
APPENDIX 2-H

HYDRO EXCAVATION OPERATING PLAN

WEST DUPAGE RECYCLING AND TRANSFER STATION

HYDRO EXCAVATION WASTE OPERATING PLAN

Lakeshore Recycling Systems, LLC (LRS) West DuPage Recycling and Transfer Station (West DuPage RTS) will accept hydro excavation wastes for solidification and transfer to off-site disposal location(s). Hydro excavation wastes are a solid/liquid waste created through a combination pressurized water and air vacuum system generally used for construction or maintenance services, such as potholing to expose utilities, installation of utility poles, installation of piers/footings, trenching near utilities, and clean out of storm sewers. The system cuts through soils/materials, breaks them up, and lifts the slurry from the excavation area into a debris tank. “Hydro Excavation Wastes” is defined to mean solid/liquid waste such as hydro/vacuum excavation muds, underground excavation material, and other similar materials. This is the same definition as listed in the Host Community Benefit Agreement between the City of West Chicago and LRS except that “drilling muds” has been removed.

The purpose of this document is to describe the operational procedures for the solidification of hydro excavation wastes. Because the hydro excavation waste is considered a “liquid waste” (i.e., does not pass the paint filter test), the waste is considered an Illinois special waste.

Pre-Approval Procedures

- Upon contact from a potential client with a hydro excavation waste stream, the following shall be performed:
 - The facility’s “Special Waste Profile Sheet and Certification” form will be provided for completion by the generator and submission for review by LRS.
 - As noted above, hydro excavation wastes means solid/liquid waste such as hydro/vacuum excavation muds, underground excavation material, and other similar materials.
 - Other similar materials includes similar wastes generated from typical hydro excavation equipment. An example is storm sewer, manhole, or catch basin cleanout material.
 - The generator is responsible for all costs associated with the sampling, testing, and application preparation for any special waste permits required for the generation and transport.
- Upon receipt of the completed form or certification, the following will be performed.
 - The waste stream will be assigned a waste number.
 - The waste profile sheet and supporting documentation will be reviewed for compliance with the demonstration that the waste is a non-hazardous waste as defined in Title 35 of the Illinois Administrative Code Part 722.111.

- If the material meets the requirements, LRS will determine if it can handle the type and volume of waste proposed.
- If the waste stream is to be accepted, LRS will provide pricing and instructions/agreement/purchase order number to the generator.
- Scheduling of waste shipments will be coordinated with LRS.
- A copy of the pre-approval log of accepted and denied materials is to be provided to the scale house, to be kept updated on a daily basis. Notification should be made to the operations personnel prior to the receipt of the first shipment of a new incoming waste stream.
- Profile packets will be kept on file at the facility. The waste stream profile shall accurately characterize the waste stream and not be more than one year old.
- No hazardous waste, potentially infectious medical waste, or radioactive waste shall be accepted.

LRS shall retain copies of any special waste profile identification sheets, special waste re-certifications, certifications of representative samples, special waste laboratory analyses, special waste analysis plans, and any waivers of requirements at the facility for three years.

Gate Acceptance Procedures

- *The operator has the right to reject any load or portion of a load.*
- All special waste generators which send liquid waste to this facility for solidification and disposal shall have an Illinois Environmental Protection Agency (IEPA) generator number. The generator is responsible for the waste at all times, including all certifications, characterizations, and proper shipment.
- The driver will provide the appropriate documentation or manifest for the waste.
- Manifests will be handled and maintained as required:
 - If the shipment does not have a disposal manifest form, the load may be accepted if a facsimile copy of the completed manifest is received from the generator and the discrepancy is noted on the form. The original manifest must be mailed from the generator to the facility and attached to the corresponding facsimile manifest copy documenting that the shipment was manifested correctly to the facility. Contact must be made with the generator to obtain and utilize manifest forms for subsequent shipments.
 - If the manifest is not complete, LRS must contact the generator to properly complete all copies of the manifest. The discrepancy must be indicated on the manifest.

- If the information on the manifest does not correspond to the information contained in the approval letter, the generator must be contacted to resolve the discrepancy. The discrepancy must be amended and indicated on the manifest.
- If the manifest is not signed by the generator, the generator must be contacted and a follow-up letter must be forwarded to LRS to indicate the generator's acknowledgement of this discrepancy. The generator must provide certification of the manifested load in the letter. If the transporter has not signed the manifest, the item will be brought to the driver's attention and the driver will be allowed to sign the manifest prior to accepting the load.
- If the manifest is complete, the scale personnel will confirm that the waste profile has been approved according to the waste pre-approval log, and will question the driver regarding the contents of the load. The generator and the waste description must correspond with an approved waste stream. If the scale personnel determines that the waste does not conform to the waste profile on file, or that the approvals have not been issued, or for any other reason, the load will be rejected until the appropriate information is provided.
- If the scale personnel confirms that the waste profile has been approved, the scale personnel will notify the field operator that a load has arrived, indicating the type of waste, and its description, and direct the driver to the solidification area.

Load Inspection Procedures

- The field personnel will meet the driver at the solidification area. LRS will visually inspect each load received as it is first unloaded to verify that it matches the description of the waste as approved. During the visual inspection, the waste will be compared to typical color, odor, texture, and consistency as noted on the generator special waste profile sheet and acceptance approval letter. If the field personnel determines that the waste does not conform to the waste profile on file, that approval has not been issued for the waste as presented, the necessary documentation has not accompanied the load, or for any other reason, any variations shall be recorded in the records as a discrepancy and kept on file.
- When a discrepancy regarding the waste variation is found during the visual inspection of a load, the facility management will be notified, who will discuss the discrepancy with the generator. If the discrepancy cannot be properly explained, or corrected documentation cannot be provided, management may reject the load. The reason for rejection must be written on the manifest form, and the manifest will not be signed. A copy of the manifest will be kept for the rejected load file, and the manifest copies will be returned to the transporter. The transporter must then return the load to the generator.

- All accepted loads will be weighed and documented with the corresponding waste profile number by the computer, or manually, when required for backup. The load must be within 10% of that volume/weight indicated on the manifest. If the volume is beyond the 10% acceptable margin of error, the facility management must contact the generator to resolve the discrepancy. The discrepancy must be amended and noted on the manifest.
- If no discrepancies are found, the gate representative must sign the manifest for the approved acceptable load. A copy of the signed manifest will be returned to the transporter. The remaining manifest copies are to be forwarded by LRS to the appropriate facilities as noted on the form. The “Destination Copy” will be placed in the customer’s manifest file. The transporter may then proceed to the solidification area to unload the waste.

Recordkeeping

- The following information shall be documented in LRS's daily operating record for each load of waste received for solidification:
 - Date the load was received;
 - Manifest number associated with the waste load;
 - Generator name, location and IEPA generator number or hauler number, if not a special waste;
 - Waste name;
 - Results of all analyses conducted on the waste load;
 - Accepted/denied loads; and
 - Volume of waste received.
- LRS shall retain a copy of the manifest, load checking, and all information relating to special waste for three years and it shall be made available at reasonable times for inspection and photocopying by the IEPA pursuant to Section 4(d) of the Illinois Environmental Protection Act.

Hydro Excavation Waste Processing

- Liquid wastes will be unloaded directly into the solidification area. The processing method involves solidifying non-hazardous liquids, sludge’s and other semi-solid waste streams utilizing reagents and/or absorbents as approved by the IEPA permit and mechanically mixing as needed to achieve disposal objectives, using a hydraulic excavator or wheel loader. The solidification process continues until the resultant material blend passes the paint filter test. Care will be taken to ensure that the stabilized waste product does not set up or harden prior to removal and disposal. In the event that Portland cement is utilized as admix, the maximum holding time for any batch is four hours. LRS shall not perform solidification if the test or waste analysis plan determines incompatibility of the waste and reagent.

- The following reagents and absorbents will be employed in the solidification process:
 - Reagents:
 - Portland cement; and
 - Lime.
 - Adsorbents:
 - Screening fines from C&D recycling;
 - Soil;
 - Sand;
 - Oil dry;
 - Sawdust;
 - Kitty litter;
 - Corn cobs;
 - Wood chips; and
 - Mixtures of the above materials.
- All reagents and absorbents used must not exhibit any characteristic which would classify it as a hazardous waste. Use of other materials or wastes other than those listed above shall be subject to approval by the IEPA permit process.
- The following information shall be documented in the facility's operating record for each load of waste received for solidification:
 - Type of reagent and/or absorbent used to solidify the waste;
 - Documentation that the solidified waste does not exhibit hazardous characteristics (e.g., verification that neither the waste nor the absorbents used exhibited hazardous characteristics, or the result of the compatibility test done in accordance with the facility's waste analysis plan). A complete toxicity characteristic leaching procedure analysis shall be performed on solidified waste resulting from a liquid waste with a $\text{pH} \leq 5$ to demonstrate that no hazardous waste has been produced.
- Each load of the solidified waste shall be sampled and tested by the paint filter test prior to disposal. **Waste that yields fluid may not be disposed.** It must be solidified again or sent to an off-site treatment facility.
- Other Solidification Process Operational Guidelines:
 - The solidification unit may be operated from 5:00 a.m. to 5:00 p.m. Monday through Saturday.
 - By the end of each day of the operation, all waste received for treatment shall be solidified, removed from the solidification unit, and transported off-site for disposal.
 - The storage of reagents and absorbents to be used in the solidification process shall not contribute to a violation of Illinois' waste disposal, water pollution, or air pollution regulations.

- Reagents and absorbent shall be stored, covered, and protected from precipitation events.
- All washwater or stormwater generated from the solidification unit shall be managed as liquid waste in the storage vessel chamber.
- In the event of a spill, such materials and equipment necessary will be available on site in order to prevent leachate migration from the contaminated area.