



John R. Kasich, Governor
Mary Taylor, Lt. Governor
Scott J. Nally, Director

Re: GM Defiance Casting Operations
OHD005050273
Defiance County
Hazardous Waste
Large Quantity Generator
Notice of Violation

March 14, 2013

Mr. Carl Schroeder
General Motors Corporation LLC
Defiance Casting Operations
26427 Street Route 281 East
Defiance, Ohio 43512-0070

Dear Mr. Schroeder:

Thank you for accompanying me during Ohio EPA's December 5, December 10, and December 19, 2012, compliance evaluation inspection (CEI) of General Motors Corporation LLC, Defiance Casting Operations (DCO) located in Defiance, Ohio. We were also accompanied by Brent Goetz and Robin Wiley of Ohio EPA and Ben Fogle of GMP. I inspected DCO to determine its compliance with Ohio's hazardous waste laws as found in Chapter 3734 of the Ohio Revised Code (ORC) and Chapter 3745 of the Ohio Administrative Code (OAC). My inspection included a tour of your facility and a review of written documentation. This letter will explain the violations I found, what you need to do to correct the violations, the general concerns I determined and what you need to do to respond to them.

Ohio EPA's greatest concern with the operations of the DCO is the management of slurry water from air pollution control devices in unlined surface impoundments. Ohio's rules state that "Any person who generates a waste, as defined in rule 3745-51-02 of the Administrative Code, must determine if that waste is a hazardous waste...." [OAC Rule 3745-52-11]. "A 'waste' is any discarded material that is not excluded by paragraph (A) of rule 3745-51-04 of the Administrative code... [OAC Rule 3745-51-02]. The slurry water waste is not excluded by paragraph (A) of OAC Rule 3745-51-04. DCO was not able to provide to Ohio EPA documentation of a hazardous waste evaluation for the sludges in the surface impoundments and other wastes placed into its on-site landfill during Ohio EPA's December 5, December 10, and December 19, 2012 inspections. Furthermore, based on discussions during my inspection, and responses from DCO dated January 15, 2013, and February 7, 2013, DCO seems to believe that none of the wastes placed into its on-site landfill must first be evaluated according to OAC Rule 3745-52-11. Rather, DCO believes that the wastes are only regulated as Class III residual wastes under Ohio's solid waste rules. This is incorrect.

In **ATTACHMENT 1** to this letter is a description of facility operations and processes, and observations of various facility areas and buildings.

Mr. Carl Schroeder
March 14, 2013
Page 2

In **ATTACHMENT 2** to this letter is a list of the known hazardous wastes, solid wastes and universal wastes generated by the facility. This information is important and should be read carefully.

On February 7, 2013, Ohio EPA received two email submissions including 27 attachments and on February 14, 2013, Ohio EPA received a cd of the DCO hazardous waste training program. Ohio EPA has reviewed all this information before finalizing this violation letter and has made appropriate comments throughout the letter regarding the information provided.

DCO began foundry operations at the facility in 1948 at Plant 1, which produces gray iron block and head castings in a 1,104,938 square foot facility. Plant 2 West (2W) was built in 1965 and produces nodular iron crankshafts in a 554,919 square foot facility. Aluminum blocks are manufactured through a precision sand process (at four lines called modules). Installation of this process began in 2008 and production commenced in 2010, in a 338,619 square foot facility in Plant 2 East (2E).

As a result of the inspection on December 5, December 10, and December 19, 2012, I found the following violations of Ohio's hazardous waste laws:

1. Waste Evaluation
OAC Rule 3745-52-11

A generator must determine whether its waste is hazardous by first determining if the waste is listed as a hazardous waste in rules 3745-51-30 to 3745-51-35; by testing the waste according to the methods set forth in rules 3745-51-20 to 3745-51-24; or by applying knowledge of the hazardous characteristic of the waste in light of the materials or the processes used. DCO failed to adequately evaluate all its waste properly, according to this rule.

In order to abate this violation, you must immediately evaluate the following wastes, in accordance with the requirements of Ohio Administrative Code Rule 3745-52-11 and this letter. A description of the wastes can be found in ATTACHMENT 2.

- A. East Basin Sludge: **DCO has not determined the Toxicity Characteristic Leaching Procedure (TCLP) concentration of the RCRA heavy metals and Semi-Volatile Organic Compounds (SVOCs).**
- B. West Basin Sludge: **DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.**
- C. Secondary Basin Sludge: **DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.**
- D. Reservoir Sludge: **DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.**

- E. Dredged, De-Watered Sludge Pile: **This is the pile of dredged surface impoundment sludge in the Mixing Area. DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs. Please be aware that if this sludge possesses a characteristic of hazardous waste it cannot be placed into the on-site landfill. DCO may want to sample and analyze this waste regularly until it is demonstrated that the waste does not possess a characteristic of hazardous waste.**

Concerning the evaluation of the sludges in the East Basin, West Basin, Reservoir and Secondary Basin, and the sludge in the pile in the Mixing Area, DCO must submit a waste sampling and analysis plan to Ohio EPA for its review and approval. The plan must describe how the characteristics of the sludge in each basin system and the pile will be determined. The waste must be evaluated horizontally and vertically from all portions of the impoundments including inlets, channels and ditches. The plan must describe how representative samples will be collected and how the samples will be analyzed. Please submit a Level 2 QA/QC data package for the evaluation of these wastes.

2. **Waste Evaluation**
OAC Rule 3745-52-11

A generator must determine whether its waste is hazardous by first determining if the waste is listed as a hazardous waste in rules 3745-51-30 to 3745-51-35; by testing the waste according to the methods set forth in rules 3745-51-20 to 3745-51-24; or by applying knowledge of the hazardous characteristic of the waste in light of the materials or the processes used. DCO failed to adequately evaluate all its waste properly, according to this rule.

In order to abate this violation, you must immediately evaluate the following wastes, in accordance with the requirements of Ohio Administrative Code Rule 3745-52-11 and this letter. A description of the wastes can be found in ATTACHMENT 2.

- F. Waste Water Treatment Plant Filter Press Sludge: **DCO has not determined the Toxicity Characteristic Leaching Procedure (TCLP) concentration of the RCRA heavy metals and Semi-Volatile Organic Compounds (SVOCs).**
- G. North Perimeter Area Treatment Building Waste Filter Socks: **DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs. Each set of filter socks in the system must be evaluated.**
- H. North Perimeter Area Treatment Building Spent Activated Carbon: **DCO has not determined the TCLP concentration of the RCRA heavy metals, Volatile Organic Compounds (VOCs) and SVOCs.**

- I. Waste Baghouse Bags: DCO could not demonstrate that it had evaluated all the waste bags at the plant. DCO must submit copies of all analytical reports for waste baghouse bags for 2009-2012. The analytical reports must demonstrate that DCO has evaluated the waste for TCLP metals.

- J. Paint Related Waste: DCO could not demonstrate that it had evaluated all the paint related waste for all TCLP metals and listed VOCs. DCO must submit a recent or new TCLP metals and total VOCs analysis of its paint related waste and any and all MSDS for cleaning solvents.

- K. Waste Parts Washer Solvent: DCO has not determined the TCLP concentration of the RCRA heavy metals. DCO reports that there are as many as 79 parts washers in the facility. Therefore, DCO may want to propose a sampling and analysis plan for Ohio EPA to review before DCO conducts this sampling at the facility.

- L. Waste Ethyl Alcohol (Absolute 200 Proof)(D004): At the time of my inspection, DCO did not know how this waste was generated and where in the facility it came from. DCO also could not explain the source of the arsenic and if the waste also possessed the characteristic of ignitability (D001). DCO must submit the waste analysis and a description of the waste, including the process generating the waste, its location in the facility and the source of the arsenic.

- M. Waste Solvent Contaminated with Lead (D001 & D008): At the time of my inspection, DCO did not know how this waste was generated and where in the facility it came from. DCO also could not explain the source of the lead. DCO must submit the waste analysis and a description of the waste, including the process generating the waste, its location in the facility, the type of solvent and the source of the lead.

- N. Maintenance Steam Cleaning Booth Liquid Waste: DCO has not determined the TCLP concentration of the RCRA heavy metals and VOCs. At the time of my inspection, DCO could not provide a laboratory analysis for this waste. DCO did not know how this waste was generated and managed. DCO must submit the waste analysis and a description of the waste and what it could contain. This waste may have different characteristics than the sludge from the steam cleaning booth tank.

- O. Floor Sweepings: DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.
- P. Spent Foundry Sand "Exempt": DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.
- Q. Spent Foundry Sand "Non-Exempt": DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.
- R. Used Antifreeze: DCO has not sufficiently determined the TCLP concentration of the RCRA heavy metals and VOCs. Only one waste analysis was provided from January 22, 2009. DCO did not demonstrate the source of the antifreeze. One sample is not enough to characterize this waste. Also, DCO must specifically sample and analyze waste antifreeze from its locomotive.
- S. KOH Sludge: DCO has not sufficiently determined the TCLP concentration of the RCRA heavy metals for this waste. DCO operates two cleaning tanks and has not demonstrated that the waste from each of the tanks has been sampled and analyzed. Also, DCO must explain how it will obtain a representative sample from each of the tanks. (The analytical result for the waste sampled in 2004 involved nine drums.) In the past, this waste contained cadmium (D006), chromium (D007) and lead (D008). Some portion of this waste was analyzed in 2008.
- T. KOH Liquid Waste: DCO has not sufficiently determined the TCLP concentration of the RCRA heavy metals for this waste. DCO operates two cleaning tanks and has not demonstrated that the waste from each of the tanks has been sampled and analyzed. Also, DCO must explain how it will obtain a representative sample from each of the tanks. (The Certificate of Caustic Solution Beneficial Reuse from Aevitas states that no hazardous waste codes will be based on TCLP and generator knowledge so to participate in this Beneficial Reuse program DCO must determine the TCLP concentration of the RCRA heavy metals.) Some portion of this liquid waste was analyzed for TCLP metals in 2009. The concentration for chromium was close to the regulatory limit and should be verified.
- U. Iron (Quench) Slag: DCO has not determined the TCLP concentration of the RCRA heavy metals. The analytical report dated January 9, 2012, is for a water leach only and not the TCLP: US EPA's SW-846 Method 1311, which requires an acid extraction.

- V. WWTP Regeneration Filter Sand: DCO has not determined the TCLP concentration of the RCRA heavy metals and SVOCs.
- W. Spent Paratherm: DCO has not determined the TCLP concentration of the RCRA heavy metals.
- X. Waste Quick Patch B: DCO has not determined the TCLP concentration of the RCRA heavy metals.
- Y. Oil Dry with Halogens (F001 & F002): At the time of my inspection, DCO did not know how this waste was generated and where in the facility it came from. DCO also could not explain the source of the halogens or what the specific halogens were. DCO must submit the waste analysis and a description of the waste, including the process generating the waste, its location in the facility and the source of the halogens.
- Z. Contaminated Oil & Water (D018): At the time of my inspection, DCO did not know how this waste was generated and where in the facility it came from. DCO also could not explain the source of the benzene. DCO must submit a waste analysis, which includes TCLP metals and TCLP VOCs and a description of the waste, including the process generating the waste, its location in the facility and the source of the benzene.

You must obtain a representative sample of the waste at the facility, according to OAC Rule 3745-51-20. You must evaluate the samples, through laboratory analysis, for at least the Toxicity Characteristic Leaching Procedure (TCLP) metals and, for some of the waste, TCLP VOCs and SVOCs. You must submit the results of the laboratory analyses to Ohio EPA as soon as they are available. **DCO will need to give Ohio EPA a five-day advance notice of sampling activities, in order for an inspector to make arrangements to view the sampling.** After Ohio EPA reviews your analytical results, I will inform you of any other violations in a separate letter.

**3. Land Disposal Restrictions – Underlying Hazardous Constituents
OAC Rule 3745-270-09(A)**

The initial generator of a waste must determine each EPA hazardous waste number applicable to the waste in order to determine the applicable treatment standards under rules 3745-270-40 to 3745-270-49 of the Administrative Code. This determination may be made concurrently with the hazardous waste determination required for rule 3745-52-11 of the Administrative Code. If the generator determines that his waste displays a hazardous characteristic (and is not D001 nonwastewater treated by CMBST, RORGS, or POLYM in the table in rule 3745-270-42 of the Administrative Code), the generator must determine underlying hazardous constituents (as defined in rule 3745-270-02 of the Administrative Code) in the characteristic waste. DCO failed to adequately evaluate all its waste properly, according to this rule.

In order to abate this violation, you must immediately evaluate the characteristic hazardous wastes listed above in violation number 1 and 2, A through Y for all underlying hazardous constituents. For the wastes found to be characteristically hazardous after evaluation, DCO must determine the underlying hazardous constituents. You must submit the results of the laboratory analyses to Ohio EPA as soon as they are available. **DCO will need to give Ohio EPA a five-day advance notice of sampling activities, in order for an inspector to make arrangements to view the sampling.** After Ohio EPA reviews your analytical results, I will inform you of any other violations in a separate letter.

**4. Training Program
OAC Rule 3745-65-16(A)(2)**

The program must include instruction which teaches facility personnel hazardous waste management procedures.

On December 19, 2012, DCO provided a copy of its training program. Ohio EPA has reviewed this program and has determined that DCO has failed to create a program that sufficiently demonstrates that it teaches facility personnel (including Waste Management personnel) all necessary hazardous waste management procedures or requirements for the DCO facility.

Specifically, the training program does not include instruction in the completion of the hazardous waste shipping label, hazardous waste manifest, and Land Disposal Restriction (LDR) documents. Also the DCO container label must be revised to include all the current hazardous wastes at the facility and the specific hazardous waste must be described in the program. The training program should include procedures for inspecting waste containers and emergency equipment. The training program must include a description of all the hazardous waste at the facility and how to manage it.

**5. Training Program – Emergency Procedures
OAC Rule 3745-65-16(A)(3)**

At a minimum, the training program must be designed to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment, and emergency systems.

On December 19, 2012, DCO provided a copy of its training program. In the program there is reference to the Spill Control and Countermeasures Plan (SPCC). DCO must be able to demonstrate that this plan also includes a hazardous waste contingency plan. The training plan should demonstrate that appropriate personnel (such as maintenance personnel) receive training regarding the proper use and deployment of sorbent booms in the settling basin system and sewers. The training program must include training regarding the revised contingency plan.

In order to abate this violation, DCO must revise its training program, submit a copy of the revised program, present this revised program to all applicable personnel and submit documentation demonstrating that this training has been accomplished.

**6. Training – Job Titles
OAC Rule 3745-65-16(D)(1)**

The owner or operator must maintain the following documents and records at the facility:
The job title for each position at the facility related to hazardous waste management, and the name of the employee filling each job.

DCO has not provided a job title for each manager and supervisor responsible for employees that are required to manage hazardous waste in some manner at the facility. In order to abate this violation, DCO must submit the job titles to Ohio EPA.

**7. Training – Job Descriptions
OAC Rule 3745-65-16(D)(2)**

The owner or operator must maintain the following documents and records at the facility:
A written job description for each position listed under paragraph (D)(1) of this rule. This description may be consistent in its degree of specificity with descriptions for other similar positions in the same company location or bargaining unit, but must include the requisite skill, education, or other qualifications, and duties of facility personnel assigned to each position.

DCO has not provided a job description for each employee required to manage hazardous waste in some manner at the facility. These job descriptions must also include their managers and supervisors. In order to abate this violation, DCO must submit the job descriptions for all job titles that involve the management of hazardous waste and require the necessary hazardous waste management training.

**8. Training – Annual Review
OAC Rule 3745-65-16(C)**

Facility personnel must take part in an annual review of the initial training required in paragraph (A) of this rule during each period from January first to December thirty-first.

On January 15, 2013, DCO submitted training records to Ohio EPA. According to these records, DCO did not provide the annual review training in 2012 for the following personnel: Timmie Avery, Timothy Ballew, Philip Bauer, Michael Becher, John Behrns, Michael Boyd, David Brown, John Brown, Craig Burgei, Richard Busch, Donaciano Carrizales, Labarron Cox, Randy Cox, William Cozzolino, Nelson Curtis, Deborah Davis, Matthew Dewitz, Michael Dewyse, Jr., Ivan Duerk, Eugene Dunlap, Thomas Garza, Norman Gerschutz, Gregory Giesige, Rene Gill, Michael Hall, Scott Harrington, Tim Hauenstein, Roger Heise, Stephen Hershberger, Joe Horrison, Roxanne Huner, Shawn Hunter, Walter Iliff, Michael Jacob, Kelvin Johnson, Nickie Keel, Charlie Kelly,

Todd Kindinger, Clifford King, Stephen Kissner, Michael Kosch, Joe Kreitzer, Eric Lause, Patrick Lineback, Roger Long, Lasaro Lopez, Mark Maag, Scoyy Maag, Peter Maas, Joseph Mackiewicz, Jessie Mendoza, Jr., William Metzger, Jr., Traci Miller, Michael Moran, Allen Niese, John Philipot, Kenneth Porter, William Porter, Michael Ramirez, Michael Rittenour, Brian Ruhe, Larry Schimming, Terri Schmenk, Paul Schmursal, Alan Schnipke, Philip Schroeder, Kenneth Schuette, Ron Schuette, Joshua Shock, Steve Siefker, Deric Smith, Jamie Smith, Michael Smith, Eric Smithers, Sandra Stanfield, Alan Stucker, Christian Stuckey, Robert Suffel, Heather Tefft, Kenneth Tenwalde, Oscar Urivez, Carl Vennekotter, Timothy Verhoff, Halden Wareham, Craig Womack, Jeffery Woodbury, Katherine Woods, and David Wright. Also, the training records do not appear to include managers and supervisors.

DCO must provide the required training to these personnel immediately and submit records that demonstrate this. This training must also include their managers and supervisors.

**9. Contingency Plan – Actions to be Taken
OAC Rule 3745-65-52(A)**

The contingency plan must describe the actions facility personnel must take to comply with rules 3745-65-51 and 3745-65-56 of the Administrative Code in response to fires, explosions, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water at the facility.

On December 19, 2012, DCO provided a copy of its contingency plan. DCO must revise its hazardous waste contingency plan to address or include the following: a description of the hazardous wastes (including their characteristics) at the facility and their locations (include in diagram of facility) (See sections 1.2, 2.1, 2.2, 5.1), an explanation that hazardous wastes are also accumulated in satellite accumulation areas and other areas within the facility (such as roll-off accumulation areas and the paint shed) and a diagram identifying where these are located, a description of what hazardous wastes are pumped to trucks and where this occurs (including KOH liquid, also), revised section 5.1 to state that the contingency plan will be implemented whenever there is a fire involving hazardous waste or the probability is high that it could involve hazardous waste, revise section 5.5 to clearly state what firefighting equipment should be used on a particular hazardous waste, submit Figure 4.5-1 GM Environmental Spill/Release and Emergency Tracking Form, submit Figure 4.6-1 Hazardous Material Spill Report/Environmental Emergency form, submit Figure B-4 Satellite Accumulation Area – Plant 1, submit Figure B-5 Significant Material Storage Areas – Plant 1, submit Figure B-6 Significant Material Storage Areas – Plant 2, submit Figure B-7 Significant Material Storage Areas – Outside Areas

**10. Contingency Plan – List of Emergency Equipment
OAC Rule 3745-65-52(E)**

The contingency plan must include a list of all emergency equipment at the facility [such as fire extinguishing systems, spill control equipment, communications and alarm systems (internal and external), and decontamination equipment], where this equipment is required. This list must be kept up to date. In addition, the contingency plan must include the location and a physical description of each item on the list, and a brief outline of its capabilities.

On December 19, 2012, DCO provided a copy of its contingency plan. DCO must revise its hazardous waste contingency plan to address or include the following: include a diagram of the location of all absorbent materials at the facility, describe what the sorbent booms are capable of absorbing or controlling, include a diagram locating the fire water distribution system and fire pumps, include a diagram locating the portable fire extinguishers, include a diagram locating the various sorbent booms, include a diagram locating floor dry in the facility, describe the capabilities of the equipment to deal with all the hazardous waste at the facility, explain what the scrubber containment lockers are, describe (list) what is in the various spill kits, and include a diagram locating the spill kits in the facility.

**11. Contingency Plan – Distribution
OAC Rule 3745-65-53(B)**

A copy of the contingency plan and all revisions to the plan shall be: submitted to all local police departments, fire departments, hospitals, and Ohio EPA and local emergency response teams, that may be requested to provide emergency services.

DCO has not provided documentation that it has submitted a copy of the most recent contingency plan to local emergency service providers and Ohio EPA. In order to abate this violation, DCO must submit to Ohio EPA documentation demonstrating that it has submitted the most recent contingency plan to all local emergency service providers it may request to provide emergency services and Ohio EPA.

**12. Contingency Plan – Evacuation Plan
OAC Rule 3745-65-52(F)**

The contingency plan must include an evacuation plan for facility personnel where there is a possibility that evacuation could be necessary. This plan must describe signal(s) to be used to begin evacuation, evacuation routes, and alternate evacuation routes (in cases where the primary routes could be blocked by releases of hazardous waste or fires).

DCO has not provided documentation that it has developed and, included in the contingency plan, evacuation routes and alternate routes. Figure 5.11-1 Facility Evacuation Diagram was not included in the contingency plan provided to Ohio EPA on December 19, 2012. DCO must revise the contingency plan to include evacuation routes for the facility. Please also submit Figure 5.11-2 Evacuation Checklist.

13. Container Inspections
OAC Rule 3745-66-74

The owner or operator must inspect areas where containers are stored, at least once during each period from Sunday to Saturday, looking for leaks and for deterioration caused by corrosion or other factors. The owner or operator must record inspections in an inspection log or summary.

On December 19, 2012, DCO provided copies of inspection reports. The inspection reports do not demonstrate that the roll-off containers for baghouse bags are inspected and that such inspections are recorded. In order to abate this violation, DCO must revise its inspection report and document that it is conducting a weekly inspection of the roll-off containers.

14. Emergency Equipment Inspection
OAC Rule 3745-65-33

All facility communications or alarm systems, fire protection equipment, spill control equipment, and decontamination equipment, where required, must be tested and maintained as necessary to assure its proper operation in time of emergency. The owner or operator must record the inspections in a log or summary.

DCO has not provided documentation of inspections of spill control and fire protection equipment. The inspection of spill control equipment must include, at least, booms and floor dry. In order to abate this violation, DCO must develop an inspection report and document that it is conducting an appropriate inspection of its spill control and fire protection equipment.

Request for Additional Information and General Concerns: DCO is required to respond to each of these requests and general concerns. After Ohio EPA reviews the new information submitted by DCO, I will inform you of any other violations in a separate letter.

1. Submit a list of all baghouses, including their identifying numbers, their date of installation and a diagram locating them in the facility. On February 7, 2013, DCO submitted a list of baghouses at the facility. It is not clear how they are numbered on facility drawings and if those numbers are on the list. It is also not clear what processes or units the baghouses serve at the facility. The list also does not include their date of installation. On February 7, 2013, DCO provided drawings of Plant #1 Roof Layout and Stack Locations and Roof Stack Layout Plant 2 East & 2 West. The drawings are not legible and it is not clear where the baghouses are located or what their numbers are. Please submit all this additional information.
2. Explain why the slurry waste water outlets (and manholes) are sampled? On February 7, 2013, DCO reported that the slurry waste water outlets are sampled for SARA reporting purposes since the sludge is disposed of into the on-site Class III residual waste landfill. Is this the only reason for sampling this waste?

On February 7, 2013, DCO also reported that "As described during the current inspection and during multiple prior inspections over the past several decades, GM has always evaluated the dust at the point of generation, when it leaves the integrated manufacturing process, which is where it exits the integrated collection system at the end of the pipe discharging into the surface water pond system." During my inspections, DCO could not explain why the slurry water waste was being sampled at the end of the pipes. DCO also could not explain the consequences of the analytical results above the regulatory limit for lead. Please explain what DCO did and will do when the slurry water waste at the end of the pipes has hazardous waste characteristics above the regulatory limit for lead and any other TCLP metal.

3. Explain what DCO is doing with its baghouse dust. How is the system operated? Why is it done this way? Explain why DCO believes that the slurry water waste at its facility is not subject to hazardous waste regulation. During my inspection you stated that the waste sludge in the surface impoundments was non-exempt solid waste that could be dredged and placed into the on-site landfill. Please explain how DCO has made this conclusion. On February 7, 2013, DCO reported that it believes that the slurry waste water is a Class III residual waste. How did DCO come to this conclusion? Why does DCO believe that the slurry water waste is not subject to waste evaluation, according to Ohio's hazardous waste laws?
4. DCO should revise all of its documentation to reflect the current list of wastes generated at the facility. The documents may include the waste drum labels, annual report, WM reports, etc. The documents should include the common names for the waste, the constituents that make the waste hazardous and the hazardous waste numbers. Old wastes should be deleted.
5. Identify the following wastes. Describe how the waste is generated, its' characteristics, where it is shipped, and the quantity generated annually. **Autocast, Hex Powder and Line Pump Solvent.** On January 15, 2013, DCO reported that the line pump solvent was a one-time waste generated when DCO switched resins in precision sand. It was non-hazardous and was shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. Hex powder was used as a sand additive in previously removed Shell Core machines in Plant 2.
6. Explain how the **waste oil dry and formaldehyde** on Manifest #009458269, dated January 31, 2012, and Manifest #009976387, dated August 2, 2012, was generated and why it is not a hazardous waste. On February 7, 2013, DCO reported that the waste listed on Manifest #009458269 consisted of two drums from the cleanup of spilled Part 1 Resin and that it has no hazardous characteristics. Also on February 7, 2013, DCO reported that the waste listed on Manifest #009976387 was a tote of expired Chem Rez 853 and non-hazardous. DCO must submit some type of documentation demonstrating these claims, such as a MSDS or an analytical report.

7. Explain how the waste on Manifest #000228333, dated April 5, 2012, and Manifest #000228343, dated August 15, 2012, was generated and why it has the hazardous waste numbers D005 and D006. Submit a copy of the waste analysis for this waste. On February 7, 2013, DCO reported that the waste listed on both manifests was dust collector filters and that the profile for them "contains D005, D006, and D008 to ensure that it covers the most common characteristics that results in dust collector filters being hazardous." Ohio EPA has observed that in the past these dust collector filters have contained cadmium (D006) and chromium (D007) as well as lead (D008). Please explain why barium (D005) is included in the description of this waste and chromium is not included.
8. During my inspection, DCO explained that in the past, malleable line #7 used sulfur dioxide as a catalyst gas, that a sodium hydroxide scrubber was used to remove the gas from the emissions and that the line and the system is now gone. Explain why DCO shipped 940 pounds of waste **sodium hydroxide** solution on May 22, 2012, on manifest #009536253. On February 7, 2013, DCO reported that this waste was not left over material from ML7, but instead was an unknown drum that had a pH of 13. However, 940 pounds of waste sodium hydroxide is more than one 55-gallon drum. Please explain how this description represents 940 pounds of waste and how DCO determined the unknown waste was sodium hydroxide.
9. Describe the unknown waste in Drum #10003 included in manifest #009536253, dated May 22, 2012. Explain how it was generated. On February 7, 2013, DCO reported that this drum is the sodium hydroxide waste noted above in number 8. So it appears that the two wastes referenced in number 8 and 9 are the same. The comment for number 8 above still must be addressed by DCO.
10. Explain the use and submit copies of the MSDS and most recent waste analysis for the following materials listed on manifest #009533912: **Perma Fil** (only received MSDS for Perma Fil Part A, B and C on January 15, 2013), **Cool Tool** (only received MSDS on January 15, 2013), **Loctite** (only received MSDS on January 15, 2013), **M714** (only received the MSDS on January 15, 2013), **Mounting Adhesive**, **Wood Seal**, **kerosene** (only received the MSDS on January 15, 2013) **and ammonia**.

On February 7, 2013, DCO reported that Cool Tool is a cutting coolant, Loctite is a thread and nut locking compound, kerosene is a space heater fuel, Perma Fil is an epoxy compound and M714 is a solvent. DCO must still submit the most recent waste analysis for all these wastes except M714. Please submit the most recent manifest for the disposal of waste M714.
11. Explain the use and submit copies of the MSDS and most recent waste analysis for the following materials listed on manifest #009976387: **Stoddard solvent/SF-96**, **boric acid and ethanol** and Soy Response. On January 15, 2013, DCO reported that Soy Response was once used as a tooling cleaning solution in Lost Foam and the MSDS submitted demonstrates that the flash point is 200.8°F.

On February 7, 2013, DCO reported that Stoddard solvent/SF-96 was a release agent that is no longer used and that boric acid and ethanol "is listed on manifest under profile for Antifreeze and coolants." Please explain what the boric acid and ethanol is and how it is generated.

12. Explain the use and submit copies of the MSDS and most recent waste analysis for the following materials listed on manifest #009975495: Bead load coating. This is apparently a typographical error. I received the MSDS for Bead Lube Coating on January 15, 2013, and DCO reported that this waste is from a coating that was used on the Styrofoam cores in Lost Foam. This process has been discontinued at the facility. No other information is necessary at this time.
13. Explain why **waste triethylamine** (D001 & D002) was shipped by hazardous waste manifest #010775375, dated December 13, 2012. On February 7, 2013, DCO reported that this was an overpack drum of waste Zip Slip that was shipped as a hazardous waste according to the profile. DCO must describe how this waste was generated and submit the most recent waste analysis.
14. Explain what **Zip-Clean 38** is used for and how this waste is generated (if applicable). On February 7, 2013, DCO reported that Zip-Clean 38 is a metal cleaner. Please describe what metal it is used to clean and how the waste is generated.
15. Explain the source of the **oily pit water** in the analytical report dated August 9, 2011. On February 7, 2013, DCO reported that the source of the oily pit water is unknown. DCO should explain how it can avoid generating unknown wastes at the facility.
16. Explain what **Valient water** is and how it is generated. It is included in the analytical report dated August 1, 2012. Submit a copy of the MSDS. On February 7, 2013, DCO reported that this is waste washing solution from the Precision Sand Castline block washer. Explain how it is generated and submit a copy of the MSDS.
17. Explain the source of the **pit slurry** in the analytical report dated August 1, 2012. It is hazardous waste due to the characteristic of toxicity for lead (**D008**). Submit a copy of the hazardous waste manifest that documents its off-site shipment. On February 7, 2013, DCO reported that this waste is from the steam booth and that it is the liquid from the steam booth tank. Therefore, it appears that both the liquid and the sludge is hazardous waste due to lead (D008). DCO must clearly explain how the waste in the tank is managed and specifically describe the different management methods for the liquid and the sludge. How and when are the liquid and the sludge removed from the tank?

18. Explain the source of the **housekeeping waste** in the analytical report dated August 1, 2012. On February 7, 2013, DCO reported that this waste was spill cleanup materials. DCO must explain what spilled and what it was cleaned up with.
19. Explain how **Tri-Strength solvent** is used, what if any waste is generated and how it is managed. On February 7, 2013, DCO reported that Tri-Strength solvent is used to clean insulators in the melting department. Please explain what insulators are, how they are used, how they are cleaned, what the constituents of the waste are, and how the waste is generated.
20. Explain the use and submit copies of the MSDS and most recent waste analysis for wastes on the WM reports including: **Micote**, **Tribonol** (coating for refractory molds, only received MSDS on January 15, 2013), **Mentor 306** (bituminous concrete, only received the MSDS on January 15, 2013), **Aquatreat** (an acrylic copolymer, only received the MSDS on January 15, 2013), **Multan 9103** (only received MSDS on January 15, 2013), **Manikaid**, **Quick Patch Part A** (flashpoint is 50°F, only received MSDS on January 15, 2013), **aluminum waste glue** (only MSDS received on January 15, 2013), **aluminum oily pit water**, **core room paste** (only MSDS received on January 15, 2013), **Zepdyna 143** and **EDM Laser Butter**. On February 7, 2013, DCO reported that Micote is not in their MSDS system. Please explain what this means. Tribonol is sprayed onto ML1 molds. Please explain how this becomes waste. Mentor 306 is an epoxy for concrete patching. Multan 9103 is a coolant/cutting fluid for the small grinder in the metallurgy lab. Please explain how this waste is managed at the facility. Quick Patch Part A is a concrete patching compound. Please explain how this becomes a waste and how it is managed at the facility. Aluminum waste glue is a waste material from glue used to adhere lost foam Styrofoam cores together. The lost foam process has been removed from the facility. Core room paste is waste material from the glue used to adhere sand cores together. Zepdyna 143 is a solvent. Please explain how it is used and how the waste is generated. Also, please submit a copy of the MSDS and describe the constituents of the material.
21. Explain the use and submit copies of the MSDS and most recent waste analysis for all the **various release agents** and **parting sprays** listed in the WM reports. These wastes have been reported as hazardous wastes (D001) in the past. On January 15, 2013, DCO reported that these agents are sprayed onto core box tooling to prevent the cores from sticking. Only the MSDS for B-500XI Liquid Parting was received on January 15, 2013. On February 7, 2013, DCO submitted the analytical summary for ZipSlip, dated December 7, 2012. No hazardous characteristics were detected. It is not clear what this summary demonstrates.
22. Submit the most recent waste analysis for **Isocure Focus II**. (The flash pint on the MSDS is 142°F. This is very close to the regulatory limit.)
23. Explain the source of the **beads** in the analytical report dated September 11, 2009. The flash point of these beads is close to the regulatory limit. On February 7, 2013, DCO reported that the source of the beads is unknown.

24. During the December 19, 2012, inspection, GMP provided a copy of its training program. In this document is a table of **residual wastes**. Explain the source and characteristics of the various wastes in the table. Explain in detail how DCO concluded that the waste were not hazardous wastes and qualified for management as residual solid wastes. On February 7, 2013, DCO reported that the wastes were "Qualified for management as residual waste per landfill PTI and residual waste rules." DCO must still provide the required information.
25. During the December 19, 2012, inspection, DCO provided a copy of its training program. In this document is a diagram of outside storage areas. Explain what the "Hold for Disposal", "Maintenance", "Waste Container Area" and "Waste Management Area" are used for. On February 7, 2013, DCO reported that "These are areas defined in our outside storage procedure to limit the amount of materials/equipment that is stored outside. 'Hold for Disposal' and 'Maintenance' areas are where old equipment is stored for sale, disposal, or future use. The 'Waste Container Area' is where extra roll off containers are stored for site use. The 'Waste Management Area' is [the] area behind the hazardous waste building that is used for waste related activities storage for items like empty drum storage." No further information is needed at this time.
26. Provide an outline or a digital copy of the "Hazardous Waste Training Video". On February 14, 2013, DCO submitted the Hazardous Waste Training Video on CD. This is a general hazardous waste training presentation and does not specifically mention hazardous waste management at DCO. No further information is needed at this time.
27. Revise the Facility Emergency Coordinators table at Figure 3.1-1 in the site contingency plan to list the new fire chief, Clint Kessler, as primary emergency coordinator and submit a revised page to Ohio EPA. The personnel were changed after the last day of my inspection. On February 7, 2013, DCO submitted a revised Figure 3.1-1 Facility Emergency Coordinators listing the new fire chief, Clint Kessler, as primary emergency coordinator. No further information is needed at this time.
28. Please explain why there is no Emergency Contact or Emergency Coordinator listed in Section 1.2 of the facility contingency plan.
29. DCO must demonstrate that it packages, labels and marks its hazardous waste containers in accordance with the applicable DOT regulations (see OAC Rules 3745-52-30, 31 and 32). Submit a copy of the appropriate labeling and marking for the containers. On February 7, 2013, DCO reported that the Resource Manager is DOT trained and verifies all loads prior to shipment. Please explain what this means and provide the required information.
30. Explain how waste **Blasocut** is generated and managed and submit the most recent waste analysis, if appropriate.

31. List the people that direct or perform the hazardous waste management training and explain how they are qualified and how they are trained.
32. Describe any fires, explosions or releases of hazardous waste and how the contingency plan was implemented. Provide copies of any reports of such incidents.
33. Provide a copy of the TCLP analytical report for "residual waste" from approximately June 18, 2002.
34. Submit a copy of the most recent manifest or shipping paper for the following wastes: **Isocure Parts I and II Waste, Sulfuric Acid Waste from Metallurgy Lab Plant 2 (D002), Maintenance Steam Cleaning Booth Liquid, North Perimeter Area Filter Socks and Ion Exchange Beads.**
35. On December 5, 2012, I observed 1 drum of hazardous **creosote**, dated October 23, 2012, in the hazardous waste building. What hazardous waste number was assigned to this waste and when was it shipped off-site? Submit a copy of the manifest or shipping paper used to ship this waste off-site.
36. Submit the most recent waste analysis for the following wastes: **Ammonium Hydroxide Waste (D002), and Aliphatic Amine Part B Grout Waste (D002).** On February 7, 2013, DCO reported that the Aliphatic Amine Part B Grout Waste (D002) was spent material and that the MSDS was used to characterize it. The MSDS was provided. No other information for this waste is needed at this time.
37. Explain how 456 pounds of Waste **Tetrachloroethylene (F001)**, shipped in 2011, to Safety-Kleen Corp. in Dolton, Illinois was generated.
38. Explain what the **Sludge From Press (D003)** is and how it is generated. Submit the most recent waste analysis. It is listed on manifest #009536253, dated May 22, 2012. The Tradebe waste profile #13534 describes it as oil from pattern shop. On February 7, 2013, DCO reported that this waste was generated from a grinding machine in the pattern shop. DCO must explain why this waste is considered reactive and describe the frequency of its generation. DCO must also submit the most recent waste analysis.
39. Explain what the **Metal Cleaner Waste (D010)** is and how it is generated. Submit the most recent waste analysis. It is listed on manifest #009536253, dated May 22, 2012. During the inspection, and on February 7, 2013, DCO reported that metal cleaners were sprayed onto core box tooling in core machines to clean them. The waste is generated from spent material or spill cleanup. DCO must submit the most recent waste analysis.
40. Explain what **Waste Oil with Trichloroethylene/Tetrachloroethylene Mix (D039 & D040)** is and how it is generated. Submit the most recent waste analysis. This analysis must include TCLP metals.

41. Is there a waste generated from QA/QC samples and metering pump checks of the **Iso-Fast 705 Catalyst**? If there is a waste what are the characteristics of the waste?
42. Explain what **waste refractory** is and how it is generated. Submit the most recent waste analysis, including TCLP metals.
43. Explain how DCO can avoid having unknown wastes generated in the facility or taken to the hazardous waste building.

Please be aware that incandescent, fluorescent, metal halide, neon, high-intensity discharge, high-pressure sodium and mercury-vapor lamps could be hazardous waste when discarded. Fluorescent lamps may contain up to 40 milligrams (mg) of mercury, depending on the brand and manufacturer. Lamps may also contain lead and cadmium. Many lamps exhibit a characteristic of toxicity for heavy metals when disposed. I have enclosed copies of the following documents to assist you in properly managing your spent lamps: Fluorescent Lamps: What You Should Know and Computer, Fluorescent Lamp and Ballast Recyclers. I recommend that you review these documents carefully and contact me if you have any questions. The fact sheet describes the rules you must follow in order to manage lamps as a universal waste.

As a used oil generator you are required to store used oil in containers or aboveground tanks that are in good condition (no severe rusting, apparent structural defects or deterioration) and not leaking. Containers, aboveground tanks and fill pipes for underground tanks must be labeled with the words "Used Oil." If leaks are detected, the generator must stop the release; contain the release; clean up and manage properly the released used oil and other materials related to the release; and, if necessary, repair or replace any leaking containers or tanks prior to returning them to service. I have enclosed, copies of the following used oil fact sheets: The Regulation of Used Oil: An Overview for Ohio Businesses Who Generate Used Oil, and Used Oil Recyclers. Please review these carefully and contact me immediately if you have any questions.

You may be able to reduce the waste your business generates. If you find ways to recycle, reduce or altogether eliminate the amount of waste that your business generates, you may be able to reduce your treatment and disposal costs and you may possibly reduce your regulatory requirements.

I have enclosed copies of the following fact sheets: Pollution Prevention Opportunities, a worksheet that can help you recognize opportunities for reducing waste and conserving energy at your facility, and the fact sheet Management of Electronic Waste from Businesses. Please review this information and contact me if you have any questions.

The Division of Materials and Waste Management has created an electronic news service to provide you with quick and timely updates on events and news related to hazardous waste activities in Ohio.

Mr. Carl Schroeder
March 11, 2013
Page 19

If you haven't already, we encourage you to sign up for this free service. You can find more information at the following Web link: http://ohioepa.custhelp.com/cgi-bin/ohioepa.cfg/php/enduser/doc_serve.php?2=subscriptionpage. Please feel free to share this information with your colleagues.

DCO needs to immediately take the necessary measures to return to compliance with Ohio's environmental laws. Within 14 days of receipt of this letter, DCO is requested to provide documentation to this office including the steps taken to abate the violations cited above. Documentation of steps taken to return to compliance includes written correspondence, updated policies, and photographs, as appropriate, and may be submitted via the postal service or electronically to don.north@epa.state.oh.us.

Please be advised that violations cited above will continue until the violations have been properly abated. Failure to comply with Chapter 3734 of the Ohio Revised Code and rules promulgated thereunder may result in a civil penalty of up to \$10,000 per day for each violation. It is imperative that you return to compliance. If circumstances delay the abatement of violations, DCO is requested to submit written correspondence of the steps that will be taken by date certain to attain compliance.

Enclosed you will find copies of all checklists completed during the inspection. If you have any questions, please feel free to contact me at (419) 373-3074. You can find copies of the rules and other information on the division's web page at <http://www.epa.ohio.gov>. Ohio EPA also has helpful information about pollution prevention at <http://www.epa.ohio.gov/ocapp>.

Sincerely,



Don North
District Representative
Division of Materials and Waste Management

/llr

Enclosures

pc: Lisa Gifford, DMWM, NWDO
Colleen Weaver, DMWM, NWDO (hard copy with checklists) -

ec: Colleen Weaver, DMWM, NWDO (scanned copy with checklists)
Don North, DMWM, NWDO

ATTACHMENT 1

Plant 1: iron blocks, heads and crankshafts (Plt. 2W)

In Plant 1 only one cupola (cupola 4) is now in operation. It is charged with scrap metal (from off-site sources), sprue (scrap metal from the facility), coke, alloys (which may include ferrosilicon, ferromanganese, ferrochrome and copper), fluorspar, and limestone. Scrap iron is shipped daily to the plant and must meet specifications determined by DCO. Molten metal from the cupola is directed through troughs to one of three 90 ton Ajax induction holding furnaces. Charging and melting is continuous when mold pouring is conducted. (If there is a breakdown at mold pouring the heat to the cupola and charging is stopped.) From the furnaces it is poured into 4 ton hot metal cranes that transport the molten iron to one of two 20 ton Rotary Mechanical Iron Pourers (RMIP). (The cranes are like transfer ladles on a rail system.) The RMIP is used to pour the molten metal into the molds that move past the unit.

The emissions from Plant 1 cupola go to a thermal oxidizer (TO) with an operating temperature of at least 1300°F. From there, the emissions go to the recuperator that acts as a heat exchanger and hot air is directed back to the cupola. From the recuperator the emissions go to a wet venturi pre-scrubber and the wastewater is pumped to the surface impoundment system. This system consists of four unlined surface impoundments: East Primary Basin, West Primary Basin, Secondary Basin and the Reservoir. The 2002 Application for a Solid Waste Landfill states that solids from wet caps, venturi scrubbers, and mist eliminators, settles in the Secondary Basin. From the venturi the emissions go to a condensation enhanced scrubber (water only) and again the wastewater from this unit is pumped to the surface impoundment system. From the CES the emissions are released to the atmosphere.

Emissions from Plant 2W cupola are managed in a similar fashion, except that the cupola is equipped with a wet cap. Waste water from the wet cap is also pumped to the surface impoundment system. Emissions from other sources, such as pouring lines in the facility, are controlled by baghouses. In a letter from DCO to Ohio EPA, dated January 31, 2011, DCO states "The baghouse and wet collectors that capture lead and particulate are then mixed with water, and directed to the facility's WWTS, dredged, mixed, and transported for disposal in the onsite landfill." Also, the facility's contingency plan states that "The Secondary Settling Basin, which is located adjacent to the Maumee River, is the principal containment area for spills that occur at the facility and reach the storm water drainage system."

In Plant 2W only one cupola (cupola 6E) is now in operation and the charge materials are basically the same as Plant 1: scrap metal, nodular iron, coke, fluorspar, and limestone. The molten metal is desulfurized using calcium oxide and calcium fluoride to form nodular iron. Nodular iron is much stronger than grey iron and is used in the manufacture of crankshafts (Line 6). As in Plant 1, the molten metal is transferred to induction holding furnaces, poured into transfer ladles on the rail system and poured into molds at the second RMIP. No cores are necessary to manufacture the crankshafts.

In Plant 1 and 2W, after brief initial cooling the mold sand and gates are removed in shakeout. Spent core and sand lumps are screened out of the used sand and discarded on-site as solid waste. Most of the mold sand can be reconditioned and reused, over and over again.

Once it is spent, DCO considers it exempt solid waste and stockpiles it for use in building the on-site landfill. The sprue is removed and it can be re-melted. Hot cast pieces are air cooled in a tunnel. Once sufficiently cooled, the pieces are shot blast to remove excess sand and make the surface of the casting smooth. The piece can then move to Finishing for simple machining. In this department certain surfaces of the blocks and heads are ground smooth.

In Pre-machining, CNC machines are used for further cutting and grinding. The waste coolant in this department is managed by MEC and is shipped to Aevitas (fka United Wastewater) in Romulus, Michigan. In this department the pieces are washed in a booth with Prevox which is a cleaner and rust inhibitor.

To make a core, sand is mixed with a catalyst and a resin and poured into core molds in the core making machine. All cores for iron parts are made in Plant 1. They are cured in either a cold box or hot box. Most cores are made with the cold box method, but the cores for all iron heads are made using the hot box method. In the cold box core making process the prepared sand is catalyzed with the gas dimethylisopropylamine (DMIPA) for 20 seconds. In the hot box core making process, the core material consists of sand and resin and is catalyzed with heat. Once hardened, the cores may be dipped in a material that provides a smooth finish for the casting.

To make a mold, the mold mix slurry is made in the Slurry Buildings in the back of Plant 1 and 2W. It is a mixture of water, bentonite clay and finely ground sea coal. It is piped to the green sand (unused sand) system in each of the plants. Sand is mixed with the slurry and pressed into the mold flask (cope and drag) over the steel pattern. The core is placed inside the depression made by the steel pattern and the two pieces of the flask are put together.

Plant 2E: aluminum blocks

In Plant 2E aluminum blocks are manufactured through the Precision Sand process. Various alloys used in Plant 2, Precision Sand (aluminum) include tabor (titanium and boron), strontium and magnesium. The plant operates two natural gas fired furnaces for Modules 1 and 2 and two stack melters for Modules 3 and 4. Stack melters can be charged with bins of aluminum and other materials similar to a cupola. It may be possible to use plant scrap directly in these stack melters in the future. Plant 2E is operated using modules in line, so that one core piece is manufactured and added to the next core piece manufactured in the next machine. Core pieces are made by mixing sand, a two part resin (IsoCure) and catalyzed with the gas dimethylisopropylamine (DMIPA). The core dies are coated with a release agent to help the die and core piece separate. The core dies are washed with Prevox after a period of use and then later are more thoroughly cleaned in Plant 1 Core Box Tool Cleaner tanks (2).

Once the core package is assembled it moves in line to the pouring station. Molten aluminum is placed into pouring furnaces to maintain its temperature prior to pouring. Aluminum blocks have steel liners inserted into the block's cylinders in the pour package. These must be pre-heated to between 500 and 1,000 °F to prevent damage when the molten aluminum is poured at 1400°F. In order to cool the piece quicker, which increases its strength, a steel chill is installed in the bottom of the pour package. Much of this work is accomplished by robots. After pouring, the blocks go through shakeout similar to iron blocks. The core material is crushed in a mill to reduce its size. The steel chills are cooled in air supplied racks.

The blocks are cooled in a conveyor tunnel. After sufficient cooling, the blocks go through finishing where more sand is removed and the sprue and gating is cut off. The blocks are shot blasted and high pressure water washed after finishing with a cleaner called Parco.

The entire pour package in precision sand is made of bonded sand so that the sand cannot be re-used. Aluminum is separated from the sand so that it can be recycled and also kept out of the landfill. Used precision sand is mixed with other sand and surface impoundment sludge and placed into the on-site landfill.

DCO has developed a waste management system that involves representatives of Waste Management (WM) and Midwest Environmental Control (MEC). DCO employees are responsible for placing waste into the appropriate containers in the plants, labeling them and moving the waste containers to the Hazardous Waste Building. Once in the building, Waste Management is responsible for managing the waste, including inspecting the container accumulation area, scheduling waste shipments and completing the manifest. Test America is the laboratory used to analyze most samples of the facility's waste. DCO also has developed and maintains a Hazardous Materials Control Committee to evaluate materials to be used at the facility before they go into production. The goal of the committee is to seek less toxic materials for use, limit the number of chemicals used, and avoid generating new hazardous wastes. DCO also recycles cardboard (16,140 pounds in 2011), aluminum cans (250 pounds in 2011) plastic bottles (1,520 pounds in 2011), monitors and electronics (5,588 pounds in 2011), super sacks (8,660 pounds in 2011), white paper (8,600 pounds in 2011) and wood pallets (180,000 pounds in 2010).

DCO has set up a corporate Scrap Team to write specifications (such as material size and metals concentrations) and set up contracts companywide. DCO (Defiance) receives scrap from Metal Management (Defiance), Omni Source (Defiance), and other suppliers.

DCO is a hazardous waste large quantity generator and a large quantity universal waste handler. The following paragraphs describe my observations at the facility:

On the **Plant 1 Sand Deck** I observed the following satellite accumulation containers:

- 1 drum of used oil properly labeled.
- 1 drum of waste Isoflow (D001) on a containment pallet near a Hot Box Core machine.
- 1 drum of waste, Hot Catalyst (D002) on a containment pallet.

Other satellite accumulation drums were on the sand deck but were not observed because of time considerations.

In the **Hazardous Waste Building** I observed the following:

4 drums of non-hazardous SS DC (steel shot dust collector) debris from Plant 2, dated December 12, 2012. DCO had a sample collected but the analytical results are not yet available.

- 1 drum of hazardous creosote, dated October 23, 2012.
- 1 pail of universal waste batteries dated: 7/3/12, 9/18/12 and 10/12/12.
- 1 pail of mercury containing equipment, dated 8/30/12
- 3 drums of Isoflow (D001), dated 11/22/12 (2 drums), and 11/21/12
- 6 drums of DC 19, (Dust Collector #19) dust and sludge, dated 10/10/12. The system got plugged and this sludge was removed by hand. GMP considers it high in sulfides and is concerned that it is D003. However, it has been stored in water for some time without a reaction, so DCO has determined that it is not hazardous waste.
- 1 pallet of universal-waste automotive lead-acid batteries, dated 6/7/12.

On December 10, 2012, I observed DCO's **Sampling Stations** for the baghouse dust slurry at four locations: 1. East Manhole (flow from the Plant 2 cupola), 2. West Manhole (flow from Plant 1), 3. Post-Mix Ditch, (where the East Sewer and West Sewer combine in a ditch), and, 4. East Primary basin Inlet (2 overhead pipes). According to Carl Schroeder of DCO, the baghouse dust slurry is not treated with chemical anywhere in the system (slurry tanks, sewers, or surface impoundments) before it reaches the on-site WWTP.

On December 10, 2012, you explained that the samples are obtained by lowering a bucket on a rope into the manhole or ditch to collect some of the slurry water two to three times per hour over the period of a day. The subsamples are poured into a large plastic container with a valve near the bottom. Once the solids settle out of the water, the valve is opened to release the water. The solids are collected and submitted for RCRA TCLP analysis.

A report dated October 17, 2012, indicates that the slurry water pumped to the lagoons was characteristically hazardous for lead on the following dates: April 30, 2012 (TCLP Lead 6.9 mg/L in WM), May 24, 2004 (TCLP Lead 10.2 mg/L in WM), March 29, 2004 (TCLP Lead 7.35 mg/L in WM), January 5, 2004 (TCLP Lead 43.5 mg/L in WM), November 3, 2003 (TCLP Lead 63.3 and 88.8 mg/L in WM), August 11, 2003 (TCLP Lead 5.5 mg/L in EM), March 24, 2003 (TCLP Lead 5.4 mg/L in WM), February 24, 2003 (TCLP Lead 7.5 mg/L in WM), December 30, 2002 (TCLP Lead 7.9 mg/L in WM), January 1, 2001 (TCLP Lead 5.1 mg/L in EM), May 22, 2000 (TCLP Lead 5.3 mg/L in EM), and March 27, 2000 (TCLP Lead 5.3 mg/L in EM).

On December 10, 2012, I observed the **Slurry Building** where bentonite clay and sea coal is mixed with water, stored and pumped to Plant 1 and 2W for mold making.

On December 10, 2012, I observed the **Maintenance Department**. Waste gasoline, diesel fuel, antifreeze and used oil are generated from maintenance of plant vehicles and the facility's locomotive. Three Safety-Kleen parts washers are located in the department and they utilize a high flash solvent (flash point of 148°F). Personnel in the department said that it takes about three years to fill a 55-gallon drum of waste fuels. I observed one drum. I observed two 55-gallon drums of used oil filters. I observed one drum for universal waste lamps and one pallet of universal waste batteries. In the locomotive portion of the department, I observed one 55-gallon drum of used oil.

On December 10, 2012, I observed the **Paint Shed**. It is designed with a secondary containment system in the floor. DCO accumulates (satellite) waste paint and solvent, empty paint cans and waste aerosol cans (in a drum). Waste drums are grounded and a spill kit is maintained in the shed.

On December 10, 2012, I observed the **Wastewater Treatment Plant**. Chloroform is used in the lab to test water for phenols and is accumulated as waste (D022) in a 15 gallon satellite accumulation container. Approximately 15 gallons is generated per year. The plant is used to treat the slurry water from the lagoon system and also all precipitation from roofs, parking lots and portions of the nearby watershed. It is equipped with sand filters, pH adjustment, ion exchangers and a filter press. The ion exchanger beads are back-flushed to the lagoon system. The filter press sludge is sent to the landfill mix area, where it is mixed with sands and surface impoundment sludge and then placed into the on-site landfill. DCO was not able to provide an analysis of this waste. I observed one 55-gallon drum for the accumulation of used oil in the building.

On December 10, 2012, I observed the **Metallurgy Lab in Plant 2**. Approximately 15-20 gallons of sulfuric acid waste is generated there each year. The acid is part of a test for concentration of contaminants and hardness in the return water used for cooling.

On December 10, 2012, I observed the outside of the **North Perimeter Area Treatment Building**. On December 19, 2012, I observed the inside of the treatment building. In this building the leachate from the NPA is filtered through a series of three foot filter socks, activated carbon and then pH adjusted in one of two large tanks. From the tanks, the waste water is pumped to NPDES Outfall 801.

Waste three foot filter socks are generated and so is spent activated carbon. There are some PCBs in the leachate and waste, but DCO reported that this is only trace amounts.

On December 10 and December 19, 2012, I observed the **Mix Area** beside the on-site landfill. In this area the dredged sludge from the surface impoundments is de-watered through a filter press, stockpiled and mixed with other dry sands. The filter press is inside a building that was locked on December 19, 2012. It was not possible to see the press; however I did observe the conveyor that moves the de-watered sludge from the press to the stockpile.

ATTACHMENT 2

DCO regularly makes determinations that certain wastes are residual wastes suitable for disposal, according to DCO, in its on-site Class III landfill. **However, DCO must first make the determination the wastes are or are not hazardous wastes.** If the wastes are not hazardous, DCO can evaluate them for management as residual wastes. Throughout this letter, Ohio EPA is referring to the hazardous waste regulations that DCO is required to comply with. In this letter, Ohio EPA is not dealing with residual waste rules. Based on Ohio EPA's current understanding, DCO generates the following hazardous, non-hazardous and universal wastes:

1. Waste Catalyst Chem-Rez 1584 (D002): DCO utilizes a very specialized hot box catalyst, in Plant 1 (Chem Rez 1584). They are the only user and there is only one company that makes it. Consequently, DCO receives it in 400 gallon totes. The resin may expire before it is used up and must be discarded. It is also periodically sampled (12 ounces) for QA/QC purposes and for metering pump checks. The sample also becomes waste. In 2011, DCO shipped 11,687 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. In 2012, 1,400 pounds of this waste has been generated.
2. Waste Catalyst Chem-Rez 89FR (D002): DCO also uses resin 89FR. It is periodically sampled (12 ounces) for QA/QC purposes and for metering pump checks. The sample becomes the waste. In 2011, DCO shipped 1,580 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. In 2012, 6,190 pounds of this waste has been generated.
3. SpotLeak (D001): DCO receives un-odorized natural gas from the main trunk, and therefore, must odorize its own natural gas. In 2011, DCO shipped 50 pounds and in 2010, it shipped 239 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. The annual report for 2010 describes the waste as empty drums. The WM report states that empty drums are non-hazardous and any liquid is D001. The liquid is extremely flammable and has a flash point of 0°F.
4. Universal Waste Lamps: DCO accumulates spent lamps, such as 4 and 8 foot fluorescent lamps and HID lamps, in a lamp box, which is a large heavy plastic chest on wheels. I observed one dated October 21, 2012. The box is kept in Maintenance Point of Use. They are recycled through Environmental Recycling of Bowling Green, Ohio, on a regular basis. In 2011, DCO shipped 7,281 pounds of universal waste fluorescent lamps off-site and in 2010, it shipped 2,003 pounds of HID lamps.
5. Universal Waste Batteries: DCO accumulates automotive lead-acid batteries and also NiCd and other types. It may accumulate tow motor batteries. Batteries are recycled through Environmental Recycling of Bowling Green, Ohio.
6. Universal Waste Mercury Containing Equipment: DCO accumulates mainly mercury containing thermostats and switches. They are recycled through Environmental Recycling of Bowling Green, Ohio. In 2010, DCO shipped 40 pounds of this waste off-site for recycling.

7. Core Box Tool Cleaner Waste Sludge (Potassium Hydroxide Sludge) (D002): DCO operates two tanks, a 4,000 gallon and a 1,000 gallon tank of potassium hydroxide, called core box tool cleaners, which are used to clean tools like steel dies. The tools are suspended in the liquid to remove resins from core making. Four to five times a year the tanks are dumped and cleaned out. In 2011, DCO shipped 42,776 pounds of sludge to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana and EQ Detroit, Inc. in Detroit, Michigan.
8. Core Box Tool Cleaner Waste (Potassium Hydroxide Liquid): The liquid potassium hydroxide is shipped to Aevitas (fka United Wastewater) for beneficial reuse and is subject to OAC Rule 3745-51-02(E)(b) and 3745-51-02(F). It is used to neutralize acids in their waste water treatment plant. It appears that 688,210 pounds was shipped in 2011. In 2012, 10,000 gallons has been shipped.
9. Used Baghouse Filters (D008): When a baghouse is performing poorly DCO replaces the bags. The bags could be changed out more than once per year or every few years, depending on the amount and type of emissions handled in the unit. DCO reports that it has at least 70 baghouses at its facility. The bags are placed into lined roll-offs and an employee from the lab obtains a sample for analysis. Usually a few random bags are selected and pieces are cut out of them. Some of the bags may be characteristically hazardous for lead (D008). Bags from each baghouse are sampled and analyzed before disposal. In the past, some bags have also been hazardous for chromium (D007) and cadmium (D006). Other heavy metals have been identified in waste at the facility, including arsenic, barium and cadmium. In 2011, DCO shipped 19,240 pounds to Envirosafe Services of Ohio, Inc. in Oregon, Ohio.
10. Baghouse Dust: The dust has not been evaluated, the waste bags have. However, the analytical reports for the waste bags could not be provided on the first day of my inspection. Currently the baghouse dust is moved from the baghouse hopper by an enclosed auger (to a bucket conveyor possibly) to a slurry tank where it is mixed with water, pumped into a slurry water header and through a piping system to a system of four unlined surface impoundments on the property. Baghouses 91 and 92 serve Pouring Line #1 in Plant 1. Line #6 in Plant 2 is serviced by baghouses on the roof. There are new dry baghouses in precision sand. The waste from the wet dust collectors is managed in the same way. The sludge in the surface impoundments is dredged and placed into the on-site landfill. In 2010, DCO dredged 30,694,000 pounds of sludge from the primary settling basin and in 2011, DCO dredged 40,774,000 pounds of this sludge. In 2010, DCO dredged 11,058,000 pounds from the secondary settling basin and in 2011, DCO dredged 7,520,000 pounds of this sludge. Ohio EPA requests that DCO submit a plant diagram locating each of the baghouses in use. Please provide the number for the baghouse and the units that it serves. On February 7, 2013, DCP reported that the "Dust is annually evaluated as part of the residual waste testing for our Class III landfill." Apparently DCO does not understand that it must be evaluated for its hazardous characteristics.

11. Used Oil: Used coolant is generated in Pre-Machining. It is pumped out of machine reservoirs by small vac trucks, transported outside the facility and pumped into tanker trucks for shipment to Aevitas (fka United Wastewater) in Redford, Michigan or Valicor Environmental Services LLC in Sharonville, Ohio.

Used oil filters are drained and accumulated in bins and can be recycled as scrap metal. Used hydraulic oil may also be generated and in the maintenance department used oil is accumulated from vehicle and locomotive maintenance. Outside Module 1 casting washer, I observed a tote of Parco labeled with the words "Used Oil". DCO has been sampling and analyzing every tote and drum of used oil before off-site shipment. I am not sure this is necessary. This waste has been shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.

12. Paint Related Waste (F003, F005, D001, D035 & D008): DCO uses petroleum naphtha to clean up brushes and rollers used to paint facility structures. DCO also performs some spray painting and uses MEK, and apparently acetone, to clean the paint can, line and gun. These solvents are accumulated in the same satellite accumulation container in the paint shed. In 2011, DCO shipped 5,161 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana and Veolia ES Technical Solutions in Port Arthur, Texas. In 2012, 2,515 pounds of this waste has been generated.
13. Sulfuric Acid (D002): DCO uses sulfuric acid in the Plant 1 cold box core rooms where it operates packed tower acid scrubbers. Acid is received in totes and is metered into the scrubbers. The acid strips the DMIPA catalyst gas from the cold box emissions. This waste may be from cleaning the pits under the scrubber, from spill cleanup and from heel in empty drums from the wastewater treatment plant. In 2011, DCO shipped 1,665 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. In 2012, 1,437 pounds of this waste has been generated. This waste was also generated in 2010, 2009 and 2008.
14. Aerosol Cans (D001): DCO uses very few aerosol spray cans since these are a serious explosion hazard if they were to get into the cupolas. DCO has a policy that employees can only sign out a new spray can when they return an empty one. This way the facility can keep track of their usage and disposal. All useless spray cans are accumulated in one drum. These may include paint, Magnaflux and SpotLeak. This waste has been shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
15. Waste Parts Washer Solvent: DCO operates 79 parts washers in the facility. The solvent in the parts washers is a high flash petroleum compound (flash point above 148°F). On December 19, 2012, DCO thought that this solvent was included in Safety-Kleen's continued use drum cleaning program in Fort Wayne, Indiana. However, on February 7, 2013, DCO reported that it was not. Safety-Kleen services all of the parts washers. In 2011, DCO only shipped 35 pounds of hazardous waste solvent (D001) to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. DCO stopped using Big Orange (D001) sometime in 2009. This may represent left over low flash solvent.

16. Waste Chloroform Mixture (D022): DCO uses chloroform in its wastewater lab to test water for phenols and is accumulated as waste (D022) in a 15 gallon satellite accumulation container. Approximately 15 gallons is generated per year. In 2011, DCO shipped 430 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
17. Paint Chips Lead (D008) and Chromium (D007): This waste is generated when DCO has to strip a facility component, possibly prior to welding operations. All paint chips are analyzed. Some are hazardous for lead (D008) and some are hazardous for chromium (D007). This will continue to be a concern for the facility due to the age of the buildings and components. In 2011, DCO shipped 179 pounds of lead paint chips and 70 pounds of chromium paint chips to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
18. Waste Ethyl Alcohol (Absolute 200 Proof)(D004): DCO does not know how this waste is generated or where it comes from in the facility. In 2010, DCO shipped 60 pounds of this waste to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. On February 7, 2013, DCO reported that this waste was accumulated in a one gallon glass jug and that the use and origin was unknown. DCO also submitted a copy of the waste analysis, dated June 11, 2010. The waste analysis demonstrates that the waste did not have a flash point blow 140°F, but is still not clear why the waste is described as waste ethyl alcohol.
19. Waste Solvent Contaminated with Lead (D001 & D008): During my inspection DCO did not know how this waste was generated or where it came from in the facility. In 2010, DCO shipped 100 pounds of this waste to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. On February 7, 2013, DCO reported that this waste was unused MB593 Belt Cement and was disposed of in two 5- gallon buckets. Based on the MSDS, this waste contains lead oxide and is noted as extremely flammable.
20. Contaminated Oil & Water (D018): DCO does not know how this waste is generated or where it comes from in the facility. The Waste Management report states "cleaning/maintenance" in its description of the waste. In 2010, DCO shipped 5,824 pounds of this waste, in 2009 it shipped 9,462 pounds, and 2008 it shipped 34,341 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. On February 7, 2013, DCO reported that this is waste oil containing benzene, which can originate in the maintenance garage from servicing the oil in our on-site equipment. Please describe where the maintenance garage is.
21. Waste Sodium Hydroxide Solution (D002): DCO reported that in the past, malleable line #7 used sulfur dioxide as a catalyst gas and that a sodium hydroxide scrubber was used to remove the gas from the emissions. The line and the system are now gone. DCO shipped 2,308 pounds in 2011, 3,547 pounds in 2010, and 342 pounds in 2009 to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
22. Isocure Parts I and II Waste: I observed two satellite accumulation drums on the sand deck. Both were labeled non-hazardous. They were sitting on a secondary containment pallet, as all satellite accumulation containers at the facility do.

It is periodically sampled for QA/QC purposes and for metering pump checks. The sample becomes waste. This waste does not possess any hazardous waste characteristic.

23. Isoflo Waste (D001): Isoflow is mixed with the catalyst, resin and sand in the hot box method to make the sand flow better. It is periodically sampled for QA/QC purposes and for metering pump checks. The sample becomes the waste. In 2012, 470 pounds of this waste has been generated. It is shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
24. Gasoline and Diesel: This is generated in the maintenance department if fuels must be removed from vehicles such as trucks, tow lifts, man lifts, dump trucks and the locomotive. In 2012, 75 pounds of this waste has been generated. This material would not be a waste if it is burned for energy recovery. It is shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. DCO also generates a gasoline and floor dry waste. If the gasoline is separated from the floor dry and burned for energy recovery it would also not be a waste. In 2011, DCO shipped 490 pounds of the contaminated floor dry to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
25. Sulfuric Acid Waste from Metallurgy Lab Plant 2 (D002): Approximately 15-20 gallons of sulfuric acid waste is generated there each year. The acid is part of a test for the concentration of coolants. It is accumulated in a 15-gallon satellite accumulation container in the lab.
26. Ammonium Hydroxide Waste (D002): On January 15, 2013, DCO reported that this was lab analytical waste from the on-site waste water treatment plant. DCO generated 10 pounds of this waste in 2008, and 10 pounds were shipped in 2010 and 2011 to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. However, on February 7, 2013, DCO reported that it did not know where the waste (in a 1-gallon container) was generated.
27. Used Antifreeze: This waste is generated in the maintenance department from maintenance of facility vehicles and the locomotive. In 2011, DCO shipped 3,255 pounds off-site and in 2010, it shipped 5,145 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
28. Used Oil Dry: This waste is listed in the WM report as non-hazardous. However, each container of this waste may need to be analyzed for TCLP metals (including lead) and TCLP VOCs (including benzene). WM reported on December 19, 2012, that contaminated oil dry is accumulated in drums in the facility. A scoop of the contaminated oil dry is collected from each drum and placed into a 5-gallon pail. The contents of the drum are emptied into a roll-off. When the roll-off is full, the sample is analyzed for VOCs and metals to characterize the waste in the roll-off. This waste is shipped to Evergreen Recycling & Disposal Facility in Northwood, Ohio.
29. Floor Sweepings: DCO operates two floor sweeping machines. The machines are used to sweep the outside paved roads and floors inside the facility. The waste is placed into a bunker.

The WM report states, and you have confirmed, that this waste is placed into the on-site landfill. However, each container of this waste may need to be analyzed for TCLP metals. On February 7, 2013, DCO reported that this waste is not evaluated for possible characteristics of hazardous waste because DCO believes it is only a residual solid waste which is placed in its on-site landfill.

30. Quench Slag: DCO reports that this waste is non-hazardous and is used for facility roads and drainage layers in the on-site landfill. In 2010, DCO generated 83,956,000 pounds and in 2011, DCO generated 80,116,000 pounds. On February 7, 2013, DCO reported that this waste is not evaluated for possible characteristics of hazardous waste because DCO believes it is only a residual solid waste which is placed in its on-site landfill or on roadways.
31. Spent Foundry Sand: In 2010, DCO generated 301,120,000 pounds of this spent sand and in 2011, DCO generated 271,902,000 pounds. This sand is transported to the mix area and eventually into the on-site landfill. In 2010, DCO also recycled 377,114,000 pounds of ("exempt") foundry sand and in 2011, DCO recycled 207,572,800 pounds of ("exempt") foundry sand and 45,104 pounds of "exempt" sand including uncured cores. This waste is stockpiled near the on-site landfill. The Revised RCRA Closure Plan for the North perimeter Area, dated February 2002, states that "Foundry sand exhibited total lead from 6 mg/kg to 3,800 mg/kg." On February 7, 2013, DCO reported that the residual waste rules only require a water leach test for the Class III constituents of concern, that the waste is not evaluated for possible characteristics of hazardous waste because DCO believes it is only a residual solid waste which is placed in its on-site landfill or used in the construction of the landfill.
32. Waste Tetrachloroethylene (F001): During my inspection DCO did not know how this waste was generated or where it came from in the facility. In 2011, DCO shipped 456 pounds of this waste to Safety-Kleen Corp. in Dolton, Illinois. On February 7, 2013, DCO reported that this waste was waste oil containing tetrachloroethylene. It is still not know how and where it was generated at. During my inspection, DCO reported that chlorinated (halogenated) solvents should not be used in the facility now.
33. Oil Dry with Halogens (F001 & F002): During my inspection DCO did not know how this waste was generated or where it came from in the facility. In 2011, DCO shipped 7,560 pounds to Wayne Disposal, Inc. in Belleville, Michigan. On February 7, 2013, DCO reported that this waste was from the cleanup of spilled oil containing halogens. A waste analysis was provided for Floor Dry (Drum #F032-013). Apparently one sample was used to characterize 7,560 pounds of this waste. It is still not know how and where it was generated at. During my inspection, DCO reported that chlorinated (halogenated) solvents should not be used in the facility now.
34. Biocure 705 Waste (D010 & D023): This material has a shelf life. If it is exceeded it is discarded. In 2011, DCO shipped 475 pounds of waste Biocure 705 to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. On February 7, 2013, DCO submitted hazardous waste manifest number 009458269, dated January 31, 2012, listing 475 pounds of this waste, which was shipped to Tradebe.

35. Aliphatic Amine Part B Grout Waste (D002): In 2010, DCO shipped 77 pounds and in 2009 they shipped 34 pounds to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana. On February 7, 2013, DCO reported that this waste was spent material and that the MSDS was used to characterize it. The MSDS was provided.
36. Ion Exchange Beads: This waste is generated in the waste water treatment plant. DCO reports that the beads are a filter media and they last several years. When the beads expire they are removed from the tanks and shipped to Evergreen Recycling & Disposal Facility in Northwood, Ohio.
37. Blasocut: DCO reports that this is waste cutting fluid from the pattern shop. On January 15, 2013, DCO submitted a copy of the MSDS.
38. Zep Soy: DCO reports that this waste is old material that, in the past, was used as a tool cleaner in the Lost Foam process, which has been removed from the facility.
39. Sludge From Press (D003): It is listed on manifest #009536253, dated May 22, 2012. The Tradebe waste profile #13534 describes it as oil from pattern shop. On February 7, 2013, DCO reported that this waste was generated from a grinding machine in the pattern shop. DCO must explain why this waste is considered reactive and describe the frequency of its generation.
40. Metal Cleaner Waste (D010): It is listed on manifest #009536253, dated May 22, 2012. During the inspection, and on February 7, 2013, DCO reported that metal cleaners were sprayed onto core box tooling in core machines to clean them. The waste is generated from spent material or spill cleanup.
41. Maintenance Steam Cleaning Booth Liquid: A steam cleaning booth is operated in the maintenance department. Water and soils drain to an underground tank. When the tank fills, the water is pumped out and discarded. This waste may have different characteristics than the sludge. On February 7, 2013, DCO reported that there was no difference between the steam booth liquid and sludge waste. DCO should explain how it has made this determination. On February 7, 2013, DCO also submitted a copy of the analytical summary for this waste liquid. It indicates that the liquid is hazardous for lead (D008). It appears that both the liquid and solid portions of the waste from the steam booth tank are hazardous waste.
42. Maintenance Steam Cleaning Booth Sludge (D008): Occasionally the sludge that builds up in the bottom of the tank must be cleaned out. It may also be hazardous for benzene (D018). On August 2, 2012, 1,250 pounds was shipped to Tradebe Treatment & Recycling, LLC in East Chicago, Indiana.
43. North Perimeter Area Filter Socks: In the NPA Treatment Building the leachate from the NPA is filtered through a series of three foot filter socks, activated carbon and then pH adjusted in one of two large tanks. The resulting liquid may also be run through another set of filter socks before discharge to the river.

44. Waste Oil with Trichloroethylene/Tetrachloroethylene Mix (D039 & D040): DCO does not know how this waste is generated or where it comes from in the facility. DCO must explain how this waste is generated. On February 7, 2013, DCO submitted an analytical summary that indicates the waste contains 1.3 mg/L of trichloroethene (D040).
45. Iso-Fast 705 Catalyst: It was not known at the time of the inspection what this waste is. On February 7, 2013, DCO reported that the waste was from QA/QC checks.
46. Waste Refractory: It was not known at the time of the inspection what is done with this waste.

Send to Central Office <input checked="" type="checkbox"/>	Ohio Environmental Protection Agency RCRA SUBTITLE C SITE IDENTIFICATION/VERIFICATION FORM	For Ohio EPA use only
---	---	-----------------------

Completed verification forms required to be submitted to CO should be e-mailed to RCRAInfoData@epa.state.oh.us.

Site EPA ID No. Site Name	EPA ID Number: OHD005050273		Website: (Optional)
Site Location Information	Name: General Motors Defiance casting Operations		
Site Land Type (check only one)	Street Address: 26427 St. Route 281 East		
NAICS code(s) www.census.gov/epcd/www/naics.html	City, Town, or Village: Defiance		State: OH
	County Name: Defiance		Zip Code:
	Private <input checked="" type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>
	Federal <input type="checkbox"/>	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>
	State <input type="checkbox"/>	Other <input type="checkbox"/>	
	331511	331524	

Facility Representative Additional names can be recorded in number 12 Only provide address information if it is different than the site address	First Name: Carl MI: B. Last Name: Schroeder		
	Title: Assoc. Environmental Engineer		
	Phone Number: 419-784-7514		Phone Number Extension:
	E-Mail Address: carl.schroeder@gm.com		
	Fax Number: 419-784-7267		Fax Number Extension:
	Street or P.O. Box:		
	City, Town or Village:		
	State:		Zip Code:

Legal Owner And Operator of the Site. List Additional Owners and/or Operators in the Comment Section or on another copy of this form page	Name of Site's Legal Owner: General Motors Corporation		Date Became Owner (mm/dd/yyyy): 08/23/1948	
	Owner Type:	Private <input checked="" type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>
	Federal <input type="checkbox"/>	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>	State <input type="checkbox"/>
	Other <input type="checkbox"/>	Street or P.O. Box: 300 Renaissance Center		
	City, Town or Village: Detroit		Owner Phone #: 313-556-5000	
	State: Michigan		Country: USA Zip Code: 48201	
	Name of Site's Operator: General Motors Corporation		Date Became Operator (mm/dd/yyyy): 08/23/1948	
	Operator Type:	Private <input checked="" type="checkbox"/>	County <input type="checkbox"/>	District <input type="checkbox"/>
	Federal <input type="checkbox"/>	Indian <input type="checkbox"/>	Municipal <input type="checkbox"/>	State <input type="checkbox"/>
	Other <input type="checkbox"/>	Street or P.O. Box: 300 Renaissance Center		
	City, Town or Village: Detroit		Operator Phone #: 313-556-5000	
	State: Michigan		Country: USA Zip Code: 48201	

VIOLATIONS CITED?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No
--------------------------	---

TYPE OF HANDLER - MARK "X" AS APPROPRIATE		
<input type="checkbox"/> Not a HW Generator	<input type="checkbox"/> UNKNOWN: Cited for violation of 3745-52-11	<input checked="" type="checkbox"/> Large Quantity Generator (LQG)
	<input type="checkbox"/> Short-Term/Temporary Generator (generates from a short-term or one-time event and not from on-going processes). Check the box for the applicable generator status and provide a comment.	<input type="checkbox"/> Small Quantity Generator (SQG)
		<input type="checkbox"/> Conditionally Exempt Small Quantity Generator
		<input type="checkbox"/> U.S. Importer of Hazardous Waste
		<input type="checkbox"/> Mixed Waste (Hazardous and Radioactive) Generator

TYPE OF REGULATED WASTE ACTIVITY (MARK "X" IN ALL OF THE APPROPRIATE BOXES)

<input type="checkbox"/> Hazardous Waste Transporter	<input type="checkbox"/> Exempt Boiler and/or Industrial Furnace
<input type="checkbox"/> Hazardous Waste Transfer Facility	<input type="checkbox"/> Small Quantity On-Site Burner Exemption
<input type="checkbox"/> Treater, Storer or Disposer of Hazardous Waste	<input type="checkbox"/> Smelting, Melting, Refining Furnace Exemption
<input type="checkbox"/> Recycler of Hazardous Waste	<input type="checkbox"/> Underground Injection Control Facility
<input type="checkbox"/> 72-Hour Recycler	<input type="checkbox"/> Receives Hazardous Waste from Off-site

UNIVERSAL WASTE ACTIVITIES (INDICATE TYPES OF UNIVERSAL WASTE MANAGED (CHECK ALL BOXES THAT APPLY))

<input type="checkbox"/> Small Quantity Handler of Universal Waste	<input type="checkbox"/> Destination Facility for Universal Waste
<input checked="" type="checkbox"/> Large Quantity Handler of Universal Waste (accumulates 5,000 kg. or more)	

CHECK ALL BOXES BELOW THAT APPLY FOR THE TYPES OF UNIVERSAL WASTE THE FACILITY MANAGES

<input checked="" type="checkbox"/> Batteries
<input type="checkbox"/> Pesticides
<input type="checkbox"/> Mercury containing equipment
<input checked="" type="checkbox"/> Lamps

USED OIL ACTIVITIES (INDICATE TYPE(S) OF ACTIVITY(S))

<input checked="" type="checkbox"/> Used Oil Generator
<input type="checkbox"/> Used Oil Transporter
<input type="checkbox"/> Used Oil Transfer Facility
<input type="checkbox"/> Used Oil Processor
<input type="checkbox"/> Used Oil Re-refiner
<input type="checkbox"/> Off-Specification Used Oil Burner
<input type="checkbox"/> Used Oil Fuel Marketer who directs shipment of Off-Spec Used Oil
<input type="checkbox"/> Used Oil Fuel Marketer who first claims the Used Oil meets the specifications

Eligible Academic Entities with Laboratories: Facility has previously notified that they are opting into managing laboratory hazardous waste pursuant to OAC rules 3745-52-200 through 3745-52-216. Check the box(es) below to indicate the laboratory type.

<input type="checkbox"/> College or University
<input type="checkbox"/> Teaching hospital that is owned by or has a formal written affiliation agreement with a college or university
<input type="checkbox"/> Non-profit Institute that is owned by or has a formal written affiliation agreement with a college or university

Waste Codes for Federally Regulated Hazardous Wastes: Please list the codes for the federally regulated hazardous waste handled at the site. List them in the order they are presented in the regulations (e.g., D001, D003, F007, U112). Use an additional page or list them in the comments if more space is needed. If the waste codes are the same as listed in the most recent RCRAInfo source record, you do not need to list them. Instead just indicate the date of the most recent source record.

D002	D008	D001	F003	F005	D022	D007
COMMENTS: USE THIS AREA TO DESCRIBE WHETHER THE INSPECTION WAS ANNOUNCED, WHETHER THE WASTE IS STORED IN TANKS OR CONTAINERS, ETC.						
Announced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Additional Facility Representatives:			
Tanks	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No				
Containers	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				
Name of Inspector(s) Don North	Name of Inspector(s) Brent Goetz			Date of Inspection/Time (mm/dd/yyyy) (hh:mm) 12/05/2012		
Comments: Robin Wiley and Brent Goetz accompanied me on December 5 and 10, 2012.						

**LARGE QUANTITY GENERATOR REQUIREMENTS
COMPLETE AND ATTACH A PROCESS DESCRIPTION SUMMARY**

CESQG: ≤100 Kg. (Approximately 25-30 gallons) of waste in a calendar month or < 1 Kg. of acutely hazardous waste.
 SQG: Between 100 and 1,000 Kg. (About 25 to under 300 gallons) of waste in a calendar month.
 LQG: ≥ 1,000 Kg. (~300 gallons) of waste in a calendar month or ≥1 Kg. of acutely hazardous waste in a calendar month.
 NOTE: To convert from gallons to pounds: Amount in gallons x Specific Gravity x 8.345 = Amounts in pounds.

Safety Equipment Used:

GENERAL REQUIREMENTS

1.	Have all wastes generated at the facility been adequately evaluated? [3745-52-11] Many waste streams at the facility must be sampled and analyzed to thoroughly evaluate them for all hazardous waste characteristics.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
2.	Are records of waste determination being kept for at least 3 years? [3745-52-40(C)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
3.	Has the generator obtained a U.S. EPA identification number? [3745-52-12]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
4.	Were annual reports filed with Ohio EPA on or before March 1 st ? [3745-52-41(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
5.	Are annual reports kept on file for at least 3 years? [3745-52-40(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
6.	Has the generator transported or caused to be transported hazardous waste to other than a facility authorized to manage the hazardous waste? [ORC 3734.02(F)] This is unknown at this time. OEPA will evaluate waste analyses, once provided by DCO, to determine if any hazardous wastes were shipped to a non-hazardous waste facility.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
7.	Has the generator disposed of hazardous waste on-site without a permit or at another facility other than a facility authorized to dispose of the hazardous waste? [ORC 3734.02(E)&(F)] This is unknown at this time. OEPA will evaluate waste analyses, once provided by DCO, to determine if any hazardous wastes were shipped to a non-hazardous waste facility.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.	Does the generator accumulate hazardous waste?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: If the LQG does not accumulate or treat hazardous waste, it is not subject to 52-34 standards. All other requirements still apply, e.g., annual reports, manifest, marking, record keeping, LDR, etc.

9.	Has the generator accumulated hazardous waste on-site in excess of 90 days without a permit or an extension from the director ORC §3734.02(E)&(F)? This is unknown at this time. OEPA will evaluate waste analyses, once provided by DCO, to determine if DCO stored hazardous wastes for longer than 90 days.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
----	---	---

NOTE: If F006 waste is generated and accumulated for > 90 days and is recycled see 3745-52-34(G)&(H).

10.	Does the generator treat hazardous waste in a: [ORC 3734.02(E)&(F)]	
a.	Container that meets 3745-66-70 to 3745-66-77?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Tank that meets 3745-66-90 to 3745-66-100 except 3745-66-97(C)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Drip pads that meet 3745-69-40 to 3745-69-45?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
d.	Containment building that meets 3745-256-100 to 3745-256-102?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Complete appropriate checklist for each unit.

NOTE: If waste is treated to meet LDRs, use LDR checklist.

11.	Does the generator export hazardous waste? If so:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
-----	---	--

a.	Has the generator notified U.S. EPA of export activity? [3745-52-53(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Has the generator complied with special manifest requirements? [3745-52-54]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	For manifests that have not been returned to the generator: has an exception report been filed? [3745-52-55]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
d.	Has an annual report been submitted to U.S. EPA? [3745-52-56]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
e.	Are export related documents being maintained on-site? [3745-52-57(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

MANIFEST REQUIREMENTS

12.	Have all hazardous wastes shipped off-site been accompanied by a manifest? (U.S. EPA Form 8700-22) [3745-52-20(A)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
13.	Have items (1) through (20) of each manifest been completed? [3745-52-20(A)(1)]&[3745-52-27(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: U.S. EPA Form 8700-22(A) (the continuation form) may be needed in addition to Form 8700-22. In these situations items (21) through (35) must also be completed. [3745-52-20(A)(1)]

14.	Does each manifest designate at least one facility which is permitted to handle the waste? [3745-52-20(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
-----	--	--

NOTE: The generator may designate on the manifest one alternate facility to handle the waste in the event of an emergency which prevents the delivery of waste to the primary designated facility. [3745-52-20(C)]

15.	If the transporter was unable to deliver a shipment of hazardous waste to the designated facility, did the generator designate an alternate TSD facility or give the transporter instructions to return the waste? [3745-52-20(D)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
16.	Have the manifests been signed by the generator and initial transporter? [3745-52-23(A)(1)&(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: Remind the generator that the certification statement they signed indicates: 1) they have properly prepared the shipment for transportation and 2) they have a program in place to reduce the volume and toxicity waste they generate.

17.	If the generator received a rejected load or residue, did the generator:	
a.	Sign item 20 of the new manifest or item 18c of the original manifest? [3745-52-23(F)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Provide the transporter a copy of the manifest? [3745-52-23(F)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Send a copy of the manifest to the designated facility that returned the shipment with 30 days after delivery of the rejected shipment? [3745-52-23(F)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

18.	If the generator did not receive a return copy of each completed manifest within 35 days of the waste being accepted by the transporter, did the generator contact the transporter and/or TSD facility to check on the status of the waste? [3745-52-42(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
-----	--	--

19.	If the generator has not received the manifest within 45 days, did the generator file an exception report with Ohio EPA? [3745-52-42(A)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
-----	---	--

20.	Are signed copies of all manifests and any exception reports being retained for at least three years? [3745-52-40]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
-----	--	--

NOTE: A generator who sends a shipment of hazardous waste to a TSD facility with the understanding that the TSD facility can accept and manage the waste and later receives that shipment back as a rejected load or residue may accumulate the waste on-site for <90 days or <180 days depending on the amount of hazardous waste on-site in that calendar month. [3745-52-34(M)]

NOTE: Waste generated at one location and transported along a publicly accessible road for temporary consolidated storage or treatment on a contiguous property also owned by the same person is not considered "on-site" and manifesting and transporter requirements must be met. To transport "along" a public right-of-way the destination facility has to act as a transfer facility or have a permit because this is considered to be "off-site." For additional information see the definition of "on-site" in OAC rule 3745-50-10.

PERSONNEL TRAINING

21.	Does the generator have a training program which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to their positions? [3745-65-16(A)(2)] Training program is not complete and must be revised.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
22.	Does the personnel training program, at a minimum, include instructions to ensure that facility personnel are able to respond effectively to emergencies involving hazardous waste by familiarizing them with emergency procedures, emergency equipment and emergency systems (where applicable)? [3745-65-16(A)(3)] Training program is not complete and must be revised.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
NOTE: For facility employees that receive emergency response training pursuant to OSHA regulations, the facility is not required to provide separate emergency response training, provided that the overall facility training meets all the requirements of OAC 3745-65-16(A). [3745-65-16(A)(4)]														
23.	Is the personnel training program directed by a person trained in hazardous waste management procedures? [3745-65-16(A)(2)] Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
24.	Do new employees receive training within six months after the date of hire (or assignment to a new position)? [3745-65-16(B)] Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
25.	Does the generator provide refresher training to employees during each period from January 1 st to December 31 st and does each training occur within 15 months after the previous training? [3745-65-16(C)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
26.	Does the generator keep records and documentation of:													
a.	Job titles? [3745-65-16(D)(1)] DCO did not provide all the job titles.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
b.	Job descriptions? [3745-65-16(D)(2)] DCO did not provide job descriptions.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
c.	Type and amount of training given to each person? [3745-65-16(D)(3)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
d.	Completed training or job experience required? [3745-65-16(D)(4)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
27.	Are training records for current personnel kept until closure of the facility and are training records for former employees kept for at least three years from the date the employee last worked at the facility? [3745-65-16(E)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
NOTE: The following section can be used by the inspector to document that all personnel who are involved with hazardous waste management have been trained. The employees who need training (written and/or on-the-job) may include the following: environmental coordinators, drum handlers, emergency coordinators, personnel who conduct hazardous waste inspections, emergency response teams, personnel who prepare manifest, etc.														
<table border="1"> <thead> <tr> <th>Job Performed</th> <th>Name of Employee</th> <th>Date Trained</th> </tr> </thead> <tbody> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> <tr> <td> </td> <td> </td> <td> </td> </tr> </tbody> </table>			Job Performed	Name of Employee	Date Trained									
Job Performed	Name of Employee	Date Trained												
CONTINGENCY PLAN														
28.	Does the owner/operator have a contingency plan to minimize hazards to human health or the environment from fires, explosions or any unplanned release of hazardous waste? [3745-65-51(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
29.	Does the plan describe the following:													
a.	Actions to be taken in response to fires, explosions or any unplanned release of hazardous waste? [3745-65-52(A)] Contingency plan is not complete and must be revised.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>												
b.	Arrangements with emergency authorities? [3745-65-52(C)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												
c.	A current list of names, addresses and telephone numbers (office and home) of all persons qualified to act as emergency coordinator? [3745-65-52(D)] At the time of the inspections the list was accurate. However, OEPA is now aware that one of the emergency coordinators has changed and this list must be revised.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>												

d.	A list of all emergency equipment, including: location, a physical description and brief outline of capabilities? [3745-65-52(E)] The list is not complete and must be revised.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
e.	An evacuation plan for facility personnel where there is possibility that evacuation may be necessary? [3745-65-52(F)] The plan is not complete and must be revised.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>

NOTE: If the facility already has a "Spill Prevention, Control and Countermeasures Plan" under 40 CFR Part 112 or some other emergency plan, the facility can amend that plan to incorporate hazardous waste management provisions that are sufficient to comply with OAC requirements. The facility may develop one contingency plan which meets all regulatory requirements. Ohio EPA recommends that the plan be based on the "National Response Team's Integrated Contingency Plan Guidance (One Plan)." [3745-65-52(B)]

30.	Is a copy of the plan (plus revisions) kept on-site and been given to all emergency authorities that may be requested to provide emergency services? [3745-65-53(A)&(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
31.	Has the generator revised the plan in response to rule changes, facility, equipment and personnel changes, or failure of the plan? [3745-65-54] At the time of the inspections the list of emergency coordinators was accurate. However, OEPA is now aware that one of the emergency coordinators has changed and this list must be revised.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
32.	Is an emergency coordinator available at all times (on-site or on-call)? [3745-65-55]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: The emergency coordinator shall be thoroughly familiar with: (a) all aspects of the facility's contingency plan; (b) all operations and activities at the facility; (c) the location and characteristics of waste handled; (d) the location of all records within the facility; (e) facility layout; and (f) shall have the authority to commit the resources needed to implement provisions of the contingency plan.

EMERGENCY PROCEDURES

33.	Has there been a fire, explosion or release of hazardous waste or hazardous waste constituents since the last inspection? If so: Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
a.	Was the contingency plan implemented? [3745-65-51(B)] Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
b.	Did the facility follow the emergency procedures in 3745-65-56(A) through (H)? Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
c.	Did the facility submit a report to the Director within 15 days of the incident as required by 3745-65-56(l)? Not know at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: OAC 3745-65-51(B) requires that the contingency plan be implemented immediately whenever there is a fire, explosion, or release of hazardous waste or hazardous waste constituents, which could threaten human health and the environment.

PREPAREDNESS AND PREVENTION

34.	Is the facility operated to minimize the possibility of fire, explosion, or any unplanned release of hazardous waste? [3745-65-31] This is unknown at this time. OEPA will evaluate waste analyses, once provided by DCO, to determine if DCO is or is not operated in a manner that minimizes the possibility of releases of hazardous waste.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
35.	Does the generator have the following equipment at the facility, if it is required due to actual hazards associated with the waste:	
a.	Internal communications or alarm system? [3745-65-32(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
b.	Emergency communication device? [3745-65-32(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
c.	Portable fire control, spill control and decon equipment? [3745-65-32(C)] Although DCO must demonstrate where it is located and how much it has in storage or available.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
d.	Water of adequate volume/pressure per documentation or facility rep? [3745-65-32(D)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: Verify that the equipment is listed in the contingency plan.

36.	Is emergency equipment tested (inspected) as necessary to ensure its proper operation in time of emergency? [3745-65-33]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
37.	Are emergency equipment tests (inspections) recorded in a log or summary? [3745-65-33]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
38.	Do personnel have immediate access to an internal alarm or emergency communication device when handling hazardous waste (unless the device is not required under 3745-65-32)? [3745-65-34(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
39.	If there is only one employee on the premises, is there immediate access to a device (eg. phone, hand held two-way radio) capable of summoning external emergency assistance (unless not required under 3745-65-32)? [3745-65-34(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
40.	Is adequate aisle space provided for unobstructed movement of emergency or spill control equipment? [3745-65-35]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
41.	Has the generator attempted to familiarize emergency authorities with possible hazards and facility layouts? [3745-65-37(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
42.	Where authorities have declined to enter into arrangements or agreements, has the generator documented such a refusal? [3745-65-37(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

SATELLITE ACCUMULATION AREA REQUIREMENTS

43.	Does the generator ensure that satellite accumulation area(s):	
	a.	Are at or near a point of generation? [3745-52-34(C)(1)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	b.	Are under the control of the operator of the process generating the waste? [3745-52-34(C)(1)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	c.	Do not exceed a total of 55 gallons of hazardous waste per waste stream? [3745-52-34(C)(1)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	d.	Do not exceed one quart of acutely hazardous waste at any one time? [3745-52-34(C)(1)]
		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	e.	Containers are closed, in good condition and compatible with wastes stored in them? [3745-52-34(C)(1)(a)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	f.	Containers are marked with words "Hazardous Waste" or other words identifying the contents? [3745-52-34(C)(1)(b)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
44.	Is the generator accumulating hazardous waste(s) in excess of the amounts listed in the preceding question? If so:	
	a.	Did the generator comply with 3745-52-34(A)(1) through (4) or other applicable generator requirements within three days? [3745-52-34(C)(2)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	b.	Did the generator mark the container(s) holding excess with the accumulation date when the 55 gallon (one quart) limit was exceeded? [3745-52-34(C)(2)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: The satellite accumulation area is limited to 55 gallons of hazardous waste accumulated from a distinct point of generation in the process under the control of the operator of the process generating the waste (less than 1 quart for acute hazardous waste). There could be individual waste streams accumulated in an area from different points of generation.

USE AND MANAGEMENT OF CONTAINERS IN <90 DAY ACCUMULATION AREAS

45.	Has the generator marked containers with the words "Hazardous Waste?" [3745-52-34(A)(3)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
46.	Is the accumulation date on each container? [3745-52-34(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
47.	Are hazardous wastes stored in containers which are:	
	a.	Closed (except when adding/removing wastes)? [3745-66-73(A)]
		Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

b.	In good condition? [3745-66-71]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
c.	Compatible with wastes stored in them? [3745-66-72]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
d.	Handled in a manner which prevents rupture/leakage? [3745-66-73(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: Record location on process summary sheets, photograph the area, and record on facility map.

48.	Is the container accumulation areas(s) inspected at least once during the period from Sunday to Saturday? [3745-66-74] The roll-off storage area is not inspected.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
a.	Are inspections recorded in a log or summary? [3745-66-74] The roll-off storage area is not inspected.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
49.	Are containers of ignitable or reactive wastes located at least 50 feet (15 meters) from the facility's property line? [3745-66-76]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
50.	Are containers of incompatible wastes stored separately from each other by means of a dike, berm, wall or other device? [3745-66-77(C)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
51.	If the generator places incompatible wastes, or incompatible wastes and materials in the same container, is it done in accordance with 3745-65-17(B)? [3745-66-77(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
52.	If the generator places hazardous waste in an unwashed container that previously held an incompatible waste, is it done in accordance with 3745-65-17(B)? [3745-66-77(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: OAC 3745-65-17(B) requires that the generator treat, store, or dispose of ignitable or reactive waste, and the mixture or commingling of incompatible wastes, or incompatible wastes and materials so that it does not create undesirable conditions or threaten human health or the environment.

53.	If the generator has closed a <90 day accumulation area does the closure appear to have met the closure performance standard of 3745-66-11? [3745-52-34(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
-----	--	--

NOTE: Please provide a description of the unit and documentation provided by the generator for the file to demonstrate that closure was completed in accordance with the closure performance standards. If the generator has closed a <90 day tank, closure must also be completed in accordance with OAC 3745-66-97 (except for paragraph C of this rule). [3745-52-34]

PRE-TRANSPORT REQUIREMENTS

54.	Does the generator package/label its hazardous waste in accordance with the applicable DOT regulations? [3745-52-30, 3745-52-31 and 3745-52-32(A)] This is not known at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
55.	Does each container ≤119 gallons have a completed hazardous waste label? [3745-52-32(B)] This is not known at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
56.	Before off-site transportation, does the generator placard or offer the appropriate DOT placards to the initial transporter? [3745-52-33] This is not known at this time.	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: Continue with the generator LDR requirements on the next page.

GENERATOR LDR REQUIREMENTS

NOTE: This LDR checklist does not include the requirements for generators that treat to meet LDR standards. If the generator treats, the inspector should use the stand-alone Generator LDR checklist instead of this checklist.

GENERAL REQUIREMENTS

1.	If LDRs do not apply, does the generator have a statement that lists how the HW was generated, why LDRs don't apply and where the HW went? [3745-270-07(A)(7)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
2.	Did the generator determine if the HW/soil must be treated to meet the LDR treatment standard prior to disposal? Generator knowledge or testing may be used. [3745-270-07(A)(1)] If not,	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
a.	Did the generator send the waste to a permitted HW TREATMENT facility? [3745-270-07(A)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

NOTE: This is done by determining if the HW/soil contains levels of constituents greater than the levels given in its LDR treatment standard in 3745-270-40. However, if a specific treatment method is given in 3745-270-40 for the HW, no determination is required [3745-270-07(A)(1)(b)]. If soil, generator can choose to have soil treated to LDR levels given in 3745-270-49 (alternative treatment levels for soils).

3.	Does the generator have documentation of how he determined whether the HW/soil meets or does not meet the LDR treatment standard in 2, above? [3745-270-07(A)(6)(a) or 3745-270-07(A)(6)(b)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
4.	Does the generator keep the documentation required in #2, above, on-site for at least three years from the last date the HW/soil was sent on-site/off-site for treatment/disposal? [3745-270-07(A)(8)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
5.	Does the generator generate a listed HW that exhibits a characteristic? If yes, Paint related waste	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
a.	Did the generator determine if the listed HW exhibits a characteristic that is not treated under the LDR treatment standard for the listed HW? [3745-270-09(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

FOR EXAMPLE: F006 that exhibits the characteristic for silver or K062 that is corrosive, D002. Review LDR treatment standard in 3745-270-40 to determine what constituents the listed HW is treated for.

6.	Did the generator determine if its characteristic HW contains underlying hazardous constituents that need to be treated? [3745-270-09(A)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
----	---	--

NOTE: This is done by evaluating which underlying hazardous constituents (UHC) are in the HW at levels above the universal treatment standards given in 3745-270-48. This requirement does not apply to high total organic carbon (i.e., contains >10% TOC) D001 wastes or listed HWs.

NOTE: Written documentation of this determination is not required.

7.	Did the generator treat his HW /soil on-site to meet the LDR treatment standard?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
----	--	--

NOTE: If "Yes" see question #16.

8.	Did the generator send a one-time LDR notification form to the TSD with the first shipment to that facility? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
a.	If the generator chose not to make the determination of whether his waste must be treated, did he send a notice to the TSD facility with each shipment? [3745-270-07(A)(2)] If so, did the notice include:	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
i.	Applicable HW codes?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
ii.	Manifest number of the first shipment to the TSD?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
iii.	A statement that conveys that the HW may or may not be subject to the LDR treatment standards and the TSD must make that determination.?"	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
9.	Did the generator resubmit the LDR notification form to the TSD when the HW changed or the generator used a new TSD? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
10.	Does the generator have a copy of the LDR notification form/notice on file?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

	[3745-270-07(A)(2)]		
a.	Is the form/notice kept on file for three years after last HW shipped? [3745-270-07(A)(8)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
NOTIFICATION FORM			
11.	Does the LDR Notification form contain the following information:		
a.	Manifest number of the first waste shipment to the TSD? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
b.	Applicable waste codes (includes characteristic codes for a listed HW if applicable)? [3745-270-07(A)(2)] However, many waste streams at the facility must be sampled and analyzed to thoroughly evaluate them for all hazardous waste characteristics. So applicable waste codes may change in the future.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
c.	A statement that conveys that the HW is subject to LDRs and must be treated to meet LDR treatment requirements? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
d.	A designation whether the HW is a wastewater or non-wastewater? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
NOTE: A wastewater contains <1% by wt. total suspended solids (TSS) and <1% by wt. TOC. If you doubt the HW is a wastewater or non-wastewater, the HW can be tested using for example, Standard Methods (SM) 160.2 for TSS, SW-846 method 9060a for TOC.			
e.	Designation of the waste subcategory when applicable? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
NOTE: Subcategories are found on the LDR treatment standards table under the applicable waste code. Not all HWs have subcategories			
f.	A listing of the underlying hazardous constituents for which a characteristic waste must be treated? [3745-270-07(A)(2)] However, many waste streams at the facility must be sampled and analyzed to thoroughly evaluate them for all hazardous waste characteristics. The listings may need to be changed then.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
NOTE: Not required if the waste is high TOC D001 or the TSD tests its treatment residues for all underlying hazardous constituents.			
g.	If the HW is F001-F005 or F039, did the generator note on the LDR form what solvents or constituents, respectively, the waste contains and must be treated for? [3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>	
NOTE: Not required if the TSD tests its treatment residues for all underlying hazardous constituents.			
PROHIBITED DILUTION			
12.	Is the HW treated by burning? If "No" go to #15.	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>	
13.	Is the HW a metal-bearing HW?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>	
NOTE: Generally, metal-bearing HWs contain heavy metals above TCLP levels or were listed due to the presence of metals. A list of the restricted metal-bearing HWs is given in the Appendix to 3745-270-03.			
14.	a.	Metal-bearing HWs cannot be incinerated, combusted or, blended and burned for fuel unless one of the following conditions apply. [3745-270-03(c)]	
	i.	Contains > 1% TOC?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	ii.	Contains organic constituents or cyanide at levels greater than the UTS levels?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	iii.	Is made up of combustible material e.g., paper, wood, plastic?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

	iv.	Has a reasonable heating value (e.g., > 5000 Btu)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	v.	Co-generated with a HW that must be combusted?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	b.	If all responses to 14 a.i. through 14 a.v. are "No", HW is being improperly treated by dilution, violation of 3745-270-03(C). Is HW being treated by dilution?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
15.		Was the HW treated by wastewater treatment?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	a.	Is a LDR treatment method, other than DEACT or a numerical value, specified for the waste? [3745-270-03(B) and 3745-270-40(A)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<i>NOTE: If "Yes", HW is improperly being treated by dilution.</i>			
	b.	Does the waste carry the D001 code <u>and</u> contain $\geq 10\%$ TOC?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	c.	Does the wastewater treatment process include a process to separate/recover the organic phase of the waste?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<i>NOTE: If the answers to b & c are "yes" and "no", respectively, waste is improperly being treated by dilution and generator is in violation of [3745-270-03(B)] and 3745-270-40(A)(3)].</i>			
<i>NOTE: A list of separation/recovery processes are given in 3745-270-42 under RORG.</i>			

**USED OIL INSPECTION CHECKLIST
GENERATORS, COLLECTION CENTERS AND AGGREGATION POINTS**

NOTE: A facility is subject to the federal SPCC regulations (40 CFR 112) if it is non-transportation related (e.g., fixed) and has an aggregate above ground storage capacity greater than 1,320 gallons or a total underground storage capacity greater than 42,000 gallons of oil (including used oil), and there is reasonable expectation of a discharge to navigable waters.

PROHIBITIONS

1.	Does the generator manage used oil in a surface impoundment or waste pile? If yes:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
a.	Is the surface impoundment or waste pile regulated as a hazardous waste management unit? [3745-279-12(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: For example, used oil contaminated scrap metal stored in a pile.

2.	Is used oil used as a dust suppressant? [3745-279-12(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
3.	Is off-specification used oil fuel burned for energy recovery in devices specified in 3745-279-12(C)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Multiple used oil checklists may be applicable if used oil handler is performing multiple tasks (e.g., if generating used oil and shipping directly to a burner, complete generator and marketer checklists at a minimum).

GENERATOR STANDARDS

4.	Does the generator mix hazardous waste with used oil? If so,	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
a.	Is the mixture managed as specified in 3745-279-10(B)? [3745-279-21(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Used Oil mixed with listed (3745-51-30 to 3745-51-35) or characteristic (3745-51-20 to 3745-51-24) hazardous waste are subject to regulation as a hazardous waste, unless the listed hazardous waste is listed solely because it exhibits a hazardous characteristic, and the resultant mixtures do not exhibit a characteristic. Mixtures of used oil and CESQG hazardous waste are subject to OAC Chapter 3745-279.

5.	Does the generator of a used oil containing greater than 1,000 ppm total halogens manage the used oil as a hazardous waste unless the presumption is rebutted successfully? [3745-279-21(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
----	--	--

NOTE: If used oil contains greater than 1000 ppm total halogens, it is presumed to be listed hazardous waste until the presumption is successfully rebutted.

6.	Does the generator store used oil in tanks; or containers; or a unit(s) subject to regulation as a hazardous waste management unit? [3745-279-22(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
7.	Are containers and aboveground tanks used to store used oil in good condition with no visible leaks? [3745-279-22(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
8.	Are containers, above ground tanks, and fill pipes used for underground tanks clearly labeled or marked "Used Oil?" [3745-279-22(C)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
9.	Has the generator, upon detection of a release of used oil, done the following: [3745-279-22(D)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
a.	Stopped the release?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Contained the release?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Cleaned up and properly managed the used oil and other materials?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
d.	Repaired or replaced the containers or tanks prior to returning them to service, if necessary?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

ON-SITE BURNING IN SPACE HEATER

10.	Does the generator burn used oil in used-oil fired space heaters? [3745-279-23] If so:	
a.	Does the heater burn only used oil that owner/operator generates or used oil received from household do-it-yourself (DIY) used oil generators?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

b.	Is the heater designed to have a maximum capacity of not more than 0.5 million BTU per hour?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Are the combustion gases from heater vented to the ambient air?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Ash accumulated in a space heater must be managed in accordance with 3745-279-10(E).

GENERATOR TRANSPORTATION

11.	Does the generator have the used oil hauled only by transporters that have obtained a U.S. EPA ID#? [3745-279-24]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
12.	If the generator self-transported used oil to an approved collection site or to an aggregation point owned by the generator: [3745-279-24]	
a.	Does the generator transport used oil in a vehicle owned by the generator or an employee of the generator? [3745-279-24]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Does the generator transport more than 55 gallons of used oil at any time? [3745-279-24]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Used oil generators may arrange for used oil to be transported by a transporter without a U.S. EPA ID # if the used oil is reclaimed under a contractual agreement (i.e., tolling arrangement).

COLLECTION CENTERS AND AGGREGATION POINTS

13.	Is the DIY used oil collection center in compliance with the generator standards in 3745-279-20 to 3745-279-24? [3745-279-30]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
14.	Is the non-DIY used oil collection center registered with Ohio EPA? [3745-279-31]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
15.	Is the used oil aggregation point in compliance with the generator standards in 3745-279-20 to 3745-279-24? [3745-279-32]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

NOTE: Complete Used Oil Generator and any other applicable used oil handler checklist (e.g., marketer, burner, etc.) for used oil collection centers and aggregation points.

LARGE QUANTITY UNIVERSAL WASTE HANDLER REQUIREMENTS – BATTERIES AND LAMPS		
Large Quantity Universal Waste Handler (LQUWH) = 5,000 Kg or more		
Small Quantity Universal Waste Handler (SQUWH) = 5,000 Kg or less		
GENERAL REQUIREMENTS		
1.	Has the LQUWH obtained a U.S. EPA Identification number before exceeding 5,000 kg limit? [3745-273-32(A)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
PROHIBITIONS		
2.	Did the LQUWH dispose of universal waste? [3745-273-31(A)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
3.	Did the LQUWH dilute or treat universal waste, except when responding to releases as provided in OAC rule 3745-273-37 or managing specific wastes as provided in OAC rule 3745-273-33? [3745-273-31(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
WASTE MANAGEMENT AND LABELING/MARKING		
UNIVERSAL WASTE BATTERIES		
4.	Are batteries that show evidence of leakage, spillage or damage that could cause leaks contained? [3745-273-33(A)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
5.	If the batteries are contained, are the containers closed, structurally sound, compatible with the contents of the battery and lack evidence of leakage, spillage or damage that could cause leakage? [3745-273-33(A)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
6.	Are the casings of the batteries breached, not intact, or open (except to remove the electrolyte)? [3745-273-33(A)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
7.	If the electrolyte is removed or other wastes generated, has it been determined whether the electrolyte or other wastes exhibit a characteristic of a hazardous waste? [3745-273-33(A)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
a.	If the electrolyte or other waste is characteristic, is it managed in compliance with OAC Chapters 3745-50 through 3745-69? [3745-273-33(A)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	If the electrolyte or other waste is not hazardous, is it managed in compliance with applicable law? [3745-273-33(A)(3)(b)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
8.	Are the batteries or containers of batteries labeled with the words "Universal Waste - Batteries" or "Waste Battery(ies)" or "Used Battery(ies)"? [3745-273-34(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
UNIVERSAL WASTE LAMPS		
9.	Does the LQUWH contain lamps in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with contents of the lamps? Are containers or packages closed and do they lack evidence of leakage, spillage or damage that could cause leakage? [3745-273-33(D)(1)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
10.	Are lamps that show evidence of breakage, leakage or damage that could cause a release of mercury or hazardous constituents into the environment immediately cleaned up? Are they placed into a container that is closed, structurally sound, compatible with the contents of the lamps; and lack evidence of leakage, spillage or damage that could cause leakage or releases of mercury or hazardous constituents to the environment? [3745-273-33(D)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<p>NOTE: Treatment (such as crushing) by a UWH is prohibited under this rule unless the facility is permitted for such activities [3745-273-31(B)]. A generator crushing lamps must manage lamps according to hazardous waste rules (OAC Chapter 3745-52). Lamp crushing is a form of generator treatment (OAC rule 3745-52-34). Crushed lamps must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility using a hazardous waste manifest.</p>		
11.	Are the lamps or containers or packages of lamps labeled with the words "Universal Waste - Lamp(s)" or "Waste Lamp(s)" or "Used Lamps?" [3745-273-34(E)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
ACCUMULATION TIME		
12.	Is the waste accumulated for less than one year? [3745-273-35(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

	a.	If not, is the waste accumulated over one year in order to facilitate proper recovery, treatment or disposal? (Burden of proof is on the handler to demonstrate) [3745-273-35(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<i>NOTE: Accumulation is defined as date generated or date received from another handler.</i>			
13.		Is the handler able to demonstrate the length of time the universal waste has been accumulated? [3745-273-35(C)] If yes, describe below:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
EMPLOYEE TRAINING			
14.		Are employees thoroughly familiar with universal waste handling/emergency procedures, relative to their responsibilities? [3745-273-36] Only maintenance employees handle universal wastes.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
RESPONSE TO RELEASES			
15.		Are releases of universal waste and other residues immediately contained? [3745-273-37(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
16.		Is the material released characterized? [3745-273-37(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
17.		If the material released is a hazardous waste, was it managed as required in OAC Chapters 3745-50 through 3745-69? (If the waste is hazardous, the handler is considered the generator of the waste and is subject to OAC Chapter 3745-52) [3745-273-37(C)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
OFF-SITE SHIPMENTS			
<i>NOTE: If a LQUWH self-transportes wastes, then the handler must comply with the Universal Waste transporter requirements.</i>			
18.		Are universal wastes sent to either another handler, destination facility or foreign destination? [3745-273-38(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
19.		Is the handler aware of DOT requirements for packaging and shipping? If not, make aware of 40 CFR 171-180.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
20.		Prior to shipping universal waste off-site, does the originating handler ensure that the receiver agrees to receive the shipment? [3745-273-38(D)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
21.		Has the originating handler ever had an off-site shipment rejected by another handler of destination facility?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	a.	If yes, did the originating handler receive the waste back or agree to where shipment was sent? [3745-273-38(E)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
22.		If a handler rejects a partial or full load from another handler, does the receiving handler contact the originating handler to discuss and do <u>one of the following</u> :	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	a.	Send the waste back to the originating handler or send the shipment to a destination facility (If both the originating and receiving handler agree)? [3745-273-38(F)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
23.		If the handler received a shipment of hazardous waste that was not a universal waste, did the LQUWH immediately notify Ohio EPA? [3745-273-38(G)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
TRACKING UNIVERSAL WASTE SHIPMENTS			
24.		Are universal wastes received from another handler? If so:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
	a.	Is a record (log, invoice, manifest, bill of lading, or other shipping document) of each shipment kept? [3745-273-39(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

25.	Does the record include the following:		
	a.	Name and address of the originating handler or foreign shipper? [3745-273-39(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	b.	Quantity of each type of universal waste? [3745-273-39(A)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	c.	Date received? [3745-273-39(A)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
26.	Is universal waste shipped to another handler? If so:		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	a.	Is a record of each shipment kept? [3745-273-39(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
27.	Does the record include the following?		
	a.	Name and address of universal waste handler, destination facility, or foreign destination? [3745-273-39(B)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	b.	Quantity of each type of universal waste? [3745-273-39(B)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	c.	Date shipped? [3745-273-39(B)(3)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
28.	Are records kept for three years? [3745-273-39(C)(1)&(2)]		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
EXPORTS			
29.	Is waste being sent to a foreign destination? If so:		Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	a.	Does the large quantity handler comply with primary exporter requirements in OAC rules 3745-52-53, 3745-52-56 and 3745-52-57? [3745-273-40(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	b.	Is waste exported only upon consent of the receiving country and in conformance with the U.S. EPA "Acknowledgment of Consent" as defined in OAC rules 3745-52-50 to 3745-52-57? [3745-273-40(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
	c.	Is a copy of the U.S. EPA "Acknowledgment of Consent" provided to the transporter? [3745-273-40(C)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>