeologic barriers/liners, slurry walls, gas control systems)?	___	___	___
o Do natural site characteristics or man-made structures (e.g., underground power transmission lines, sewer pipes/sand and gravel lenses) facilitate gas migration from the unit to buildings?	___	___	___
Determining the Relative Effect of the Release on Human Health and the Environment			
1. Exposure Potential			
o Does building usage (e.g., residential, commercial) exhibit high potential for exposure?	___	___	___

Facility name: _____
EPA ID # _____
Name of Preparer: _____
Date: _____

Site Investigation Report

1) During the inspection of this facility did the inspector note any evidence of past waste disposal practices not currently regulated under RCRA such as piles of waste or rubbish, ponds or surface impoundments that might contain waste, active or inactive landfills?

_____ a) Yes, Explain _____

_____

_____ b) No

_____ c) Cannot Respond to this Question

2) Was there any evidence of discolored soils or dead vegetation that might be caused by a spill, discharge or disposal of hazardous wastes or constituents?

_____ a) Yes, Explain _____

_____ b) No

_____ c) Cannot Respond to this Question

3) Are there any tanks at the facility which are used for waste storage (solid or hazardous) which are located below grade and could possibly leak without being noticed by visual observation?

_____ a) Yes

_____ b) No

_____ c) Cannot Respond to this Question

4) Based on an inspection or inspections that have been done at this facility there is no reason to question or doubt the information which the applicant has submitted on the questionnaire regarding Solid Waste Management Units and the possibility of prior or continuing releases of hazardous wastes or constituents.

_____ a) I concur with this statement

_____ b) I do not concur with this statement for the following reasons:

_____

_____

_____

5) If 4(b) was checked,
Describe what additional information or testing is needed to determine if prior or continuing releases of hazardous wastes or constituent have occurred. Specify which units are of concern and what types of releases are suspected (i.e., releases to groundwater, surface water, air, soils, etc).

_____

_____

_____

_____

6) An on site inspection to discuss and evaluate the possibility of prior or continuing releases from Solid Waste Management Units is recommended

_____ a) Yes

_____ b) No

7) Was site sampling for confirmation of suspected releases conducted?

_____ a) Yes

_____ b) No

8) If yes to 7, detail the following:

1) Sampling plan - include locating parameters to be tested. rationale for each parameter, logistics, dates, personnel etc.

2) Analytical results - QA, QC. Result summary conclusion.

9) A Remedial Investigation (R.I.) is needed to evaluate the nature and extent of prior releases of hazardous wastes or constituents from Solid Waste Management Units.

_____ a) Yes

_____ b) No

10. If the answer to No. 7 above is "Yes", the priority and manner for requiring the applicant to conduct the Remedial Investigation (R.I.) is as follows:

_____ a) Require R.I. in compliance schedule that is part of RCRA permit.

_____ b) Issue Compliance Order requiring R.I. to be done.

11. Did the SI address all items that the PA "Assessment of Unit" forms indicated the SI should address?

_____

_____

12. Based on my review of this S.I. report, it is hereby:

☐ approved

☐ not approved

Signature _____ Date: _____
(EPA Staff)

ATTACHMENT 7

NAME OF PREPARER Mary Logan

PREPARER IS: USEPA EMPLOYEE [X]

STATE EMPLOYEE [ ]

DATE 1/2/86

TREATMENT, STORAGE, DISPOSAL FACILITY
INITIAL SCREENING
FOR
ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Master Metals Inc.

FACILITY ID # OHD 097 613 871

FACILITY LOCATION 2850 W. 3rd St.
STREET ADDRESS

Cleveland	Cuyahoga	Ohio	44113
CITY	COUNTY	STATE	ZIP CODE

LIST ALL CURRENT INTERIM STATUS PROCESS CODES

501, 503 T04

LIST ALL PROCESS CODES PROPOSED IN PART B APPLICATION (IF APPLICABLE)

INSTRUCTIONS

FOR EACH OF ITEMS 1 THROUGH 11 BELOW, MARK ONE AND ONLY ONE BOX, BASED ON YOUR KNOWLEDGE OF THE FACILITY. USE THE "RATING DISCUSSION" TO ELABORATE, IF DESIRED. NOTE THAT ANY ENVIRONMENTAL CONCERN RATING OF HIGH CONSTITUTES YOUR RECOMMENDATION THAT THIS FACILITY IS "SUFFICIENTLY ENVIRONMENTALLY SIGNIFICANT" TO WARRANT PREPARATION OF A FACILITY MANAGEMENT PLAN. IN ORDER FOR YOU TO RECOMMEND THAT A FACILITY MANAGEMENT PLAN NEED NOT BE PREPARED, EACH AND EVERY ITEM MUST BE MARKED EITHER LOW OR N/A.

Environmental Concern Rating

	HIGH	LOW	N/A
1. Rate concern relative to the CERCLA Program, and discuss -(National Priority List sites should automatically be high concern; significant past handlers of CERCLA cleanup wastes should automatically be high concern; facilities that have absolutely no 'CERCLA connection' should be rated N/A)	☐	☐	☒
2. Rate concern relative to status as a commercial handler, and discuss -- (facilities that handle significant amounts of waste from a variety of sources should be rated high; (facilities that handle only their own company's off-site waste could be rated low; facilities that only handle on-site generated wastes should be rated N/A)	☒	☐	☐
3. Rate concern relative to facility's financial condition (facilities which have or are expected to declare financial insolvency should be rated high)	☒	☐	

RATING DISCUSSION: They handle waste from various off-site sources

RATING DISCUSSION: They are working under chapter 11 - trying to get out of bankruptcy

Environmental Concern Rating

	HIGH	LOW	N/A
4. Rate concern relative to facility's 40 CFR Part265 compliance status/history, (High Priority Violators and Significant Non-Compliers should be rated high; for proposed facilities, rating is N/A)	☐	☐	☒
5. Based on the waste management processes employed (to be employed) at the facility, rate the concern, and discuss -- (processes subject to ground water monitoring will most often dictate a rating of high; incinerators will most often dictate a rating of high; "contained" storage/treatment such as in drums/tanks will most often rate low)	☐	☒	
6. Based on the presence, absence, significance of old Solid Waste Management Units & whether releases from old or current units are known, suspected, corrected; rate the concern, and discuss -- (known & seriously suspected releases should dictate a rating of high, unless felt to be insignificant/de minimis)	☒	☐	

RATING DISCUSSION: They are trying to get a Part B permit to help get out of bankruptcy - they had withdrawn so no RCRA inspections were done for several years

RATING DISCUSSION: This is a storage facility with an enclosed waste pile + storage in drums

RATING DISCUSSION: There is possible GW contamination from the Pb dust + scrap which was on the facility long before RCRA was enacted. The facility is still using

Environmental Concern Rating

	HIGH	LOW	N/A
7. Rate concern, based only on the volume and type of waste handled, and discuss -- (low volumes of extremely toxic wastes could rate a high; very heavy volumes of waste could rate a high, though wastes are not particulary dangerous)	X		
8. Rate concern relative to facility's NON-hazardous waste general environmental regulatory status/history, and discuss --	X		
9. Rate concern relative to facility's physical location(proximity to population or to sources of accidents or dangers which would tend to increase the facility's inherent danger)	X		

RATING DISCUSSION: They handle a high vol. of PCB waste

RATING DISCUSSION: Investigated for ERRIS (NPN) compliance problems by OEPA

RATING DISCUSSION: The facility is located in a mixed industrial / residential area in Cleveland

Environmental Concern Rating

	HIGH	LOW	N/A
10. Rate public concern, for whatever reason	☐	☒	
11. Other	☐	☐	☒

RATING DISCUSSION: _____

_____

_____

DISCUSS: _____

_____

_____

_____

_____

BASED ON ABOVE ANALYSIS, RECOMMENDATION IS THAT

Master Metals Inc.

FACILITY NAME

IS ENVIRONMENTALLY SIGNIFICANT AND A FACILITY MANAGEMENT PLAN WILL BE PREPARED ☒

IS NOT, AT THIS TIME, CONSIDERED TO BE ENVIRONMENTALLY SIGNIFICANT, AND A FACILITY MANAGEMENT PLAN WILL NOT BE PREPARED ☐

SUMMARY OF FACILITY SCREENING FOR ENVIRONMENTAL SIGNIFICANCE

FACILITY NAME Mastmo Metals Inc.

FACILITY ID # OHD 097 613 871

	DATE	Environmentally Significant YES	Environmentally Significant NO
STATE'S RECOMMENDATION OF		☐	☐
U.S. EPA RECOMMENDATION OF	12/31/85	☒	☐
JOINT STATE - U.S. EPA DETERMINATION		☐	☐

Discussion of resolution of issues, if any, in arriving at joint recommendation. Include date(s), location, participants at any resolution meetings.