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State of Ohio Environmental Protection Agency

STREET ADDRESS:

Central District Office

MAILING ADDRESS:

Lazarus Government Center  
50 W. Town St., Suite 700  
Columbus, Ohio 43215

TELE: (614) 728-3778 FAX: (614) 728-3898  
www.epa.state.oh.us

P.O. Box 1049  
Columbus, OH 43216-1049

July 23, 2009

Mr. Douglas G. Anderson  
Abrasive Technology, Inc.  
8400 Green Meadows Drive  
P.O. Box 545  
Lewis Center, OH 43035

Re: **Abrasive Technology, Inc.**  
**Large Quantity Generator**  
**U.S. EPA ID#: OHD981784648**  
**Delaware County, CDO**  
**NOV**

Dear Mr. Anderson:

On July 16, 2009, I inspected Abrasive Technology's facility in Lewis Center, Ohio, to determine its compliance with Ohio's hazardous waste laws and rules as found in Chapter 3734. of the Ohio Revised Code (ORC) and Chapter 3745. of the Ohio Administrative Code (OAC). At the time of my inspection, Abrasive Technology was operating as a large quantity generator (LQG) of hazardous waste and a small quantity handler of universal waste.

I found the following violations of Ohio's hazardous waste rules. In order to correct these violations, you must do the following and send me the required information **within 30 days** of your receipt of this letter (unless otherwise specified):

1. **OAC Rule 3745-52-34(A)(2), Accumulation time of hazardous waste:** The date upon which each period of accumulation and/or treatment begins must be clearly marked and visible for inspection on each container.

At the time of the inspection, five drums of spent sulfuric and hydrochloric acid were being accumulated in the waste treatment room prior to being treated in the facility's on-site wastewater treatment system. These drums were not marked with an accumulation start date.

Ted Strickland, Governor  
Lee Fisher, Lieutenant Governor  
Chris Korleski, Director

- Abrasive Technology must mark an accumulation start date on each container and submit photographic documentation to me **within 30 days** of receipt of this letter to demonstrate compliance with this rule.
- 2. **OAC Rule 3745-52-34(A)(3), Accumulation time of hazardous waste:** While being accumulated and/or treated on site, each container and tank must be labeled or marked clearly with the words "Hazardous Waste."

At the time of the inspection, five drums of spent sulfuric and hydrochloric acid were being accumulated in the waste treatment room prior to being treated in the facility's on-site wastewater treatment system. These drums were not labeled or marked clearly with the words "Hazardous Waste."

- Abrasive Technology must label each container with the words "Hazardous Waste" and submit photographic documentation to me **within 30 days** of receipt of this letter to demonstrate compliance with this rule.
- 3. **OAC Rule 3745-270-07(A)(7), Testing, tracking, and recordkeeping requirements for generators, treaters, and disposal facilities:** If a generator determines that he is managing a prohibited waste that is excluded from the definition of hazardous waste or waste, or is exempt from regulation as a hazardous waste under rules 3745-51-02 to 3745-51-06 of the Administrative Code subsequent to the point of generation, he must place in the generator's files a one-time notice describing such generation, subsequent exclusion from the definition of hazardous waste or waste or exemption from regulation as hazardous waste, and the disposition of the waste.

During the E-bonding process, Abrasive Technology generates spent sulfuric and hydrochloric acid (D002), which are treated within the on-site wastewater treatment system and then subsequently discharged to the POTW. Thus, once this waste enters the wastewater treatment system, it is excluded from regulation. Abrasive Technology did not have a one-time notice in its files to satisfy the requirements of OAC Rule 3745-270-07(A)(7).

- Abrasive Technology must prepare a one-time notice for the spent sulfuric and hydrochloric acid that describes how the waste is generated (from E-bonding), subsequent exclusion from regulation (waste is treated in the wastewater treatment system and then discharged to POTW subsequent to the point of generation), and the disposition of the waste (treated and discharged to POTW). Abrasive Technology must place this notice in its files and also submit a copy to me **within 30 days** of your receipt of this letter.

4. **OAC Rule 3745-66-74, Inspections:** The owner or operator must inspect areas where containers are stored, at least weekly, 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.

At the time of my inspection, Abrasive Technology did not have any documentation demonstrating that the required weekly inspections of hazardous waste containers were being completed in accordance with OAC Rule 3745-66-74.

- To return to compliance, Abrasive Technology must record weekly inspections of containers in an inspection log or summary. Please send a copy of the inspection log, summary, or checklist to me **within 30 days** of receipt of this letter. Please submit a month's worth of completed checklists to me **within 45 days** of receipt of this letter. An example LQG inspection log is available at: <http://www.epa.state.oh.us/dhwm/pdf/lqglog.PDF>.

5. **OAC Rule 3745-65-33, Testing and maintenance of equipment:** 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.

At the time of my inspection, Abrasive Technology did not have any documentation demonstrating that the required inspections of emergency equipment (e.g., spill response kits) were being completed in accordance with OAC Rule 3745-65-33.

- To return to compliance, Abrasive Technology must record inspections of emergency equipment in an inspection log or summary. Please send a copy of the inspection log, summary, or checklist to me **within 30 days** of receipt of this letter.

6. **OAC Rule 3745-65-54(C), Amendment of contingency plan:** The contingency plan must be reviewed, and immediately amended, if necessary, whenever (A) applicable rules are revised; (B) the contingency plan fails in an emergency; (C) the facility changes- in its design, construction, operation, maintenance, or other circumstances- in a way that materially increases the potential for fires, explosions, or releases of hazardous waste or hazardous constituents, or changes the response necessary in an emergency; (D) the list of emergency coordinators changes; or (E) the list of emergency equipment changes.

Abrasive Technology has not updated its contingency plan since 2004. For example, the emergency coordinators are not up-to-date.

- To return to compliance, Abrasive Technology must update its contingency plan to ensure that it accurately reflects current facility operations and personnel (emergency coordinators) at the facility. Please also ensure that your current contingency plan contains all of the required information listed in OAC Rules 3745-65-50 through 3745-65-56. All revisions to the plan are to be maintained at the facility and submitted to all local police departments, hospitals, and Ohio EPA and local emergency response teams, that may be requested to provide emergency services. Please update the facility's contingency plan and send a copy to me to demonstrate compliance with this rule **within 30 days** of receipt of this letter.

7. **OAC Rule 3745-65-16(A) through (C), Personnel Training:** A LQG must have a training program which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to their positions.

Abrasive Technology does not have a training program which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to their positions.

- To return to compliance, Abrasive Technology must develop and implement a personnel training program in accordance with OAC Rule 3745-65-16. The program must be directed by a person trained in hazardous waste management procedures, and must include instruction which teaches facility personnel hazardous waste management procedures, including contingency plan implementation, relevant to the positions in which they are employed [OAC Rule 3745-65-16(A)(2)].

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, including, where applicable, the items listed in OAC Rule 3745-65-16(A)(3)(a) through (f). Please be aware that, in the future, new employees must receive training within six months after the date of hire or assignment to a new position [OAC Rule 3745-65-16(B)]. In addition, facility personnel must take part in an annual refresher training [OAC Rule 3745-65-16(C)].

Please develop and submit a copy of the facility's training program to me **within 30 days** of receipt of this letter. This documentation should include what the training consists of and who is providing the training. Then, Abrasive Technology must immediately provide this training as required and submit documentation (i.e., copy of the sign-in sheets) to this office for review.

8. **OAC Rule 3745-65-16(D) and (E), Personnel Training Documents and Records:** The owner or operator must maintain the following documents and records at the facility: job titles, job descriptions, the type and amount of training given to each

person, and records that document that the required training or job experience has been given to, and completed by, facility personnel [OAC Rule 3745-65-16(D)].

Training records for current personnel must be kept until closure of the facility. Training records for former employees must be kept at least three years from the date the employee last worked at the facility [OAC Rule 3745-65-16(E)].

At the time of my inspection, Abrasive Technology did not have any of the required documentation (job titles, job descriptions, training records, etc.) as specified in OAC Rule 3745-65-16(D).

- To return to compliance, Abrasive Technology must provide personnel training to its facility employees per OAC Rule 3745-65-16 (see Violation #7) and provide the required documents and records specified in paragraph (D) to Ohio EPA for review. This should be completed **within 90 days** of receipt of this letter. Please note that training records for current personnel must be kept until closure of the facility.

9. **OAC Rule 3745-273-13(D)(1), Waste management standards for small quantity handlers of universal waste:** A small quantity handler of universal waste must contain any lamp in containers or packages that are structurally sound, adequate to prevent breakage, and compatible with the contents of the lamps. Such containers and packages must remain closed and must lack evidence of leakage, spillage, or damage that could cause leakage under reasonably foreseeable conditions.

At the time of my inspection, a few of the containers containing universal waste lamps in the waste treatment room were not closed.

- During the inspection, Abrasive Technology closed the open containers of universal waste lamps. The violation was abated at that time.

10. **OAC Rule 3745-273-14(E), Labeling/marketing standards for small quantity handlers of universal waste:** Each universal waste lamp or a container or package in which such lamps are contained must be labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

At the time of my inspection, one of the containers containing universal waste lamps was not labeled or marked clearly with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)."

- During the inspection, Abrasive Technology properly labeled the unmarked container of universal waste lamps. The violation was abated at that time.

Mr. Douglas G. Anderson  
Abrasive Technology, Inc.  
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### General Comments

- Please note that any hazardous waste that is accumulated prior to being treated in the facility's on-site wastewater treatment unit must be managed as such until it enters the unit. This includes compliance with OAC Rule 3745-52-34 (e.g., label with the words "Hazardous Waste," accumulation start date), as well as counting the waste toward your monthly generator status. If you generate 2,200 lbs (approximately five 55-gallon drums) or more of hazardous waste per calendar month, then you need to comply with the LQG rules for that month. Guidance on the hazardous waste generator categories and episodic generation is available at: [http://www.epa.state.oh.us/dhwm/pdf/Episodic\\_Generation.pdf](http://www.epa.state.oh.us/dhwm/pdf/Episodic_Generation.pdf).

If you would like a free, non-regulatory on-site pollution prevention assessment or if you would like more information about pollution prevention, please contact Ohio EPA's Office of Compliance Assistance and Pollution Prevention at (800) 329-7518 or visit <http://www.epa.state.oh.us/ocapp/ocapp.html>.

Enclosed you will find a copy of the checklists that I completed as a result of the inspection. Should you have any questions, please feel free to call me at (614) 728-3887. You can find copies of the rules and other information on the division's web page at: <http://www.epa.state.oh.us/dhwm/>.

Sincerely,



Melissa M. Storch  
Environmental Specialist  
Division of Hazardous Waste Management  
Central District Office

Enclosure

c: Shawna Mosher, Abrasive Technology, Inc.  
Kristina Durnell, DHWM/CO  
CDO File

MMS/nsm AbrasiveTech.NOVletter.071609

**NOTICE:**

Ohio EPA's failure to list specific deficiencies or violations in this letter does not relieve your company from having to comply with all applicable regulations.

Ohio Environmental Protection Agency  
**RCRA SUBTITLE C SITE  
 IDENTIFICATION/VERIFICATION FORM**

For Ohio EPA use only

E-mail this completed form to [kristina.durnell@epa.state.oh.us](mailto:kristina.durnell@epa.state.oh.us)  
 or mail it to Kristina Durnell, Central Office

<b>Site EPA ID No.</b> <b>Site Name</b>	EPA ID Number: <b>OHD981784648</b> Name: <b>Abrasive Technology, Inc.</b>		Website: <b>www.abrasive-tech.com</b> (Optional)	
<b>Site Location Information</b>	Street Address: <b>8400 Green Meadows Dr.</b> City, Town, or Village: <b>Lewis Center</b> County Name: <b>Delaware</b>		State: <b>OH</b> Zip Code: <b>43035</b>	
<b>Site Land Type</b> (check only one) <b>NAICS code(s)</b> <a href="http://www.census.gov/epcd/www/naics.html">www.census.gov/epcd/www/naics.html</a>	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"/>		32791	
<b>Facility Representative</b>  Additional names can be recorded in number 12  Only provide address information if it is different than the site address	First Name: <b>Douglas</b> MI: <b>G</b> Last Name: <b>Anderson</b> Phone Number: <b>740-548-4100</b> Phone Number Extension: <b>151</b> E-Mail Address: <b>danderson@abrasive-tech.com</b> Fax Number: <b>740-548-7617</b> Fax Number Extension: Street or P.O. Box: City, Town or Village: State: Zip Code:			
<b>Legal Owner And Operator of the Site.</b> List Additional Owners and/or Operators in the Comment Section or on another copy of this form page	Name of Site's Legal Owner: <b>Abrasive Technology, Inc.</b>		Date Became Owner (mm/dd/yyyy): <b>12/17/1984</b>	
	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: <b>8400 Green Meadows Dr.</b> City, Town or Village: <b>Lewis Center</b> State: <b>OH</b>		Owner Phone #: <b>740-548-4100</b> Country: <b>USA</b> Zip Code: <b>43035</b>	
	Name of Site's Operator: <b>Abrasive Technology Partnership</b>		Date Became Operator (mm/dd/yyyy): <b>12/17/1984</b>	
	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: <b>8400 Green Meadows Dr.</b> City, Town or Village: <b>Lewis Center</b> State: <b>OH</b>		Operator Phone #: <b>740-548-4100</b> United States Zip Code: <b>43035</b>	

**VIOLATIONS CITED?**  Yes  No

**TYPE OF HANDLER- A MINIMUM OF ONE BOX MUST BE CHECKED**

<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"/> 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
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TYPE OF REGULATED WASTE ACTIVITY (MARK "X" IN ALL OF THE APPROPRIATE BOXES)	
<input type="checkbox"/> Recycler of Hazardous Waste	<input type="checkbox"/> Exempt Boiler and/or Industrial Furnace
<input type="checkbox"/> Underground Injection Control Facility	<input type="checkbox"/> Small Quantity On-Site Burner Exemption
<input type="checkbox"/> Hazardous Waste Transporter	<input type="checkbox"/> Smelting, Melting, Refining Furnace Exemption
<input type="checkbox"/> Treater, Storer or Disposer of Hazardous Waste	

UNIVERSAL WASTE ACTIVITIES (INDICATE TYPES OF UNIVERSAL WASTE MANAGED (CHECK ALL BOXES THAT APPLY))	
<input checked="" type="checkbox"/> Small Quantity Handler of Universal Waste	<input type="checkbox"/> Destination Facility for Universal Waste
<input 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 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. Oil	
<input type="checkbox"/> Used Oil Fuel Marketer to Off-Specification Used Oil Burner	

**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 if more space is needed. If there are more than 7 waste codes and they are the same as listed in the most recent RCRA Info source record, you do not need to list them all. Instead just indicate the date of the most recent source record.

<b>D001</b>	<b>D002</b>	<b>F001</b>	<b>F002</b>	<b>F003</b>	<b>F005</b>	<b>F006</b>
<b>COMMENTS: USE THIS AREA TO DESCRIBE WHETHER THE INSPECTION WAS ANNOUNCED, WHETHER THE WASTE IS STORED IN TANKS OR CONTAINERS, ETC.</b>						
Announced	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Additional Facility Representatives:		<b>Shawna Mosher, Administration, Regulatory Compliance</b>	
Tanks	<input type="checkbox"/> Yes	<input checked="" type="checkbox"/> No	Other Comments: <b>Episodic LQG</b>			
Containers	<input checked="" type="checkbox"/> Yes	<input type="checkbox"/> No				

Name of Inspector(s)	Name of Inspector(s)	Date of Inspection/Time (mm/dd/yyyy) (hh:mm)
<b>Melissa Storch, DHWM/CDO</b>		<b>7/16/2009 9:30am</b>

**OPTIONAL CERTIFICATION.** I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations.

Signature of Owner, Operator, or an Authorized Representative	Name and Title (Print)	Date (mm/dd/yyyy)

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**PROCESS DESCRIPTION SECTION**

Give a general process description (include all processes at the facility)

Abrasive Technology produces high-tech diamond tooling for machining and grinding applications. The company supplies highly specialized superabrasives to the aerospace, automotive, metal working, medical, dental, gear, lapidary, glass, tile, and stone industries. Parts are machined on site from metal stock, and then one of two processes is used to bond the diamond abrasive material per product specifications to the part. One process involves nickel electroplating (E-bonding), while the other process (PBS bonding) involves furnace or heat plating of the abrasive material to the parts. Parts may be cleaned prior to bonding using a TCE/alcohol mixture, an ultrasonic cleaning process, or sulfuric acid. Parts may also be retooled after the old abrasive and bonding material is removed using a caustic or acid stripping process.

A wastewater treatment system treats the wastewaters from the stripping and nickel plating operations. Two filter presses are used to dewater the sludge from the system. A tank chemistry lab is provided to control the quality of plating solutions which affect the end quality of the parts.

The company was created in 1971 and moved to its current location on Green Meadows Drive in 1986. Abrasive Technology is a process-centered organization, which means that it is process and communication based. It also has a "Green Team" which encourages recycling and gives pollution prevention tips to employees.

At the time of the inspection, Abrasive Technology was operating as a large quantity generator (LQG) of hazardous waste and a small quantity handler of universal waste.

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**WASTE ACTIVITIES AND P2 SUMMARY SECTION**

For each of the processes listed above that generate a waste give the following information: (1) name of process generating waste, (2) name or description of waste generated (e.g. sludge, solvent, ash, used oil, spent lamps, etc.), (3) EPA waste codes, if applicable, (4) quantity generated per month, (5) type of accumulation (container, tank, etc.) (6) waste accumulation location in facility, (7) type of on-site treatment (if used), (8) name of off-site management facility and type of waste management activity occurring there, (9) Current P2 activities, and (10) P2 opportunities.

Three hazardous waste streams are generated at the Abrasive Technology facility. The first is filter cake and any other solids generated from the treatment of nickel plating wastewaters. The sludge is batch generated, collected in small hoppers, and then transferred to 55-gallon drums for storage and eventual shipment as hazardous waste. Waste code F006 is applied to this waste which is shipped to Agmet Metals, Inc. in Oakwood Village, Ohio, for metals recovery. The company accumulates this waste in a designated area in the waste treatment room. The quantity of waste generated is dependent upon production levels, but the company usually generates about 3 to 4 drums of F006 sludge per month.

The second hazardous waste managed at the facility is a spent TCE/alcohol mixture from cleaning operations. Abrasive Technology uses this mixture to clean parts prior to the bonding process. Waste codes D001, F001, F002, F003, and F005 apply to this waste, and it is shipped to Chemical Solvents in Cleveland, Ohio, via Enviroserve. The company usually generates about 1 to 2 drums of solvent waste per month. This waste is accumulated in a designated area

in the waste treatment room.

The third hazardous waste stream consists of sulfuric and hydrochloric acid generated in the E-bonding process. This waste stream is corrosive (D002) and is accumulated in 55-gallon drums in the waste treatment room prior to being treated in the onsite wastewater treatment system. The waste water treatment system discharges to the local POTW. At the time of my inspection, Abrasive Technology was generating approximately 5 drums of this waste per month.

Other wastes generated at the facility include liquid nickel waste, universal waste lamps and batteries, scrap metal, and solid waste. Two nickel waste streams are sent off site as liquid (they're chelated), thus not generating any F006 sludge. This waste stream is collected in tanks and does not go through the WWTU. About 3500 to 4000 gallons are sent to Agmet Metals each quarter. The facility also generates universal waste lamps and batteries which are sent to Environmental Enterprises. Scrap steel and empty metal drums are sent to Sims Brothers in Marion, Ohio, for recycling. Finally, the facility recycles all of its paper, plastic, glass, and aluminum through Waste Management.

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

CESQG: ≤100Kg. (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]	Yes <input checked="" type="checkbox"/> No <input 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 <sup>st</sup> ? [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 <b>other</b> than a facility authorized to manage the hazardous waste? [ORC 3734.02(F)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
7.	Has the generator disposed of hazardous waste <b>on-site without a permit</b> or at another facility <b>other</b> than a facility authorized to dispose of the hazardous waste? [ORC 3734.02(E) & (F)]	Yes <input type="checkbox"/> No <input checked="" 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)?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
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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 3745-66-101 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"/>
<b>MANIFEST REQUIREMENTS</b>		
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"/>
<i>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)]</i>		
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"/>
<i>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)].</i>		
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"/>
<i>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.</i>		
17.	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"/>
18.	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"/>
19.	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"/>
<i>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.</i>		
<b>PERSONNEL TRAINING</b>		
20.	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)] <b>Abrasive Technology does not have a training program which teaches facility personnel hazardous waste management procedures (including contingency plan implementation) relevant to their positions.</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
21.	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)(a-f)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
22.	Is the personnel training program directed by a person trained in hazardous waste management procedures? [3745-65-16(A)(2)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
23.	Do new employees receive training within six months after the date of hire (or assignment to a new position)? [3745-65-16(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
24.	Does the generator provide annual refresher training to employees? [3745-65-16(C)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
25.	Does the generator keep records and documentation of: <b>At the time of the inspection, Abrasive Technology did not have any of the required</b>	

<b>documentation (job titles, job descriptions, training records, etc.) as specified in OAC Rule 3745-65-16(D).</b>		
a.	Job titles? [3745-65-16D(1)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
b.	Job descriptions? [3745-65-16D(2)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
c.	Type and amount of training given to each person? [3745-65-16D(3)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
d.	Completed training or job experience required? [3745-65-16D(4)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
26.	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 type="checkbox"/> No <input checked="" 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.*

Job Performed	Name of Employee	Date Trained

**CONTINGENCY PLAN**

27.	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)] <b>Abrasive Technology has a contingency plan, but has not updated it since 2004. For example, the emergency coordinators are not up-to-date. To return to compliance, the facility must update its contingency plan to ensure that it accurately reflects current operations and personnel (emergency coordinators) at the facility.</b>	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
28.	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)]	Yes <input checked="" type="checkbox"/> No <input 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)]	Yes <input type="checkbox"/> No <input checked="" 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)]	Yes <input checked="" type="checkbox"/> No <input 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)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

*NOTE: If the facility already has a "Spill Prevention, Control and Countermeasures Plan" under CFR Part 112 or 40 CFR Part 1510, 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. [3745-65-52(B)]*

29.	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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
30.	Has the generator revised the plan in response to rule changes, facility, equipment and personnel changes, or failure of the plan? [3745-65-54]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
31.	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

32.	Has there been a fire, explosion or release of hazardous waste or hazardous waste constituents since the last inspection? If so:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
a.	Was the contingency plan implemented? [3745-65-51(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
b.	Did the facility follow the emergency procedures in 3745-65-56(A) through (H)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
c.	Did the facility submit a report to the Director within 15 days of the incident as required by 3745-65-56(J)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" 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

33.	Is the facility operated to minimize the possibility of fire, explosion, or any unplanned release of hazardous waste? [3745-65-31]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
34.	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)]	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.*

35.	Is emergency equipment tested (inspected) as necessary to ensure its proper operation in time of emergency? [3745-65-33]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
36.	Are emergency equipment tests (inspections) recorded in a log or summary? [3745-65-33] <b>Abrasive Technology did not have any documentation demonstrating that the required inspections of emergency equipment (e.g., spill response kits) were being completed in accordance with OAC Rule 3745-65-33.</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
37.	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"/>
38.	If there is only one employee on the premises, is there immediate access to a device (e.g., 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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
39.	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"/>
40.	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"/>
41.	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

42.	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"/>
43.		Is the generator accumulating hazardous waste(s) in excess of the amounts listed in the preceding question? If so:	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
	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 type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" 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 type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" 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

44.		Has the generator marked containers with the words "Hazardous Waste?" [3745-52-34(A)(3)] <b>Five drums of spent sulfuric and hydrochloric acid were being accumulated in the waste treatment room prior to being treated in the facility's on-site wastewater treatment system. These drums were not labeled or marked clearly with the words "Hazardous Waste."</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
45.		Is the accumulation date on each container? [3745-52-34(A)(2)] <b>Five drums of spent sulfuric and hydrochloric acid were being accumulated in the waste treatment room prior to being treated in the facility's on-site wastewater treatment system. These drums were not marked with an accumulation start date.</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
46.		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.

47.		Is the container accumulation areas(s) inspected weekly? [3745-66-74] Per ORC§1.44(A) "Week" means 7 consecutive days.	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>	N/A <input type="checkbox"/>
	a.	Are inspections recorded in a log or summary? [3745-66-74] <b>At the time of my inspection, Abrasive Technology did not have any documentation demonstrating that the required weekly inspections of hazardous waste containers were being completed in accordance with OAC Rule 3745-66-74.</b>	Yes <input type="checkbox"/>	No <input checked="" type="checkbox"/>	N/A <input type="checkbox"/>
48.		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"/>
49.		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"/>
50.		If the generator places incompatible wastes, or incompatible wastes and	Yes <input type="checkbox"/>	No <input type="checkbox"/>	N/A <input checked="" type="checkbox"/>

	materials in the same container, is it done in accordance with 3745-65-17(B)? [3745-66-77(A)]	
51.	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.		
52.	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]		
<b>PRE-TRANSPORT REQUIREMENTS</b>		
53.	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)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
54.	Does each container ≤119 gallons have a completed hazardous waste label? [3745-52-32(B)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
55.	Before off-site transportation, does the generator placard or offer the appropriate DOT placards to the initial transporter? [3745-52-33]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

**GENERATOR LDR CHECKLIST  
DOES NOT APPLY TO CESQGS**

**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)] <b>During the E-bonding process, Abrasive Technology generates spent sulfuric and hydrochloric acid (D002), which are treated in the on-site wastewater treatment system and then subsequently discharged to the POTW. Abrasive Technology did not have a one-time notice in its files to satisfy the requirements of OAC Rule 3745-270-07(A)(7).</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input 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)]	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,	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 checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
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*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 checked="" type="checkbox"/> N/A <input type="checkbox"/>
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*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"/>
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 on file?[3745-270-07(A)(2)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
a.	Is the form 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)]	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"/>
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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)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
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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"/>
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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 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 are given in the Appendix to 3745-270-03.

14.	a.	Metal-bearing HWs cannot be incinerated, combusted or, blended and burned for fuel unless <b>one</b> of the following conditions apply. [3745-270-03(c)]	
	i.	Contains > 1% TOC?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input 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 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 type="checkbox"/>
	iv.	Has a reasonable heating value (e.g., > 5000 Btu)?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	v.	Co-generated with a HW that must be combusted?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	b.	If all responses to 14 a.i. through 14 a.v. are ANo@, 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 type="checkbox"/>
15.		Was the HW treated by wastewater treatment?	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input 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 checked="" type="checkbox"/> N/A <input type="checkbox"/>

NOTE: If Yes, HW is improperly being treated by dilution.

	b.	Does the waste carry the D001 code <u>and</u> contain $\geq 10\%$ TOC?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input 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"/>

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)].

NOTE: A list of separation/recovery processes are given in 3745-270-42 under RORG.

**GENERATOR TREATMENT**

16.	Does the generator treat to meet LDRs on-site [3745-270-40(A)]?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
	Did the generator treat his hazardous waste/soil on-site in a tank, container, drip pad or containment building <u>to meet</u> the LDR treatment standard?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
	If "Yes", complete the rest of the checklist. If "No" ...stop...you are done.	
a.	Does the generator have a written waste analysis plan (WAP) that describes the procedures he will follow to treat the HW/soil to the LDR treatment standard? [3745-270-07(A)(5)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
b.	Did the generator use a detailed chemical and physical analysis of the HW/soil in order to develop the WAP? [3745-270-07(A)(5)(a)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
NOTE: This is a laboratory analysis but it does not have to be kept by the generator.		
c.	Does the WAP contain all information necessary to treat the HW/soil to the LDR treatment standard? [3745-270-07(A)(5)(a)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
d.	Does the WAP include the testing frequency of the treated HW/soil to demonstrate that the LDR treatment standard is being met? [3745-270-07(A)(5)(a)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
e.	Does the generator keep the WAP on-site? [3745-270-07(A)(5)(b)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
f.	Is the WAP available for the inspector's review during the inspection? [3745-270-07(A)(5)(b)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

**NOTIFICATION FORM FOR GENERATOR TREATMENT**

17.	a.	Contains all information in #11 a-g above and	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	b.	If the treated HW/soil is listed.....notification contains the following certification statement:  "I certify under penalty of law that I personally have examined and am familiar with the waste, through analysis and testing or through knowledge of the waste, to support this certification that the waste complies with the treatment standards specified in rule 3745-270-40 to 3745-270-49 of the Administrative Code. I am aware that there are significant penalties for submitting a false certification, including the possibility of fine and imprisonment."	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	c.	If the treated HW/soil no longer exhibits a characteristic and is no longer a HW, did the generator:	
	i.	Send a one-time notification to the director?[3745-270-09(D)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	ii.	Maintain a copy of the notice onsite?[3745-270-09(D)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	iii.	Include in the notification: [3745-270-09(D)(1)(a)]	
		1. Name & address of receiving landfill?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		2. Description of HW when generated?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		3. HW code when generated?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		4. Treatability group when generated?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
		5. Underlying hazardous constituents present when generated?	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	iv.	Contain the certification statement as required by	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>

		3745-70-07(B)(4)?	
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**SMALL 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*

**PROHIBITIONS**

1.	Did the SQUWH dispose of universal waste? [3745-273-11(A)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
2.	Did the SQUWH dilute or treat universal waste, except when responding to releases as provided in OAC rule 3745-273-17 or managing specific wastes as provided in OAC rule 3745-273-13? [3745-273-11(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>

**WASTE MANAGEMENT AND LABELING/MARKING**

**UNIVERSAL WASTE BATTERIES\*\***

3.	Are batteries that show evidence of leakage, spillage or damage that could cause leaks contained? [3745-273-13(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<b>**No batteries were on site at the time of my inspection.</b>		
4.	If batteries are contained, are the containers closed and structurally sound, compatible with the contents of the battery and lack evidence of leakage, spillage or damage that could cause leakage? [3745-273-13(A)(1)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
5.	Are the casings of the batteries breached, not intact, or open (except to remove the electrolyte)? [3745-273-13(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
6.	If the electrolyte is removed or other wastes generated, has it been determined whether the electrolyte or other wastes exhibit a characteristic of hazardous waste? [3745-273-13(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? [3745-273-13(A)(3)(a)]	Yes <input type="checkbox"/> No <input checked="" 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? [3745-273-13(A)(3)(b)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
7.	Are the batteries or containers of batteries labeled with the words "Universal Waste - Batteries" or "Waste Battery(ies)" or "Used Battery(ies)"? [3745-273-14(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

**UNIVERSAL WASTE LAMPS**

8.	Does the SQUWH 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? [3745-273-13(D)(1)] <b>At the time of my inspection, a few of the containers containing universal waste lamps in the waste treatment room were not closed. During the inspection, Abrasive Technology closed the open containers of universal waste lamps. The violation was abated at that time.</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
9.	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 waste constituents to the environment? [3745-273-13(D)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>

**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.**

10.	Are the lamps or containers or packages of lamps labeled with the words "Universal Waste - Lamp(s)" or "Waste Lamp(s)" or "Used Lamp(s)"? [3745-273-14(E)] <b>At the time of my inspection, one of the containers containing universal waste lamps was not labeled or marked clearly</b>	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
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	with one of the following phrases: "Universal Waste-Lamp(s)," or "Waste Lamp(s)," or "Used Lamp(s)." During the inspection, Abrasive Technology properly labeled the unmarked container of universal waste lamps. The violation was abated at that time.	
<b>ACCUMULATION TIME</b>		
11.	Is the waste accumulated for less than one year? [3745-273-15(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) [3745-273-15(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>		
12.	Is the handler able to demonstrate the length of time the universal waste has been accumulated? [3745-273-15(C)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
	If yes, describe below: <b>Abrasive Technology labels each container with the earliest date when the universal waste became a waste.</b>	
<b>EMPLOYEE TRAINING</b>		
13.	Are employees who handle or have the responsibility for managing universal waste informed of waste handling/emergency procedures, relative to their responsibilities? [3745-273-16]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
<b>RESPONSE TO RELEASES</b>		
14.	Are releases of universal waste and other residues immediately contained? [3745-273-17(A)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
15.	Is the material released characterized? [3745-273-17(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
16.	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) [3745-273-17(B)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<b>OFF-SITE SHIPMENTS</b>		
<i>NOTE: If a SQUWH self-transport waste, then the handler must comply with the Universal Waste transporter requirements.</i>		
17.	Are universal wastes sent to either another handler, destination facility or foreign destination? [3745-273-18(A)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
18.	Is the handler aware of DOT requirements for packaging and shipping? If no, make aware of 49 CFR 171-180.	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
19.	Prior to shipping universal waste off-site, does the originating handler ensure that the receiver agrees to receive the shipment? [3745-273-18(D)]	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A <input type="checkbox"/>
20.	Has the originating handler ever had an off-site shipment rejected by another handler or destination facility?	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>
a.	If yes, did the originating handler receive the waste back or agree to where the shipment was sent? [3745-273-18(E)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
21.	If a handler rejects a partial or full load from another handler, does the receiving handler contact the originating handler and 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)? [3745-273-18(F)(2)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
22.	If the handler received a shipment of hazardous waste that was not a universal waste, did the SQUWH immediately notify Ohio EPA? [3745-273-18(G)]	Yes <input type="checkbox"/> No <input type="checkbox"/> N/A <input checked="" type="checkbox"/>
<b>EXPORTS</b>		
23.	Is waste being sent to a foreign destination? If so:	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input type="checkbox"/>

	a. Does the small quantity handler comply with primary exporter requirements in OAC rules 3745-52-53, 3745-52-56, and 3745-52-57? [3745-273-20(A)]	Yes <input type="checkbox"/> No <input checked="" 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? [3745-273-20(B)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>
	c. Is a copy of the U.S. EPA "Acknowledgment of Consent" provided to the transporter? [3745-273-20(C)]	Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A <input checked="" type="checkbox"/>

