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NC DEPT OF ENVIRONMENT
AND NATURAL RESOURCES
KERNERSVILLE REGIONAL OFFICE

OPERATIONAL PLAN

FOR

THE LANDFILL RECLAMATION PROJECT

AT

OMNISOURCE SOUTHEAST, LLC KERNERSVILLE, NC

APRIL 2010

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INTRODUCTION

This Operational Plan has been developed to ensure that the landfill reclamation project proceeds without impediment and complies with the conditions of NCDENR – Solid Waste Division Permit No. 34-20 (issued 9/2/05 and extended 3/5/08). It is understood that such impediments could be related to environmental regulations, health and safety issues, regulatory permitting, and/or public relations.

The existing landfill was initially permitted in the early 1970's by the state of North Carolina. The landfill was a private industrial landfill used to dispose of shredder residue from the automobile shredder in the 1970's. This shredder was one of the first such machines installed in the south. The primary focus in the early days of shredding was the recovery of ferrous metals. Little, if any effort was made to recover nonferrous metals as the technology for efficient recovery did not exist. As metal markets changed and as recovery technology improved, the site began recovering some nonferrous metals from the downstream system on the shredder. Currently, the site has a relatively sophisticated nonferrous recovery system utilizing eddy-currents and other separation technologies. However, up until the time shredder residue was being shipped to an off-site landfill, a fraction of nonferrous and some ferrous metal was buried in the landfill.

It is estimated that 75 to 100 tons of shredder residue were generated by the shredder during a full production day. Using this generation rate and assuming 230 days per year for 25 years, it is calculated that the potential shredder residue in the landfill is about 500,000 tons. As the waste was placed in the landfill, it was covered periodically with native clay soil excavated from a borrow pit located on the same property. Exact records are not available but is estimated that the landfill contains between 600,000 and 700,000 cubic yards including shredder residue and the soil used for interim cover.

Based on all preliminary studies, it is feasible to install recovery equipment and process the waste presently buried in the landfill to recover both ferrous and nonferrous materials. A Process Flow Chart is presented in Figure 1, while the operational plan for each aspect is presented in the following sections.

EXCAVATION

- Excavation of the waste will proceed in sequence across the width of the landfill starting on the north end and moving south
- In each area to be excavated, a barrier will always be left in place to isolate the active excavation from surface streams. Any precipitation falling in the excavation pit will remain in the pit
- It is anticipated that some pockets of perched water will be encountered at various places in the landfill. These should be isolated and are not true groundwater. If groundwater is encountered, excavation in that area will cease

- It is anticipated that sections of the landfill will contain excessive moisture, which makes it difficult to efficiently recover metals. In this situation, material will be spread in wind-rows or stockpiled on top a vapor barrier for drying
- During dry weather, water will be available to control fugitive dust from the excavation zone to the processing equipment area
- Excavation will be suspended during periods of extreme wet or extreme cold weather

IN-FEED STOCKPILE

- An in-feed storage area is provided adjacent to the processing equipment area, as depicted in Figure 2. The volume of the storage area will be equal to approximately two months of production to allow the processing equipment to function during periods when extreme weather suspends excavation
- The in-feed stockpile will be placed on top of a vapor barrier to prevent wicking of moisture from the unexcavated material
- The pile will be inspected daily
- Care will be exercised to ensure that material is not washed/blown into nearby storm water conveyance system

MATERIAL SCREENING

- Screens will process the residue prior to separation
- Oversize material will be placed on the waste stockpile (except large pieces of metal) for return to the landfill

PROCESS PLANT

- After screening, material is separated by a series of magnets, eddy currents, sensor sorters, and concentrators
- The process plant produces three products; recovered metals, fines, and waste

RECOVERED METALS

- All recovered metals will be deposited in stockpiles on the concrete pad or into containers
- Except under unusual conditions, recovered metal will be shipped within 30 days

FINES STOCKPILE

- Fines will be transferred via truck to be deposited in stockpiles on the existing landfill until needed as a leveling and consolidation layer during backfill
- Except under unusual conditions, recovered metal will be shipped within 30 days

WASTE STOCKPILE

- Waste material will be transferred via truck to be deposited in stockpiles on the existing landfill until needed as backfill
- Care will be exercised to ensure that material is not washed/blown off of the landfill

LANDFILL

- As soon as an excavated area has reached its maximum depth and a sufficient gap exists to allow back filling and excavation to take place simultaneously, processed residue will be returned to the landfill
- Waste will be compacted using a suitable track dozer or a landfill compactor
- As the level of waste approaches the surface of the landfill, fines from the stockpile will be placed on the processed waste as a leveling and consolidation layer
- Until the final decision is made relative to the cap design (soil and vegetation vs. soil and Descobond) a minimum one foot layer of soil will be placed over the waste
- Filling activities will be conducted in a manner so as to minimize any potential for impoundment of surface water

THROUGHPUT

- Throughput for the processing plant is to be calculated from bucket counts from the loading equipment
- Tonnage is determined by multiplying the count by the average weight of a bucket, which is determined by periodic actual weights (i.e. every two hours)

SAFETY REQUIREMENTS

- Equipment and fill dirt for suppression is provided for to control any accidental fires which may occur in the reclamation area
- The Town of Kernersville Fire Department is familiar with the best techniques of fire suppression at the site. OmniSource officials have met with officials from the fire department. The Town of Kernersville's Fire Department is the first responder to any incident pertaining to a fire at OmniSource's facility
- All OSHA reporting and training requirements will be handled by OmniSource's Environmental, Health and Safety Department

ENVIRONMENTAL REQUIREMENTS

- Stormwater runoff and landfill operations are under the jurisdiction of the state of North Carolina, while air quality issues are under the jurisdiction of Forsyth County

- The reclamation project is covered by the landfill permit, stormwater runoff from the reclamation area is covered under the facility's general stormwater permit, and currently the air emissions are deemed to be below de minimis levels for permitting
- All environmental permitting and reporting requirements will be handled by OmniSource's Environmental, Health and Safety Department

ACCESS AND SECURITY MEASURES

- The access and security measures currently in place will be maintained
- Operating personnel will be present whenever activity associated with the reclamation project is underway
- During non-business hours a periodic visual inspection of the area will be conducted by on-site personnel
- Access to the project area is limited from the southern end by means of the fenced scrap processing area and from other direction by berms, topography, and side-slopes of the landfill

APPENDIX A: Figures

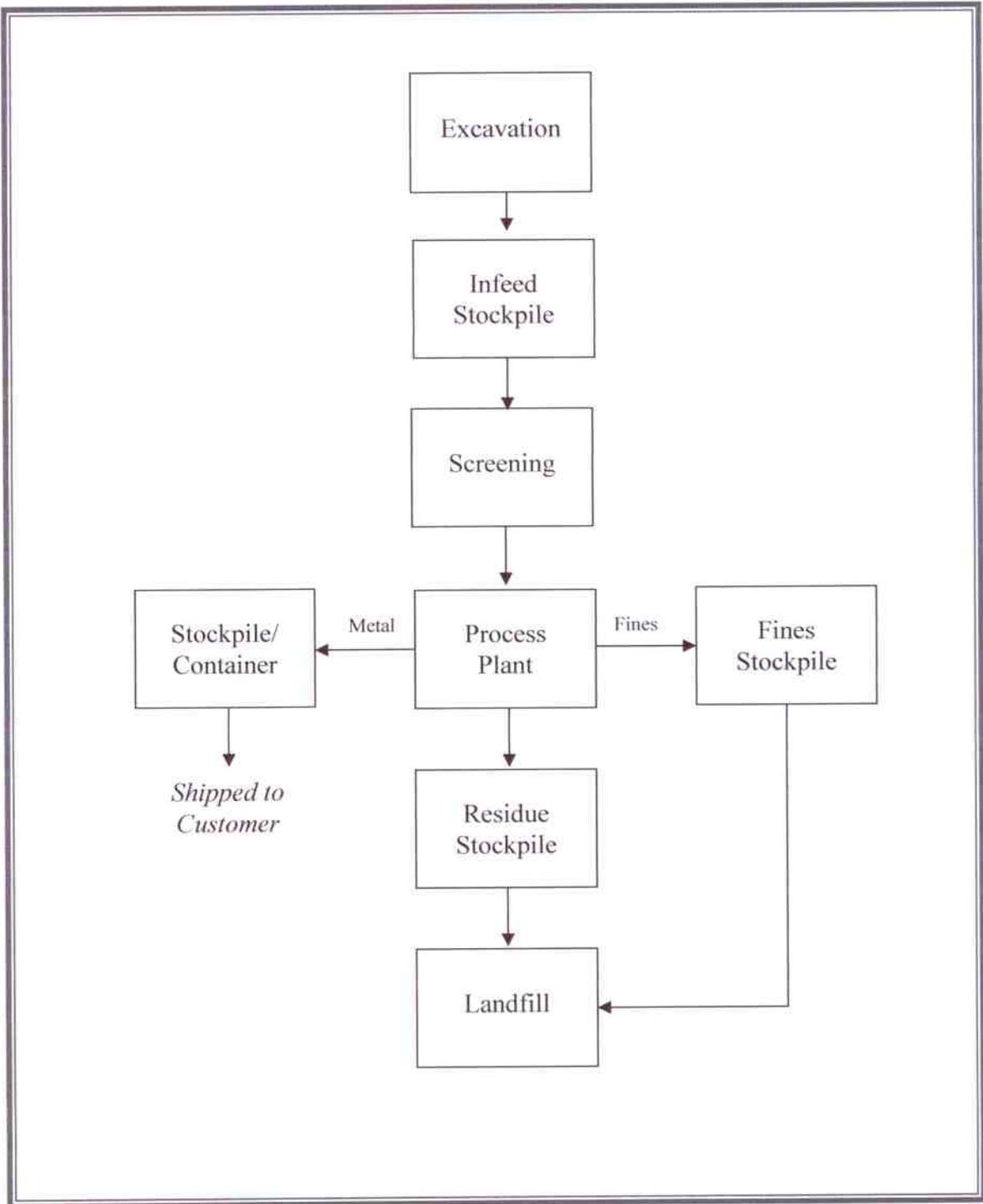


Figure 1: Process Flow Diagram

Legend

-  Active Mining
-  In-Feed Storage
-  Fines Storage
-  Waste Storage

**Figure 2:
Facility Layout
Kernersville, NC
(operational plan)**

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Revision Dates:



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