



Environmental
Protection Agency

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

nl. \$50
Enf. \$30
2 violations RTCd

June 7, 2011

Mr. Brain Bokovoy
Emerald Materials Hilton Davis
2235 Langdon Farm Road
Cincinnati OH 45237

**RE: Emerald Materials Hilton Davis
OHD004240313
Notice of Violation/Partial Return to Compliance**

Dear Mr. Bokovoy:

On Monday, May 9, 2011 I conducted an inspection of the Emerald Materials Hilton Davis (hereafter Emerald) facility. The purpose of my inspection was to determine your 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). As is our standard practice, my inspection was not scheduled in advance. I returned on Friday, May 13 to complete the inspection. During both days, I was the only representative of Ohio EPA. You were assisted by Douglas Jackson during the first part of my inspection on Monday and Andy Higgins (Superior Environmental Solutions, Inc., SES) was present during our inspection of the < 90 day storage area and assisted you in locating and explaining waste shipment and waste characterization paperwork on both days.

The inspection on Monday consisted of an introductory meeting during which we discussed Emerald's production processes and waste streams. We also discussed pollution prevention opportunities. We then inspected the < 90 day storage area and the satellite accumulation area (SAA) drum in the QC lab. I reviewed waste inspection records, employee training records, your contingency plan, and manifests.

You provided me a photocopy of 'beneficial solvent continued use' paperwork from Buzzi UNicem USA Inc. Later that afternoon, you provided by e-mail .pdf files of land disposal restrictions (LDR) paperwork for several waste streams and .pdf files of the missing copy of the 'destination facility to generator' page of the manifest.

When I returned on Friday, we inspected the SAA drums in the production buildings and we delved more deeply into the waste codes used internally to identify containers managed under the SAA rules. I also reviewed records for the waste characterization for several waste streams.

I found the following violations of Ohio's hazardous waste rules:

- 1) **Accumulation date must be clearly marked: OAC 3745-52-34(A)(2)** requires that the date upon which each period of accumulation begins is clearly marked and visible for inspection on each container.

On Monday, we found one black 55-gallon drum without a date on the label. Andy said the drum had just been delivered to the < 90 day storage area. Please see the Areas of Concern later in of this letter for more discussion on the dating of hazardous waste containers when they transitions from being managed under the SAA rules to the rules relevant to containers managed in accumulation areas.

☞ Since the date was marked on the container before we left the area, there are no further actions required by you to be returned to compliance.

- 2) **Containers must be closed: OAC 66-73(A)** requires that a container holding hazardous waste shall always be closed except when it is necessary to add or remove waste.

On Monday, we observed an over-pack container in the < 90 day storage area. The drum was properly dated and labeled but the drum ring was not affixed to the lid of the outer drum.

☞ When we returned on Friday, the over-pack was properly closed. There are no further actions required by you to be returned to compliance.

- 3) **Containers managed under the SAA rules: OAC 3745-52-34(C)(1)** requires that containers managed under the SAA rules must be at or near point of generation and under the control of the operator of the process generating the waste.

On Friday, I inspected the SAA drum used to manage waste solvent generated in the pilot plant lab. This waste is managed as D001 (ignitable characteristic hazardous waste) and it is designated with the internal code H-64-04. The container is located within a chain-link fence. The fence has a gate and a padlock but the lock was not closed and you told me that the gate is left unlocked during business hours when the lab staff is present. The precise location is not shown on the 'Plant Plot Plan' sketch dated 6/2/93, but the pilot plant comprises the western part of Building 35, the Administration Building. I recall the SAA enclosure is about 50 feet from the exterior pedestrian door of the pilot plant. The storage area is separated from the employee parking lot by another section of gated, chain-link fence but the gate was not locked.

I have determined that this location does not meet the control criterion. The drum is under neither the visual nor the physical control of the operator. That being said

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if you make changes so that the drum is under the control of the operator, I would likely consider the proximity criterion to also be satisfied. For the purpose of further discussion, I consider all pilot plant employees authorized to add wastes to this container to satisfy the definition of 'operator'.

☞ To return to compliance, you must devise a strategy to properly manage the waste solvent from the pilot plant lab. Please have this strategy in place and implemented within 30 days of your receipt of this letter. At that time I will contact you by telephone and we can mutually decide whether a return inspection is warranted or whether a written response by you is sufficient.

Areas of Concern

Employee training

Emerald uses a computer-based training software package called 'Active learner'. The training provided seemed rather pre-packaged and it did not seem to be specific to the activities as conducted at Emerald. When I asked you how employees were trained to assign the proper internal waste management codes, you informed me that this was not a part of the Active Learner package. Beyond saying that employees learned the proper coding for labeling the SAA drums by 'institutional knowledge', you were not able to articulate how employees are trained in the proper use of the internal codes.

I did not review your training program in enough detail to determine how you document the job titles and job descriptions as required by OAC 3745-65-16(D)(1) and (2). I note that these job descriptions must be in writing. I did not ask to see this. I note that Emerald is required (OAC 3745-65-16 (A)(2) to ensure that the training program includes instruction which teaches facility personnel hazardous waste management procedures relevant to the positions they are employed.

Dating containers of hazardous waste

As a large quantity generator, Emerald is not allowed to accumulate containers of hazardous waste for more than 90 days, unless you obtain an Ohio permit. (Ohio Revised Code 3734.02(E)&(F). The dating requirements in OAC 3745-52-34(A)(2) are intended to enable generators to avoid exceeding the 90 day limit. Wastes managed under the SAA rules do not count toward the 90 day limit. I provide the following discussion to reiterate the dating requirement for drums.

Under the SAA rules, a generator has 3 calendar days to remove wastes in excess of the SAA limit of 55 gallons. Practically, when the operator fills a drum, he marks it with today's date. He obtains an empty drum for his next addition of waste and the

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generator has three days from the SAA date to move the drum to the < 90 day storage area. The operator can add newly-generated waste to the new drum, and as long as the full drum is moved within three days, all is compliant. (As a digression, if the drum remains longer than 3 days and there is excess waste in the new, empty drum, the former SAA drums are now being managed under the < 90 day storage rules and a whole new set of requirements is triggered.)

When the full SAA drum arrives at the < 90 day storage area, the dating and labeling requirements are now in effect. A hazardous waste label must be applied and the original date is crossed out and the new date is marked. You have 90 days from the new date to ship the waste unless you obtain a storage permit.

Manifest tracking

OAC 3745-52-42(A)(1) and (2) require that generators who have not received a returned copy of the completed manifest contact the designated facility (TSD facility) within 35 days of waste shipment. If the manifest copy is not returned in 45 days, the generator must notify the State of Ohio. The matching of the generator's original copy with the TSD facility's returned signed copy is an essential element in tracking hazardous waste from cradle to grave.

You were unable to produce a manifest copy from the designated facility when I inspected manifest records on Monday. You were not able to describe the procedures in place that are used to match the original generator's copy with the designated facility's copy. Apparently, manifest copies are routed either to your accounting staff, or to Tracy who previously performed many of your job functions, or to you as the person who signs the manifest or to Andy, who manages all the various waste generated. By the time I returned to my office, you had sent me a .pdf of the missing manifest.

Ohio EPA has no rules requiring you to have internal procedures in place to properly track manifests; the rules only require you to notification if a manifested is not received from the designated facility. Consequently despite your lack of having a functioning system, I am not able to find you in violation of the OAC. Nevertheless, I need to reemphasize to you the importance of having a workable system in place.

Although you sign the manifest as the Generator, Andy performs many of the hazardous waste activities including record keeping. You will need to institute internal procedures so that the manifests reach Andy regardless of accounting issues such as a billing dispute. I cannot over-emphasize how important manifest tracking is to the cradle-to-grave regulation of hazardous waste.

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Enclosed you will find a copies of the inspection checklists and a process description summary form.

Please feel free to call me at (937) 285-6090 if you have any questions about this letter or if I can clarify your options for managing the drum of Pilot Plant lab wastes under the SAA rules.

Sincerely,



Tom Ontko
Hazardous Waste Inspector
Southwest District Office

TO/rb

Enclosures Process description summary
 Used Oil checklist
 LQG checklist
 LDR checklist

cc: DHWM Data Entry/Facility File

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.

**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: borrowed hard hat, safety glasses, safety shoes

GENERAL REQUIREMENTS

1.	Have all wastes generated at the facility been adequately evaluated? [3745-52-11] Emerald manages wastes using the following coding system; N-xx-yy or H-xx-yy where N and H indicate the regulatory status (hazardous waste or non-hazardous waste); xx is the building number and yy is the individual waste stream from that building. These numbers are also used as labels in the SAA areas.	Yes
2.	Are records of waste determination being kept for at least 3 years? [3745-52-40(C)] I looked at TCLP records for 'mag oxide' from CY '02 and CY '97 and waste profiles for H-64-04 and H-07-02. All were adequately characterized and I determined that the waste determinations were adequate.	Yes
3.	Has the generator obtained a U.S. EPA identification number? [3745-52-12]	Yes
4.	Were annual reports filed with Ohio EPA on or before March 1 st ? [3745-52-41(A)] Annual report for 2010 was not in DRUMS before inspection.	Yes
5.	Are annual reports kept on file for at least 3 years? [3745-52-40(B)]	Yes
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)]	No
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)]	No
8.	Does the generator accumulate hazardous waste?	Yes

The < 90 day storage area is located outside. See facility 'plant plot plan' dated 6/2/93 w/ hand-written designation of < 90-day storage area within the larger waste yard.

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)?	No
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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)]	no generator treatment
a.	Container that meets 3745-66-70 to 3745-66-77?	N/A
b.	Tank that meets 3745-66-90 to 3745-66-100 except 3745-66-97(C)?	N/A
c.	Drip pads that meet 3745-69-40 to 3745-69-45?	N/A
d.	Containment building that meets 3745-256-100 to 3745-256-102?	N/A

11.	Does the generator export hazardous waste? If so:	No
a.	Has the generator notified U.S. EPA of export activity? [3745-52-53(A)]	N/A
b.	Has the generator complied with special manifest requirements? [3745-52-54]	N/A
c.	For manifests that have not been returned to the generator: has an exception report been filed? [3745-52-55]	N/A

	d.	Has an annual report been submitted to U.S. EPA? [3745-52-56]	N/A
	e.	Are export related documents being maintained on-site? [3745-52-57(A)]	N/A
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
13.		Have items (1) through (20) of each manifest been completed? [3745-52-20(A)(1)]&[3745-52-27(A)]	Yes
<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
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)]	N/A
16.		Have the manifests been signed by the generator and initial transporter? [3745-52-23(A)(1)&(2)]	Yes
<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 received a rejected load or residue and accumulated the waste on-site, did the generator sign item 18c or 20 of the manifest? [3745-52-34(M)]	N/A
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)] See AOC manifest record keeping in letter	No
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)]	No
20.		Are signed copies of all manifests and any exception reports being retained for at least three years? [3745-52-40] I inspected manifests going back to 2008. All were in order except for issues discussed in letter.	Yes
<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>			
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)]	Yes
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)]	Yes
Emerald uses 'Active Learner software package. This is apparently a 'canned' training program with minimal site-specific training.			
23.		Is the personnel training program directed by a person trained in hazardous waste management procedures? [3745-65-16(A)(2)]	Yes
24.		Do new employees receive training within six months after the date of hire (or assignment to a new position)? [3745-65-16(B)]	Yes
25.		Does the generator provide annual refresher training to employees? [3745-	Yes

	65-16(C)]	
26.	Does the generator keep records and documentation of:	
	a. Job titles? [3745-65-16(D)(1)]	Yes
	b. Job descriptions? [3745-65-16(D)(2)]	Yes
	c. Type and amount of training given to each person? [3745-65-16(D)(3)]	Yes
	d. Completed training or job experience required? [3745-65-16(D)(4)]	Yes
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

See AOC part of letter for discussion of items 22 and 26a thru d.

Job Performed	Name of Employee	Date Trained
lab supervisor	Ed Shannon	
hw contractor, employee of SES.	Andy Higgins	
fork truck operator Ed and Larry were current on their training. Brian said that Andy is trained by SES, not Emerald.	Larry Mashino	

A critical part of employee training is the use of the H-xx-yy codes used to designate the waste types. Any deficiencies in how employees are trained in using these codes could result in improper handling of hazardous waste if a hazardous waste container was mistakenly marked with a non-hazardous code.

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
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)]	yes
	b. Arrangements with emergency authorities? [3745-65-52(C)]	yes
	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
	d. A list of all emergency equipment, including: location, a physical description and brief outline of capabilities? [3745-65-52(E)]	Yes
	e. An evacuation plan for facility personnel where there is possibility that evacuation may be necessary? [3745-65-52(F)]	
<p><i>NOTE: If the facility already has a "Spill Prevention, Control and Countermeasures Plan" under 40 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. 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)]</i></p>		
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
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] The Emergency Coordinator is Tracy Wright. Brian Bokovoy will be transitioning into this position soon and the contingency plan must be updated immediately when this change is made.	Yes
32.	Is an emergency coordinator available at all times (on-site or on-call)? [3745-65-55]	Yes

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:	No
a.	Was the contingency plan implemented? [3745-65-51(B)]	N/A
b.	Did the facility follow the emergency procedures in 3745-65-56(A) through (H)?	N/A
c.	Did the facility submit a report to the Director within 15 days of the incident as required by 3745-65-56(I)?	N/A

There was a fire in a process vessel on the morning of 5/9/11. Since hw was not involved this is not considered to be an implementation of the contingency plan.

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]	Yes
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)] Andy Higgins (SES) oversees waste management activities in the <90 day storage area and he has a 2-way radio.	Yes
b.	Emergency communication device? [3745-65-32(B)]	Yes
c.	Portable fire control, spill control and decon equipment? [3745-65-32(C)]	Yes
d.	Water of adequate volume/pressure per documentation or facility rep? [3745-65-32(D)]	Yes

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
37.	Are emergency equipment tests (inspections) recorded in a log or summary? [3745-65-33]	Yes
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
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
40.	Is adequate aisle space provided for unobstructed movement of emergency or spill control equipment? [3745-65-35]	Yes
41.	Has the generator attempted to familiarize emergency authorities with possible hazards and facility layouts? [3745-65-37(A)]	Yes
42.	Where authorities have declined to enter into arrangements or agreements, has the generator documented such a refusal? [3745-65-37(B)]	N/A

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)]	No
b.	Are under the control of the operator of the process generating the waste? [3745-52-34(C)(1)] Waste solvent (determined to be a hazardous waste because of ignitability, D001) from Bldg 64 (pilot plant) is managed outside in a 55-gallon steel drum in a fenced, gated enclosure. (H-64-04) Bldg 64 is not labeled in the attached 'plant plot plan', but it	No

		comprises the western end of Bldg 35, the Administration Bldg. The gated enclosure is furnished with a pad lock but it is not routinely locked when the Pilot Plant is staffed. I have determined that this SAA drum is not near the point of generation nor under the control of the operator. In this case, the operator is considered to be all the pilot plant employees who transfer solvent to this drum.	
	c.	Do not exceed a total of 55 gallons of hazardous waste per waste stream? [3745-52-34(C)(1)]	Yes
	d.	Do not exceed one quart of acutely hazardous waste at any one time? [3745-52-34(C)(1)]	N/A
	e.	Containers are closed, in good condition and compatible with wastes stored in them? [3745-52-34(C)(1)(a)]	Yes
	f.	Containers are marked with words "Hazardous Waste" or other words identifying the contents? [3745-52-34(C)(1)(b)]	Yes
44.		Is the generator accumulating hazardous waste(s) in excess of the amounts listed in the preceding question? If so:	No
	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)]	N/A
	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)]	N/A
<p>All containers managed under the SAA rules were compliant with the exception of items 43a and 43b as noted above. The following lists containers managed under the SAA rules</p> <p>Lab solvent in fire safety cans in pilot plant lab fume hood in Room 215-A</p> <p>Aerosol cans (pressurized-not drained or crushed) managed as D001 in Building 18 (H-18-06)</p> <p>Flusher/cleanout solvent (H-03-07)</p> <p>Hazardous sludge from ball mill (H-21-18) D001</p> <p>Lab samples from pigment dispersion testing in QC lab-D001 (H-07-02)</p> <p>We walked thru Bldg 10, Bldg 21 and Bldg 35-no drums managed under the SAA rules in these buildings.</p>			
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
46.		Is the accumulation date on each container? [3745-52-34(A)(2)] One drum just shipped from SAA area was properly labeled but not dated.	No
47.		Are hazardous wastes stored in containers which are:	
	a.	Closed (except when adding/removing wastes)? [3745-66-73(A)] Over-pack drum in <90-day area did not have ring fastened to over-pack lid. Overpacked drum did not have lid on outer container fastened w/ ring	No
	b.	In good condition? [3745-66-71]	Yes
	c.	Compatible with wastes stored in them? [3745-66-72]	Yes
	d.	Handled in a manner which prevents rupture/leakage? [3745-66-73(B)]	Yes
<i>NOTE: Record location on process summary sheets, photograph the area, and record on facility map.</i>			
48.		Is the container accumulation areas(s) inspected weekly? [3745-66-74]	Yes
	a.	Are inspections recorded in a log or summary? [3745-66-74]	Yes
<i>NOTE: "Week" means 7 consecutive days per ORC§1.44(A).</i>			

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
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)]	N/A
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)]	N/A
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)]	N/A
<p><i>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.</i></p>		
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)]	N/A
<p><i>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]</i></p>		
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)]	Yes
55.	Does each container ≤119 gallons have a completed hazardous waste label? [3745-52-32(B)]	Yes
56.	Before off-site transportation, does the generator placard or offer the appropriate DOT placards to the initial transporter? [3745-52-33]	Yes

**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)]	Yes
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
	a. Did the generator send the waste to a permitted HW TREATMENT facility? [3745-270-07(A)(1)]	Yes

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
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
5.	Does the generator generate a listed HW that exhibits a characteristic? If yes,	No
	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)]	N/A

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
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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 <u>to meet</u> the LDR treatment standard?	No
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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
	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:	N/A
	i. Applicable HW codes?	N/A
	ii. Manifest number of the first shipment to the TSD?	N/A
	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.?"	N/A
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)]	N/A
10.	Does the generator have a copy of the LDR notification form/notice on file? [3745-270-07(A)(2)]	Yes
	a. Is the form/notice kept on file for three years after last HW shipped? [3745-270-07(A)(8)]	Yes

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
	b.	Applicable waste codes (includes characteristic codes for a listed HW if applicable)? [3745-270-07(A)(2)]	Yes
	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
	d.	A designation whether the HW is a wastewater or non-wastewater? [3745-270-07(A)(2)]	Yes <input 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
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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
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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
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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?		No
	If "No" go to #15.		

13.	Is the HW a metal-bearing HW?		N/A
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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 one of the following conditions apply. [3745-270-03(c)]	
	i.	Contains > 1% TOC?	N/A
	ii.	Contains organic constituents or cyanide at levels greater than the UTS levels?	N/A
	iii.	Is made up of combustible material e.g., paper, wood, plastic?	N/A
	iv.	Has a reasonable heating value (e.g., > 5000 Btu)?	N/A
	v.	Co-generated with a HW that must be combusted?	N/A
	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?	N/A

15.	Was the HW treated by wastewater treatment?		N/A
	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)]	N/A

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?	N/A
	c.	Does the wastewater treatment process include a process to separate/recover the organic phase of the waste?	N/A

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?	No
		Did the generator treat his hazardous waste/soil on-site in a tank, container, drip pad or containment building to <u>meet</u> the LDR treatment standard?	N/A
		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)]	N/A
	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)]	N/A

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)]	N/A
	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)]	N/A
	e.	Does the generator keep the WAP on-site? [3745-270-07(A)(5)(b)]	N/A
	f.	Is the WAP available for the inspector's review during the inspection? [3745-270-07(A)(5)(b)]	N/A

NOTIFICATION FORM FOR GENERATOR TREATMENT

17.	a.	Contains all information in #11 a-g above and	N/A	
	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."	N/A	
	c.	If the treated HW/soil no longer exhibits a characteristic and is no longer a HW, did the generator:		
		i.	Prepare a one-time notification? [3745-270-09 (D)]	N/A
		ii.	Maintain a copy of the notice onsite? [3745-270-09(D)]	N/A
		iii.	Include in the notification: [3745-270-09(D)]	
		1.	Name & address of receiving landfill?	N/A
		2.	Description of HW when generated?	N/A
		3.	HW code when generated?	N/A
		4.	Treatability group when generated?	N/A

		5.	Underlying hazardous constituents present when generated?	N/A
		iv.	Contain the certification statement as required by 3745-270-07(B)(4)?	N/A

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

NOTE: 1. 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.

2. Inspectors can check BUSTR's web-site at https://www.comapps.ohio.gov/sfm/fire_apps/bust/bustr/PublicInquiry.asp to determine if a UST containing used oil is registered with BUSTR. Inspectors may call BUSTR at 614-752-7938 or a BUSTR site coordinator to report an unregistered UST or a UST that appears to not be in compliance with BUSTR regulations. A list of BUSTR coordinators by county are at: https://www.comapps.ohio.gov/sfm/fire_apps/bust/bustr/SearchByCounty.asp.

PROHIBITIONS

1.	Does the generator manage used oil in a surface impoundment or waste pile? If yes:	No
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a.	Is the surface impoundment or waste pile regulated as a hazardous waste management unit? [3745-279-12(A)]	N/A
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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)]	No
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3.	Is off-specification used oil fuel burned for energy recovery in devices specified in 3745-279-12(C)?	No
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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,	No
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a.	Is the mixture managed as specified in 3745-279-10(B)? [3745-279-21(A)]	N/A
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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)]	N/A
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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)]	No
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7.	Are containers and aboveground tanks used to store used oil in good condition with no visible leaks? [3745-279-22(B)]	Yes
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8.	Are containers, above ground tanks, and fill pipes used for underground tanks clearly labeled or marked "Used Oil?" [3745-279-22(C)]	Yes
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9.	Has the generator, upon detection of a release of used oil, done the following: [3745-279-22(D)]	N/A
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a.	Stopped the release?	N/A
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b.	Contained the release?	N/A
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c.	Cleaned up and properly managed the used oil and other materials?	N/A
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d.	Repaired or replaced the containers or tanks prior to returning them to service, if necessary?	N/A
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ON-SITE BURNING IN SPACE HEATER

10.	Does the generator burn used oil in used-oil fired space heaters? [3745-279-23] If so:	No
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a.	Does the heater burn only used oil that owner/operator generates or	N/A
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		used oil received from household do-it-yourself (DIY) used oil generators?	
	b.	Is the heater designed to have a maximum capacity of not more than 0.5 million BTU per hour?	N/A
	c.	Are the combustion gases from heater vented to the ambient air?	N/A

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
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]	N/A
	b.	Does the generator transport more than 55 gallons of used oil at any time? [3745-279-24]	N/A

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]	N/A
14.		Is the non-DIY used oil collection center registered with Ohio EPA? [3745-279-31]	N/A
15.		Is the used oil aggregation point in compliance with the generator standards in 3745-279-20 to 3745-279-24? [3745-279-32]	N/A

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.

Emerald manages used oil in properly labeled 300 gallon totes in Building 18.

PROCESS, WASTE, P2 SUMMARY SHEET

Facility Name:	Facility Type: LQG	Date of Inspection:	EPA ID #:
Emerald Materials Hilton Davis	Brian Bokovoy, Doug Jackson (only present initially on Monday) Andy Higgins, SES, Inc.	5/9/11 and 5/13/11	OHD004240313

Waste Generated			On- or Off-Site Management		P2 Activities	
Process/Activity Generating Waste <small>(e.g. plating bath, machining, baghouse, painting, general maintenance, etc)</small>	Waste Description <small>(e.g. sludge, solvent, ash, used oil, spent lamps, etc.) and EPA Waste Code, if applic.</small>	QTY Generated per Month, Type of Accumulation <small>(container, tank, etc) and location of waste accumulation area</small>	Type of On-Site Treatment <small>(recycle, wwt, etc)</small>	Name, state, and type of activity occurring at the off-site facility.	Current P2 Activities	P2 Opportunities
1 dispersion samples from QC lab	D001					
2 solvent from equipment cleaning	D001					
3 spent solvent from lab	D001					
4 coal ash, fly ash	not regulated as hazardous waste	none currently generated-market conditions have resulted in use of natural gas				

5	empty fiber drums	non-hazardous			Rumpke, landfilled as solid waste		
6	magnesium carbonate /spent catalyst from dye manufacturing referred to as 'mag oxide'	non-hazardous reviewed TCLP from samples taken in '02 and '97 were very low	waste is generated from a family of similar processes in Bldg 12 and stored in ROBs		landfilled		probably none 'mag oxide' is a mix w/ random colors
7	poly intermediate bulk containers (IBC) commonly referred to as 'totes' Typically 4'X4'X4' and 275 gallons				returned to product vendor and re-used		
8	cardboard and pallets				recycled		
9	waste water treatment consisting of elementary neutralization	sludges generated from this process have not been removed from the process tank recently					

REMARKS-GENERAL INFORMATION

General Process Information:

Emerald Materials Hilton Davis manufactures 3 general classes of pigments and dyes: water soluble; oil-based and solvent-based. The dyes are typically produced thru an acid-base reaction. The pigments are typically ground to a fine powder and dispersed in a resin. Carbon black is frequently used as a pigment. Products include food colorants, mulch colorants and pond colorants.

Superior Environmental Solutions, Inc. (SES) is contracted to manage all wastes generated. Activities performed by SES

include waste characterization, drum and container labeling, inspection of the <90 day storage area, manifest preparation (Brian Bokovoy signs the manifests).

Emerald manages production wastes under the SAA rules in several areas. The < 90 day storage area is a smaller area within the waste management area. See 'Plant Plot Plan'. The facility is over 80 acres. Fork trucks are used to transport waste containers and facility is aware that wastes cannot be transported along the Langdon Farm Road right-of-way.

Regulatory/Enforcement History (if applicable): Previous inspection on 9/19/06 was a USEPA Region V lead w/ no violations cited.

Facility completed annual report forms using the name 'Emerald Materials Hilton Davis'. The current facility name as listed on business cards is 'Emerald Performance Materials'. Old SWDO files use the original name, 'Hilton Davis'.

Additional P2 remarks and information: Facility does not separate soft drink aluminum cans from regular plant trash/solid waste.

Would this facility be interested in a P2 assessment? Yes*_____ No_____

*If yes, refer promptly to your district P2 coordinator. Office of Compliance Assistance and Pollution Prevention – 1-800-329-7518 or p2mail@epa.state.oh.us or www.epa.state.oh.us/ocapp/ocapp.html

Other: