

ISP Columbus
Attn: Mr. Jere Ellison
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Enclosed, you will find a copy of the checklists completed during the CEI. Should you have any questions, I can be by telephone at (614) 728-5036.

Failure to list specific deficiencies in this communication does not relieve ISP from the responsibility of complying with all applicable hazardous waste regulations. This letter does not relieve ISP from liability for any past or present violations of the state's hazardous waste laws.

Respectfully,



Chris Bulinski
Division of Hazardous Waste Management
Central District Office

Enclosures

c: Tammy McConnell, DHWM, CO
GDO File

E-mail this completed form to tammy.mcconnell@epa.state.oh.us or mail it to Tammy McConnell, Central Office

Environmental Protection Agency
RCRA SUB. TITLE C SITE IDENTIFICATION/VERIFICATION FORM

For Ohio EPA use only

2. Site EPA ID No. EPA ID Number: OHD000721803

3. Site Name Name: ISP Columbus Website (optional):

4. Site Location Information
 Street Address: 1979 Atlas Street
 City, Town, or Village: Columbus State: OH
 County Name: Franklin Zip Code: 43228

5. Site Land Type (check only one)
 Private County District Federal Indian Municipal State Other

6. NAICS code(s) www.census.gov/epcd/www/naics.html
 A. 325411 B. 325199
 C. D.

7. Facility Representative:
 First Name: Jere MI: R. Last Name: Ellison
 Phone Number: 614-529-3331 Phone Number Extension:
 E-Mail Address: jellison@ispcorp.com
 Fax Number: 614-77-7909 Fax Number Extension:
 Street or P.O. Box:
 City, Town or Village:
 State: Country: Zip Code:

Additional names can be recorded in number 12.
Only provide address information if it is different than the site address.

8. Legal Owner and Operator of the Site List Additional Owners and/or Operators in the Comment Section or on another copy of this form page.

A. Name of Site's Legal Owner: ISP Chemical LLC Date Became Owner (mm/dd/yyyy): 02/08/1993
 Owner Type: Private County District Federal Indian Municipal State Other

 Street or P.O. Box: 1361 Alps Road
 City, Town, or Village: Wayne Owner Phone #: 973-628-4000
 State: NJ Country: USA Zip Code: 07470

B. Name of Site's Operator: Date Became Operator (mm/dd/yyyy):
 Operator Type: Private County District Federal Indian Municipal State Other

 Street or P.O. Box:
 City, Town, or Village: Operator Phone #:
 State: Country: Zip Code:

9. Violations Cited? Yes No

10. Type of Regulated Waste Activity (Mark "X" in all of the appropriate boxes.)
 Not Regulated

PROCESS DESCRIPTION SECTION

ISP Columbus (ISP) is a specialty chemical manufacturer. They are located at 1979 Atlas Street in Columbus, Ohio 43228. Their chemical products are used for the production of many consumer goods (i.e., sunscreens, medicines, hair sprays, paper coatings, insect attractants, food products, biotechnical products, etc.). This facility employs approximately eighty (80) persons. Twelve (12) reactors are utilized at ISP, ranging from 100 to 4,000 gallons in size. There are three (3) large centrifuges used for separations. There are also seven (7) rotary vacuum dryers and numerous production tanks.

ISP makes about 300 different products. There are often multiple steps utilized in the manufacturing process of each of these chemical products and many of these steps generate hazardous wastes or solvents which can be reused as a metal wash at Safety Kleen Smithfield, Kentucky, as a tank wash at Greencastle WDF Facility and most recently as a synthetic fuel for the boilers at the ISP facility in Calvert City, Kentucky. During 2005 450,000 pounds of metal wash solvent went to Safety Kleen, Smithfield, Kentucky. Hazardous wastes can be generally organized into several broad groups these include:

1) Process waste solvents: These solvents come from batch chemical processing are piped into a 6000 gallon hazardous waste tank these are mainly hexane, methanol and tetrahydrofuran. This solvent has a water content that is usually too high for use in the metal or tank washing programs. It carries the F003, F005 and D001 hazardous waste codes. It is shipped to the Greencastle WDF Facility at 3301 South Country Road, Greencastle, Indiana 46135 where it is burned as fuel during the manufacture of concrete. 12 tanker truck loads totaling 58,678 gallons of this waste stream were shipped during November 2006. One tanker truck load 4896 gallons was shipped as a synthetic fuel to ISP in Calvert City, Kentucky during the month of November, 2006. In October of 2006, five tank truck loads of the solvent waste stream were shipped as hazardous waste to Greencastle WDF. 2 tank truck loads of the solvent waste stream accumulated in a separate "tank wash" tank were shipped to Greencastle WDF for use as a tank cleaner. In September 2006, 6 tank truck loads of the solvent waste stream were shipped as hazardous waste, 2 tank trucks accumulated in a separate tank were shipped to Greencastle WDF for use as a tank cleaner. In August 2006, 16 tank truck loads of the hazardous waste were shipped to Greencastle WDF as hazardous waste. During 2005, 2,096,585 pounds of the process waste solvent was shipped to Greencastle WDF for burned as fuel in the cement kiln. Another 120,076 pounds of the process waste solvent was shipped to Safety Kleen, Smithfield, Kentucky for fuels blending prior to energy reclamation at another facility. Some of this was waste solvent accumulated at two solvent switching stations satellite areas (55 gallon drums) on the second floor of the column building and the first floor on the east side of the column building. Finally more of this process waste solvent is accumulated is in a satellite area outside the product development laboratory are part of this waste stream.

2) General process waste solids: Is generated when the centrifuge cake is not the

product but a waste. It is loaded into 55 gallon drums and taken to the 90 day accumulation area. The waste code is D001 and the waste is shipped to Onyx Environmental Services, 4301 Infirmiry Road, West Carrollton, OH. 2749 pounds were shipped in the year 2005 for fuels blending prior to energy reclamation at another facility. None of this hazardous waste stream was shipped 08-01-11-30-2006.

3) Obsolete Materials: These wastes are moved directly to the 90 day area. 38 drums (16670 pounds) of ethanol was shipped as D001 and was shipped on 11-06-2006 to Veolia ES Technical Solutions, LLC in West Carrollton, OH. On 10-11-2006 two cylinders of butane and hexane totaling 645 pounds with the D001 code were shipped to Veolia ES Tech, LLC. #7 Mobile Avenue, Saugat, Illinois 62201 for incineration. On August 29, 2006 a lab pack of obsolete chemicals was sent to American Environmental Services, Inc 1689 Shar-Cal Road Calvert, KY 42029 including 15 pounds of sodium ethoxide and sodium methoxide as D001 and D003, 100 pounds of piperazine hexhydrate dibenzylamine as D001, D002, 100 pounds of titanium chloride in dichloromethane as D022, F002, U147 and 20 pounds of triethyl aluminum and hexalithium in hexane as D001, D003. Many other obsolete materials were shipped since the last inspection. Waste codes for these materials in 2005 included D001, D002, D003, D007, D008, U006, U188. 5992 pounds of this waste were shipped to Onyx Environmental Services, #7 Mobile Avenue, Saugat, IL 62201 in 2005 for incineration. 6223 pounds of this waste was sent to American Environmental Services, Inc. 170 Morgantown Industrial Park, Morgantown WV 26501 for storage bulking or offsite transfer. 450 pounds were shipped to Onyx Environmental Services, L.L.C., 4301 Infirmiry Road, West Carrollton, OH. 45449 for storage, bulking or transfer offsite for treatment during 2005.

4) Waste Water Chlorobenzene: from the manufacture of one product is pumped to the hazardous waste accumulation tank. It carries the D001 and D021 waste codes. It is shipped to Dupont E.I. DeNemours, Chambers Works Route 130, Deepwater, NJ for biological treatment. 248581 pounds of this waste were shipped here in the year 2005. Another 216,261 pounds was shipped to Safety Kleen, Hebron OH for solvent recovery during 2005. 4400 gallons of this waste stream was shipped to Safety Kleen, Hebron, OH for solvent recovery on 09-18-2006. Another 4500 gallons of this waste was sent to Safety Kleen, Hebron OH for solvent recovery on 09-21-2006.

5) Waste Water Tetrahydrofuran: is also generated in several processes and is pumped to the hazardous waste accumulation tank. It carries the waste code D001. It is shipped to Dupont Chamber Works, Deepwater, NJ. 102907 pounds of this waste were sent to this location for biological treatment during 2005. None of this hazardous waste stream was shipped 08-01-11-30-2006

6) Waste corrosive liquids: from any of the processes are loaded into 55 gallon drums and accumulate in the 90 day accumulation area. It carries the D002 waste code. 75 pounds of corrosive liquid was shipped on 11-06-2006 to Veolia ES Technical Solutions, LLC in West Carrollton, OH. Another corrosive material was used to clean the scale out of pipes. It is called Spall Guard and has a pH low enough to make it a D002 hazardous waste. 1691 pounds of this material were shipped to Onyx Environmental Services,

L.L.C., 4301 Infirmary Road, West Carrollton, OH. 45449 for storage, bulking or transfer offsite for treatment during 2005.

7) Obsolete Materials - Acute Hazardous Waste: Propargyl alcohol was generated in one of ISP's processes in 2005, it is moved directly to the 90 day area. It carries the D001 and P102 waste codes. 375 pounds of this acutely hazardous waste was shipped to American Environmental Services, Inc., 170 Morgantown Industrial Park, Morgantown, WV 26501-0000 for storage , bulking and offsite disposal. No acutely hazardous waste was shipped 08-01-11-30-2006.

8) Hazardous Aqueous Waste: A hazardous aqueous waste is generated with water, butanol and IPA from the manufacture of one of ISP's products, it carries the D001 code. 4700 gallons of butanol was shipped to Safety Kleen Systems, Inc. 581 Milliken Drive S.E. for solvent recovery on 11-01-2006. 359,073 pounds of this waste were shipped to Safety Kleen, Hebron OH for solvent recovery during 2005.

Formerly, satellite storage areas were set up at each of the "stoke" pumps for the management of waste solvents all of these waste solvents go to one of three metal wash tanks. Two of the tanks are located on the first floor of the main column building and the other is in the new dryer building. These tanks and all of their ancillary equipment are inside the buildings and there is secondary containment provided for each.

The contents of the tanks go to a program of scrap metal washing in Smithfield Kentucky. DHWM, Central Office has interpreted this program to be exempt from hazardous waste management requirements.

Current satellite storage areas include:; 1) solvent switching stations on 2nd and 1st floor of the main column building, 1 hazardous waste liquid 55 gallon drum 2) the quality control and product development labs have a 55-gallon container located on the old <90 day container storage pad.

Pollution prevention activities undertaken by ISP since the last inspection include reusing once considered waste solvents as a product in the Safety Kleen metal washing program in Smithfield, Kentucky, as a tank wash at Greencastle WDF Facility and most recently as a synthetic fuel for the boilers at the ISP facility in Calvert City , Kentucky. During 2005 450,000 pounds of metal wash solvent went to Safety Kleen, Smithfield, Kentucky.

A biological reactor system with membrane filtration and carbon polishing is in use at the facility for wastewater being sent to the city.

LARGE QUANTITY GENERATOR REQUIREMENTS
COMPLETE AND ATTACH A PROCESS DESCRIPTION SUMMARY

LESQG: <100Kg. (Approximately 25-30 gallons) of waste in a calendar month.
 ISQG: Between 100 and 1,000 Kg. (About 25 to under 300 gallons) of waste in a calendar month.
 OQG: >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 No N/A
2. Has the generator obtained a U.S. EPA identification number? [3745-52-12] Yes No N/A
3. Were annual reports filed with Ohio EPA on or before March 1st? [3745-52-41(A)] Yes No N/A
4. 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)] Yes No N/A

5. 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)] Yes No N/A

6. Does the generator accumulate hazardous waste? Yes No N/A

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.

7. 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 No N/A

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

8. 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 No N/A
- b. Tank that meets 3745-66-90 to 3745-66-101 except 3745-66-97 (C) and Yes No N/A
- c. Drip pads that meet 3745-69-40 to 3745-69-45? Yes No N/A
- d. Containment building that meets 3745-256-100 to 3745-256-102? Yes No N/A

NOTE: Complete appropriate checklist for each unit.
 NOTE: If waste is treated to meet LDRs, use LDR checklist.

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

d. Has an annual report been submitted to U.S. EPA? [3745-52-56] Yes No N/A

e. Are export related documents being maintained on-site? [3745-52-57(A)] Yes No N/A

MANIFEST REQUIREMENTS

10. Have all hazardous wastes shipped off-site been accompanied by a manifest? (U.S. EPA Form 8700-22) [3745-52-20(A)] Yes No N/A

11. Have items (1) through (20) of each manifest been completed? [3745-52-20(A)] Yes No N/A

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)]

12. Does each manifest designate at least one facility which is permitted to handle the waste? [3745-52-20(B)] Yes No N/A

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)].

13. 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 No N/A

14. Have the manifests been signed by the generator and initial transporter? [3745-52-23(A)(1) & (2)] Yes No N/A

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 of the waste they generate.

15. 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 No N/A

16. 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 No N/A

17. Are signed copies of all manifests and any exception reports being retained for at least three years? [3745-52-40] Yes No N/A

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

PERSONNEL TRAINING

18. 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 No N/A

19. Does the personnel training program include instructions to ensure that facility personnel are able to respond effectively to emergencies by familiarizing them with emergency procedures, emergency equipment and emergency systems (where applicable)? [3745-65-16(A)(3)(a-f)] Yes No N/A

20. Is the personnel training program directed by a person trained in hazardous waste management procedures? [3745-65-16(A)(2)] Yes No N/A
21. Do new employees receive training within six months after the date of hire (or assignment to a new position)? [3745-65-16(B)] Yes No N/A
22. Does the generator provide annual refresher training to employees? [3745-65-16(C)] Yes No N/A
23. Does the generator keep records including: job titles [D(1)], job descriptions [D(2)], type and amount of training given to each person [D(3)] and documentation of completed training or job experience required [D(4)]? [3745-65-16(D)] Yes No N/A
24. 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 No N/A

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.

<u>Job Performed</u>	<u>Name of Employee</u>	<u>Date Trained</u>

CONTINGENCY PLAN

25. 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 No N/A
26. 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 No N/A
- b. Arrangements with emergency authorities [3745-65-52(C)]. Yes No N/A
- 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 No N/A
- d. A list of all emergency equipment, including: location, a physical description and brief outline of capabilities? [3745-65-52(E)] Yes No N/A
- e. An evacuation plan for facility personnel where there is possibility that evacuation may be necessary? [3745-65-52(F)] Yes No N/A

NOTE: If the facility already has a "Spill Prevention, Control and Counter measures 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)]

27. 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 No N/A

28. 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 No N/A

29. Is an emergency coordinator available at all times (on-site or on-call)? [3745-65-55] Yes No N/A

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

30. Has there been a fire, explosion or release of hazardous waste or hazardous waste constituents since the last inspection? If so: Yes No N/A

a. Was the contingency plan implemented? [3745-65-51(B)] Yes No N/A

b. Did the facility follow the emergency procedures in 3745-65-56(A) through (H)? Yes No N/A

c. Did the facility submit a report to the Director within 15 days of the incident as required by 3745-65-56(J)? Yes No N/A

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

31. Is the facility operated to minimize the possibility of fire, explosion, or any unplanned release of hazardous waste? [3745-65-31] Yes No N/A

32. Does the generator have the following equipment at the facility, if it is required due to actual hazards associated with the waste:

a. Internal alarm system? [3745-65-32(A)] Yes No N/A

b. Emergency communication device? [3745-65-32(B)] Yes No N/A

c. Portable fire control, spill control and decon equipment? [3745-65-32(C)] Yes No N/A

d. Water of adequate volume/pressure? [3745-65-32(D)] Yes No N/A

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

33. Is emergency equipment tested (inspected) as necessary to ensure its proper operation in time of emergency? [3745-65-33] Yes No N/A

34. Are emergency equipment tests (inspections) recorded in a log or summary? [3745-65-33] Yes No N/A

35. Do personnel have immediate access to an internal alarm or emergency communication device when handling hazardous waste (unless the device is not required under 3745-65-34(A)) [3745-65-34(A)] Yes No N/A

6. If there is only one employee on the premises is there immediate access to a device (ex. phone, hand held two-way radio) capable of summoning external emergency assistance? (Unless not required under 3745-65-32) [3745-65-34(B)] Yes No N/A
7. Is adequate aisle space provided for unobstructed movement of emergency or spill control equipment? [3745-65-35] Yes No N/A
8. Has the generator attempted to familiarize emergency authorities with possible hazards and facility layouts? [3745-65-37(A)] Yes No N/A
9. Where authorities have declined to enter into arrangements or agreements, has the generator documented such a refusal? [3745-65-37(B)] Yes No N/A

SATELLITE ACCUMULATION AREA REQUIREMENTS

10. Does the generator ensure that satellite accumulation area(s):
- a. Are at or near a point of generation? [3745-52-34(C)(1)] Yes No N/A
- b. Are under the control of the operator of the process generating the waste? [3745-52-34(C)(1)] Yes No N/A
- c. Do not exceed one quart of acutely hazardous waste at anyone time? [3745-52-34(C)(1)] Yes No N/A
- d. Containers are closed, in good condition and compatible with wastes stored in them? [3745-52-34(C)(1)(a)] Yes No N/A
- e. Containers are marked with words "Hazardous Waste" or other words identifying the contents? [3745-52-34(C)(1)(b)] Yes No N/A
11. Is the generator accumulating hazardous waste(s) in excess of the amounts listed in the preceding question? If so: Yes No N/A
- 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 No 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)] Yes No N/A
- c. Do not exceed a total of 55 gallons of hazardous waste per waste stream? [3745-52-34(C)(1)] Yes No N/A

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

42. Has the generator marked containers with the words "Hazardous Waste?" [3745-52-34(A)(3)] Yes No N/A
43. Is the accumulation date on each container? [3745-52-34(A)(2)] Yes No N/A
44. Are hazardous wastes stored in containers which are:

- a. Closed (except when adding/removing wastes)? [3745-66-73(A)] Yes No N/A
- b. In good condition? [3745-66-71] Yes No N/A
- c. Compatible with wastes stored in them? [3745-66-72] Yes No N/A
- d. Handled in a manner which prevents rupture/leakage? [3745-66-73(B)] Yes No N/A

NOTE: Record location on process summary sheets and photograph the area.

- 45. Is the container accumulation areas(s) inspected weekly? [3745-66-74] Per ORC§1.44(A) "Week" means seven 7 consecutive days. Yes No N/A
 - a. Are inspections recorded in a log or summary? [3745-66-74] Yes No N/A
- 46. Are containers of ignitable or reactive wastes located at least 50 feet (15 meters) from the facility's property line? [3745-66-76] Yes No N/A
- 47. 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 No N/A
- 48. If the generator places incompatible wastes, or incompatible wastes and materials in the same container, is it done in accordance with 3745-65-17(B)? [3745-66-77(A)] Yes No N/A
- 49. 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 No N/A

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.

- 50. 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 No N/A

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

PRE-TRANSPORT REQUIREMENTS

- 51. 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 No N/A
- 52. Does each container <110 gallons have a completed hazardous waste label? [3745-52-32(B)] Yes No N/A
- 53. Before off-site transportation, does the generator placard or offer the appropriate DOT placards to the initial transporter? [3745-52-33] Yes No N/A

LDR REQUIREMENTS

1. Has the generator adequately evaluated all wastes to determine if they are restricted from land disposal? [3745-270-07(A)(1)] (possibly also cite 3745-52-11) **If so:**

Yes No N/A ___RMK#___

a. **For determinations based solely on knowledge of the waste:** Is supporting data retained on-site? [3745-270-07(A)(6)]

Yes No N/A ___RMK#___

b. **For determinations based upon analytical testing:** Is waste analysis data retained on-site? [3745-270-07(A)(6)]

Yes No N/A ___RMK#___

2. Has the generator determined each EPA hazardous waste code applicable to the waste? [3745-270-07(A)(2) see Table 1] (possibly also cite 3745-52-11)

Yes No N/A ___RMK#___

3. Has the generator determined the correct "treatability group(s)" (e.g., wastewater, non-wastewater, etc.)? [3745-270-07(A), Table 1]

Yes No N/A ___RMK#___

4. Does the generator generate a characteristic hazardous waste? **If so:**

Yes No ___ N/A ___ RMK#___

a. Have all underlying hazardous constituents (UHCs) been identified? [3745-270-09(A)]

Yes No N/A ___RMK#___

NOTE: *If the waste is D001 non-wastewater treated by CMBST, RORGS, POLYM in Table 1 of Rule 3745-270-42 UHCs do not need to be identified.*

5. Does the generator generate listed waste(s) which also exhibit hazardous characteristics? [3745-270-09] **If so:**

Yes No ___ N/A ___ RMK#___

a. Has the generator also identified the appropriate treatment standard(s) for the constituent(s) which cause the waste to exhibit a characteristic? [3745-270-09(A)]

Yes No N/A ___RMK#___

NOTE: *The generator is not required to identify the treatment standard for the characteristic if the listing covers the associated characteristic (e.g., a F019/D007 hazardous waste - F019 being listed due to chromium content and D007 being the characteristic waste code for chromium). [See OAC Rule 3745-270-09(B)]*

6. Has the generator **correctly** determined if restricted wastes meet or do not meet treatment standards? [3745-270-07(A)(1)] Yes No N/A ___RMK#___

7. Does the owner/operator ensure that restricted wastes or treatment residues are not diluted as a method of achieving/circumventing LDR treatment standards? [3745-270-03] Yes No N/A ___RMK#___

NOTE: *A generator may dilute a waste (that is hazardous only because it exhibits a characteristic) in a treatment system that discharges to waters of the State pursuant to an NPDES permit (§402 of CWA), that treats waste in a CWA equivalent treatment system, or that treats waste for the purposes of pre-treatment requirements under §307 of CWA, unless a method other than DEACT is specified or the waste is a D003 reactive cyanide wastewater or non-wastewater.*[3745-270-03(B)]

8. Is combustion of any of the wastes identified in the Appendix to Rule 3745-270-03 occurring without meeting one or more of the criteria under Rule 3745-270-03(C) upon generation or after treatment? [3745-270-03(C)] Yes No N/A ___RMK#___

Note: In other words, is combustion a legitimate treatment method

9. Has the generator added iron to lead-containing hazardous waste in order to achieve LDR treatment standards for lead? [3745-270-03(D)] Yes No N/A ___RMK#___

10. Does the facility have a case-by-case extension to the effective date to land dispose of hazardous waste?[3745-270-05] If so: Yes___ No N/A ___RMK#___

a. The facility can dispose of hazardous waste in a on-site landfill or surface impoundment.[3745-270-05]

11. Does the facility have an extension to allow for a restricted waste to be land disposed?[3745-270-06] If so:

Yes ___ No N/A ___ RMK# ___

a. The facility can land dispose of the waste. [3745-270-06]

12. Does the facility treat wastes that are otherwise prohibited from land disposal, in a surface impoundment?
If so:

Yes ___ No N/A ___ RMK# ___

a. Has the facility complied with 3745-270-04?

Yes ___ No N/A RMK# ___

REMARKS

NOTIFICATION AND CERTIFICATION REQUIREMENTS

13. If a generator's waste or contaminated soil does not meet the treatment standards, does the generator have the paperwork required in Column A of Table 1? [3745-270-07(A)(2)] Yes No N/A RMK#
14. If a generators' waste or contaminated soil meets the treatment standard at the original point of generation, does the generator have the paperwork required in Column B of Table 1? [3745-270-07(A)(3)] Yes No N/A RMK#
15. If a generators' waste is exempt (under 3745-270-05, 3745-270-06, national capacity or case-by-case variance, etc.) does the generator have the paperwork required in Column C of Table 1? [3745-270-07(A)(4)] Yes No N/A RMK#
16. If a generator manages a lab pack containing hazardous waste using the alternative treatment standard in 3745-270-42, does the generator have the paperwork required in Column D of Table 1? [3745-270-07(A)(9)] Yes No N/A RMK#
17. Does the generator produce a waste that is hazardous waste from the point of generation, but subsequently excluded from regulation under OAC 3745-51-02 through 3745-51-06? [3745-270-07(A)(7)] If so: Yes No N/A RMK#
- a. Is a one-time notice placed in the facility's file stating such generation, subsequent exclusion or exemption, and disposition of the wastes? [3745-270-07(A)(7)] Yes No N/A RMK#

NOTE: Examples include hazardous wastes discharged to a POTW or to a surface water under a NPDES permit. (See 270-07(A)(7))

18. Does the generator retain on-site a copy of all notices, certifications, demonstrations and waste analysis data for at least three years from the last shipment of waste sent off-site? [3745-270-07(A)(8)] Yes No N/A RMK#

REMARKS

GENERATORS TREATING HAZARDOUS WASTE

1. Is treatment of hazardous waste occurring to meet the treatment standards in 3745-270-40? Yes ___ No ___ N/A RMK# ___
2. If so, does the generator have a waste analysis plan containing the following requirements? [3745-270-07(A)(5)] Yes ___ No N/A RMK# ___
- a. A detailed chemical and physical analysis of a representative sample of the wastes being treated? [3745-270-07(A)(5)(a)] Yes ___ No N/A RMK# ___
- b. All information necessary to treat the waste(s) in accordance with the requirements of 3745-270, including the selected frequency? [3745-270-07(A)(5)(a)] Yes ___ No N/A RMK# ___
3. Is the WAP on-site in the facility's files and available to inspectors? [3745-270-07(A)(5)(b)] Yes ___ No N/A RMK# ___
4. Have the treated wastes met the applicable treatment standards in 3745-270-40? Yes ___ No N/A RMK# ___

NOTE: If the waste is a characteristic waste, which has been treated to render it non hazardous and subsequently sent to a solid waste landfill, proceed to question 7 & 8.

5. Has the generator sent a notification and certification with the initial shipment of waste? [3745-270-07(A)(5)(c)] Yes ___ No N/A RMK# ___
6. Does each notification/certification form completed, contain the information found in Table 1 of 3745-270-07? [3745-270-07(A)(5)(c)] Yes ___ No N/A RMK# ___
7. Has the generator, who is treating a characteristic waste, submitted a notification and certification to the director which contains the following:
- i. Name and address of the facility receiving the waste? [3745-270-09(D)(1)(a)] Yes ___ No N/A RMK# ___
- ii. A description of the waste, including EPA hazardous waste codes and treatability group, and UHCs? [3745-270-09(D)(1)(b)] Yes ___ No N/A RMK# ___

NOTE: If the waste will be treated and monitored for all UHCs then they do not need to be listed on the notice.

8. Has the process/operation generating the waste or the solid waste landfill facility changed? If so: Yes ___ No ___ N/A RMK# ___
- a. Has the notification and certification been updated in the generators and treaters files? [3745-270-09(D)] Yes ___ No N/A RMK# ___
- b. Has the director been notified of such changes? [3745-270-09(D)] Yes ___ No N/A RMK# ___

NOTE: The director need only be notified on an annual basis but no later than December 31.

9. Is the facility treating contaminated soil using the alternative treatment standards in 3745-270-49? If so: Yes ___ No ___ N/A RMK# ___
- a. Has the facility treated the contaminated soil to less than 10 times the Universal Treatment Standards or has a 90% reduction in the total constituent concentrations occurred? [3745-270-49(C)] Yes ___ No N/A RMK# ___
10. Does each notification/certification form completed, contain the information found in Table 1? [3745-270-07(A)(3)] Yes ___ No N/A RMK# ___

NOTE: If the waste will be treated and monitored for all constituents, there is no need to put them all on the LDR notice.

REMARKS

HAZARDOUS DEBRIS

- 1. Does the material in question meet the definition of hazardous debris as defined in rule 3745-270-02(A)(3)? Yes___ No___ N/A x RMK#___

- 2. Is the hazardous debris being treated to the waste specific treatment standard in 3745-270-40 to 3745-270-49? (If yes, use the generator checklist.) Yes___ No___ N/A x RMK#___

- 3. Is the hazardous debris being treated by the alternative treatment standards in 3745-270-45? If so: Yes___ No___ N/A x RMK#___
 - a. Has the debris or mixtures of debris been treated for each contaminant subject to treatment (toxicity, listed waste and cyanide reactive debris) using one or more of the treatment technologies found in Table 1 in 3745-270-45? [3745-270-45(A)] Yes ___ No N/A x RMK#___

- NOTE:** *If immobilization has been used in a treatment train, it must be the last treatment technology used.*

- 4. Was the hazardous debris a listed waste treated by an immobilization technology in Table 1? [3745-270-45(A)(1)] If so: Yes___ No___ N/A x RMK#___
 - a. Was immobilization the last treatment technology used? [3745-270-45(A)(3)] Yes ___ No N/A x RMK#___

- 5. Is the waste a PCB waste under 40 CFR Part 761? If so: Yes___ No___ N/A x RMK#___
 - a. Has the waste been treated to the most stringent standard in 40 CFR 761 or 3745-270-45? [3745-270-45(A)(5)] Yes ___ No N/A x RMK#___

- 6. Has the residue from the treatment of hazardous debris been disposed of in accordance with 3745-270-40 to 3745-270-49? [3745-270-45(D)] Yes ___ No N/A x RMK#___

- 7. Does the owner/operator of a treatment facility that claims the debris is excluded under 3745-51-03(F)(1) maintain the following information? Yes___ No___ N/A x RMK#___
 - a. Records of all inspections, evaluations, and analyses of treated debris? [3745-270-07(D)(3)(a)]

- b. Records of key operating parameters of the treatment unit? [3745-270-07(D)(3)(b)] Yes ___ No N/A RMK# ___
- c. A certification statement for each shipment of treated debris? (See 270-07(D)(3)(c) for exact wording) [3745-270-07(D)(3)(c)] Yes ___ No N/A RMK# ___
8. Does the notifications and certifications of an owner/operator who first claims the debris is excluded under 3745-51-03(F) have the following information? [3745-270-07(D)(3)] Yes ___ No N/A RMK# ___
- a. Name and address of licensed solid waste landfill receiving the treated debris? [3745-270-07(D)(1)(a)] Yes ___ No ___ N/A RMK# ___
- b. Description of hazardous debris as initially generated with applicable waste codes? [3745-270-07(D)(1)(b)] Yes ___ No N/A RMK# ___
- c. Technology used from Table 1? [3745-270-07(D)(1)(c)] Yes ___ No N/A RMK# ___
9. Has the above notification been sent to the director? [3745-270-07(D)(1)] Yes ___ No N/A RMK# ___

REMARKS

TREATING FACILITIES

1. Does the treating facility test waste according to their waste analysis plan as required in 3745-54-13 or 3745-65-13? [3745-270-07(B)] Yes ___ No N/A RMK# ___
2. Has a one-time notification been sent with the initial shipment of waste or contaminated soil to the land disposal facility? [3745-270-07(B)(3)] Yes ___ No N/A RMK# ___
- Note:** *No further notification is necessary until such time that the waste changes or the receiving facility changes.*
3. Does the one-time notification and certification contain the information listed in Table 2 of 3745-270-07? [3745-270-07(B)(3)] Yes ___ No N/A RMK# ___
4. Are wastes or treatment residues being sent to another TSD to be further managed? **If so:** Yes ___ No ___ N/A RMK# ___
- a. Has the facility complied with the generator notification/certification requirements? [Table 1, 3745-270-07(B)(5)] Yes ___ No N/A RMK# ___
5. Are recyclable materials used in a manner constituting disposal and subsequently subject to 3745-266-20? **If so:** Yes ___ No ___ N/A RMK# ___
- a. Has the treatment facility (recycler) sent a notification (found at 3745-270-07(B)(4)), excluding the manifest number, with each shipment of waste? [3745-270-07(B)(6)] Yes ___ No N/A RMK# ___
- b. Has the treatment facility (recycler) sent a certification found in 3745-270-07(B)(4) [3745-270-07(B)(6)] Yes ___ No N/A RMK# ___
- c. Has a copy of the notification and certification been sent to the director? [3745-270-07(B)(6)] Yes ___ No N/A RMK# ___
6. Does the recycling facility maintain records of the name and location of each entity receiving the hazardous waste-derived products? [3745-270-07(B)(6)] Yes ___ No N/A RMK# ___
7. Does the owner or operator of any land disposal facility disposing of waste subject to regulation under 3745-270 have: Yes ___ No ___ N/A RMK# ___

- a. Copies of all notices and certifications required in 3745-270? Yes ___ No N/A RMK# ___
- b. Test results indicating all waste, extracts of waste or treatment residue are in compliance with 3745-270-40 to 3745-270-49? Yes ___ No N/A RMK# ___
- c. Followed the testing frequency specified in the facility's WAP? Yes ___ No N/A RMK# ___

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REMARKS

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 No N/A ___ RMK# ___
2. Did the SQUWH dilute or treat universal waste, except when responding to releases as provided in 3745-273-17 or managing specific wastes as provided in 3745-273-13? [3745-273-11(B)] Yes No N/A ___ RMK# ___

WASTE MANAGEMENT & LABELING/MARKING

UNIVERSAL WASTE BATTERIES

3. Are battery(ies) that show evidence of leakage, spillage or damage that could cause leaks contained? [3745-273-13(A)(1)] Yes ___ No N/A RMK# ___
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 No N/A ___ RMK# ___
5. Does the SQUWH conduct any of the following activities:
- a. Sort batteries by type? Yes No ___ N/A ___ RMK# ___
- b. Mix battery types in one container? Yes ___ No N/A ___ RMK# ___
- c. Discharge batteries to remove the electric charge? Yes ___ No N/A ___ RMK# ___
- d. Regenerated used batteries? Yes ___ No N/A ___ RMK# ___
- e. Disassemble them into individual batteries or cells? Yes ___ No N/A ___ RMK# ___
- f. Remove batteries from consumer products? Yes ___ No N/A ___ RMK# ___

g. Remove the electrolyte from the battery? Yes ___ No N/A ___ RMK# ___

If so, are the casings of the batteries breached, not intact, or open (except to remove the electrolyte)? [3745-273-13(A)(2)]
Yes No ___ N/A RMK# ___

6. If the electrolyte is removed or other waste generated, has it been determined whether it is a hazardous waste? [3745-273-13(A)(3)]
Yes ___ No N/A RMK# ___

a. If the electrolyte or other waste is characteristic, is it managed in compliance with 3745-50 through 3745-69? [3745-273-13(A)(3)(a)]
Yes ___ No N/A RMK# ___

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 ___ No N/A RMK# ___

7. Are the battery(ies) of container(s) of batteries labeled with the words "Universal Waste - Batteries" or "Waste Battery(ies)" or "Used Battery(ies)"? [3745-273-14(A)]
Yes No N/A ___ RMK# ___

UNIVERSAL WASTE LAMPS

8. Does the SQGUHW contain lamps in containers or packages that are structurally sound, adequate to prevent breakage, and are 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)]
Yes No N/A ___ RMK# 1

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 ___ No N/A RMK# ___

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)] Yes No N/A RMK#

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 3745-52-34). Crushed lamps must be transported by a registered hazardous waste transporter to a permitted hazardous waste facility under a hazardous waste manifest.

ACCUMULATION TIME

11. Is the waste accumulated for less than one year? [3745-273-15(A)] If not: Yes No N/A RMK#
- a. Was 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 No N/A RMK#

NOTE: Accumulation is defined as date generated or date received from another handler.

12. Is the length of time the universal waste is stored documented by one of the following: [3745-273-15(C)] Yes No N/A RMK#
- a. Marking or labeling the container with the earliest date when the universal waste became a waste or was received? [3745-273-15(C)(1)] Yes No N/A RMK#
- b. Marking or labeling individual item(s) of universal waste with the earliest date that it became a waste or was received? [3745-273-15(C)(2)] Yes No N/A RMK#
- c. Maintaining an inventory system on-site that identifies the date the universal waste became a waste or was received? [3745-273-15(C)(3)] Yes No N/A RMK#
- d. Maintaining an inventory system on-site that identifies the earliest date that any universal waste in a group of universal waste items or a group of containers became a universal waste or was received? [3745-273-15(C)(4)] Yes No N/A RMK#
- e. Placing the universal waste in a specific accumulation area and identifying the earliest start date or date received? [3745-273-15(C)(5)] Yes No N/A RMK#

- f. Any other method, which clearly demonstrates, the length of time the universal waste has been accumulated from the date it became a waste or was received? [3745-273-15(C)(6)]

Yes ___ No N/A ___ RMK# ___

EMPLOYEE TRAINING

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 No N/A ___ RMK# ___

RESPONSE TO RELEASES

14. Are releases of universal waste and other residues immediately contained? [3745-273-17(A)]

Yes ___ No N/A RMK# ___

15. Is the material released characterized? [3745-273-17(B)]

Yes ___ No N/A RMK# ___

16. If the material released is a hazardous waste, is 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 Chapter 3745-52) [3745-273-17 (B)]

Yes ___ No N/A RMK# ___

OFF-SITE SHIPMENTS

NOTE: *If a SQUWH self-transport waste, then they must comply with the Universal Waste transporter requirements.*

17. Are universal wastes sent to either another handler, destination facility or foreign destination? [3745-273-18(A)]

Yes No N/A ___ RMK# ___

NOTE: *SQUWHs are prohibited to send waste to any other facility.*

18. If the universal waste meets the definition of hazardous material under 49 CFR 171-180, are DOT requirements met with regard to package, labels, placards and shipping papers? [3745-273-18(C)]

Yes ___ No N/A RMK# ___

19. Prior to shipping universal waste off-site, does the receiver agree to receive the shipment? [3745-273-18(D)]

Yes No N/A ___ RMK# ___

20. If the universal waste shipped off-site is rejected by another handler or destination facility does the originating handler do one of the following:
- a. Receive the waste back? [3745-273-18(E)(1)] Yes ___ No ___ N/A RMK# ___
- b. Agree to where the shipment will be sent? [3745-273-18(E)(2)] Yes ___ No ___ N/A RMK# ___
21. If a handler rejects a partial or full load from another handler, does the receiving handler contact the originating handler and discuss one of the following:
- a. Sending the waste back to the originating handler? [3745-273-18(F)(1)] Yes ___ No N/A RMK# ___
- b. Sending the shipment to a destination facility? (If both the originating and receiving handler agree) [3745-273-18(F)(2)] Yes ___ No ___ N/A RMK# ___
22. If the handler received a shipment of hazardous waste that was not universal waste, did the SQUWH immediately notify Ohio EPA? [3745-273-18(G)] Yes ___ No N/A RMK# ___
23. If the handler received a shipment of nonhazardous, non-universal waste, was the waste managed in accordance with applicable law? [3745-273-18(H)] Yes ___ No N/A RMK# ___

EXPORTS

24. Is waste being sent to a foreign destination? If so: Yes ___ No N/A ___ RMK# ___
- a. Does the small quantity handler comply with primary exporter requirements in OAC 3745-52-53, 3745-52-56, and 3745-52-57? [3745-273-20(A)] Yes ___ No N/A RMK# ___
- b. Is waste exported only upon consent of the receiving country and in conformance with U.S. EPA's "Acknowledgment of Consent" as defined in 3745-52-50 to -52-57? [3745-273-20(B)] Yes ___ No N/A RMK# ___
- c. Is a copy of U.S. EPA's "Acknowledgment of Consent" provided to the transporter? [3745-273-20(C)] Yes ___ No N/A RMK# ___

REMARKS

1. Original shipping container.

TANK SYSTEM REQUIREMENTS (OAC 3745-66-91 TO 3745-66-100)

(Please refer to the rules before or while completing this checklist.)

NOTE: *New Tank System - Installation commencing after July 14, 1986.*
Existing Tank System - Installation or operation commencing on/before July 14, 1986.

1. For an existing or new tank system(s) has secondary containment been provided? [3745-66-93(A)(1) to (A)(5)] Yes No N/A RMK#

- NOTES:**
- A. *Secondary containment must be provided for all new tank systems or components, prior to their being put into service. [3745-66-93(A)(1)]*
 - B. *For an existing tank system(s) of **known and documentable age** secondary containment is required to be provided within two years after January 12, 1987, or when the tank system has reached 15 years of age, whichever came later. [3745-66-93(A)(3)]*
 - C. *Secondary containment is required for all existing tanks for which the **age cannot be documented**. The tanks were required to have secondary containment within eight years of January 12, 1987 or when the facility turned 15 years of age, whichever came later. [3745-66-93(A)(4)]*
 - D. *Tank systems that store/treat materials that become hazardous waste after January 12, 1987, must have secondary containment required within the time intervals in OAC 3745-66-93(A)(1) to (A)(4). The date the material became a hazardous waste must be used in place of January 12, 1987. [3745-66-93(A)(5)]*
 - E. *If the tank system has no secondary containment, or a variance from secondary containment requirements has been granted, skip to the middle of page 6 of this Tank Systems Checklist: (Tank Systems without secondary containment).*

2. Is the secondary containment one of the following:

- a. An External Liner [3745-66-93(E)(1)(a) - (1)(f)] If so, Yes No N/A RMK#
 - i. Is liner designed or operated to contain 100% of the capacity of the largest tank? Yes No N/A RMK#
 - ii. Is liner designed and operated to prevent run-on and infiltration or the collection system has excess capacity to contain run-on and infiltration from a 25-year, 24-hour storm? Yes No N/A RMK#
 - iii. Is liner free of cracks and gaps? Yes No N/A RMK#
 - iv. Does liner completely surround the tank and cover all earth likely to be contacted by waste during a release? Yes No N/A RMK#
 - v. Are chemically resistant water stops in place at all joints? (concrete liners only) Yes No N/A RMK#

- vi. Is there a compatible interior coating or lining to prevent migration of waste into the concrete? (*concrete liners only*) Yes No N/A RMK#
- b. **Vault System?** [3745-66-93(E)(2)(a) - (2)(f)] If so, Yes No N/A RMK#
- i. Is vault system designed to contain 100% of the capacity in the largest tank? Yes No N/A RMK#
- ii. Is liner designed and operated to prevent run-on and infiltration or the collection system has excess capacity to contain run-on and infiltration from a 25-year, 24-hour storm? Yes No N/A RMK#
- iii. Are chemically resistant water stops in place at all joints? Yes No N/A RMK#
- iv. Is there a compatible interior coating to prevent migration into the concrete? Yes No N/A RMK#
- v. For **ignitable or reactive waste**: Is the vault system provided with means to prevent against the formation or ignition of vapors? Yes No N/A RMK#
- vi. Is vault system provided with an exterior moisture barrier? Yes No N/A RMK#
- c. **Double-Walled Tank?** [3745-66-93(E)(3)(a) - (3)(c)] If so, Yes No N/A RMK#
- i. Is double-walled tank designed as an integral structure to contain any release from the inner tank? Yes No N/A RMK#
- ii. **If metal**, are the primary tank interior and outer shell exterior surfaces protected from corrosion? Yes No N/A RMK#
- iii. Is double-walled tank provided with a continuous leak detection system able to detect a release within 24 hours or at the earliest practicable time? Yes No N/A RMK#
3. Is the secondary containment system for the tank(s) an equivalent device as described in 3745-66-93(D)(4) which has been approved by the director? [3745-66-93(D)(E)] Yes No N/A RMK#

SECONDARY CONTAINMENT DESIGN/OPERATION/INSTALLATION (OAC 3745-66-93(B)(C))

4. Has each secondary containment system been designed, installed and operated to prevent any migration of wastes or liquid to the soil, ground water, or surface water and is it capable of detecting and collecting releases and accumulated liquids? [3745-66-93(B)] Yes No N/A RMK#
5. Does the secondary containment system meet the following minimum requirements of 3745-66-93(C):
- a. Constructed or lined with compatible materials of sufficient strength to prevent failure? Yes No N/A RMK#
 - b. Placed on a foundation or base capable of providing support? Yes No N/A RMK#
 - c. Provided with a leak detection system designed/operated to detect failure to primary or secondary containment or any release of hazardous waste within 24 hours or at earliest practicable time? Yes No N/A RMK#
 - d. Sloped or designed to drain and remove liquid resulting from leaks, spills or precipitation? Yes No N/A RMK#
 - e. Any liquid which accumulates in the containment unit resulting from spills, leaks or precipitation removed within 24 hours or in a timely manner? Yes No N/A RMK#

ANCILLARY EQUIPMENT REQUIREMENTS (OAC 3745-66-93(F))

6. Is ancillary equipment provided with secondary containment (such as double-walled piping, jacketing or a trench)? *If not*, is the ancillary equipment:
- a. Inspected daily? **AND**; Yes No N/A RMK#
 - b. Is ancillary equipment one of the following:
 - i. Above ground piping (exclusive of flanges, joints, valves and connections)? Yes No N/A RMK#
 - ii. Welded flanges, welded joints and/or welded connections? Yes No N/A RMK#
 - iii. Sealless or magnetic coupling pumps and/or sealless valves? Yes No N/A RMK#

- iv. Pressurized above ground piping systems with automatic shut-off devices (e.g., excess flow check valves, flow metering shutdown, and/or loss of pressure-actuated shut-off devices)? Yes ___ No N/A RMK# ___

DESIGN AND INSTALLATION OF NEW TANK SYSTEMS OR COMPONENTS (OAC 3745-66-92)

1. Is there a written assessment attesting that the design, installation and structural integrity of the system is adequate for the management of hazardous waste(s)? [3745-66-92(A)] Yes ___ No N/A ___ RMK# ___
2. Does the written assessment include the following: [OAC 3745-66-92(A)]
- a. Certification by an independent, registered, professional engineer? Yes ___ No ___ N/A ___ RMK# 1.
 - b. Consideration of the design standards of the system? Yes ___ No N/A ___ RMK# 1.
 - c. Consideration of the hazardous characteristics of the waste(s)? Yes ___ No N/A ___ RMK# 1.
 - d. An evaluation by a corrosion expert (*if the external system/components are metal*)? Yes ___ No N/A ___ RMK# 1.
 - e. A determination of design and operational measures that will be needed to protect the tank system from potential damage (*for underground tank components*)? Yes ___ No N/A RMK# ___
 - f. Design considerations to ensure that the tank foundations will maintain the load of a full tank? Yes ___ No N/A ___ RMK# 1.
 - g. Design considerations for anchoring the unit to prevent floatation (*for tanks situated in a seismic fault zone or saturated zone*)? Yes ___ No N/A ___ RMK# 1.
 - h. Design considerations to ensure that the tank system will withstand the effects of frost heave (*for underground tank systems*)? Yes ___ No N/A ___ RMK# 1.
3. Are there written statements by those person who supervised installation or certified design of the new tank system, that the tank system was properly installed and designed and that required repairs were performed? [3745-66-92(G)] Yes ___ No N/A ___ RMK# ___

Do the written statements address all of the following:

- a. Inspection for damage and/or inadequate construction and installation was conducted? [3745-66-92(B)] Yes No N/A RMK# 1
- b. Statement that deficiencies were corrected before the tank system was covered or put into use? [3745-66-92(B)] Yes No N/A RMK# 1
- c. Proper backfilling? [3745-66-92(C)] Yes No N/A RMK# 1
- d. Tightness test; if the tank was found not to be tight, does the statement indicate that proper repairs were made? [3745-66-92(D)] Yes No N/A RMK# 1
- e. Proper support and protection of ancillary equipment? [3745-66-92(E)] Yes No N/A RMK# 1
- f. Supervision of the installation of field fabricated corrosion protection? [3745-66-92(F)] Yes No N/A RMK# 1

ASSESSMENT OF EXISTING TANK SYSTEM'S INTEGRITY (OAC 3745-66-91)

1. For existing tank systems:
Is there a written assessment on file which includes the following considerations: [3745-66-91(A)(B)] Yes No N/A RMK#
- a. Design standards? [3745-66-91(B)(1)] Yes No N/A RMK#
- b. The characteristics of hazardous waste(s) that have been or will be handled? [3745-66-91(B)(2)] Yes No N/A RMK#
- c. Corrosion protection measures? [3745-66-91(B)(3)] Yes No N/A RMK#
- d. The age of the tank system has been estimated or documented? [3745-66-91(B)(4)] Yes No N/A RMK#
- e. A leak test has been conducted? (For non-enterable underground tanks) [3745-66-91(B)(5)(a)] Yes No N/A RMK#
- f. A leak test or an internal inspection by qualified P.E. has been conducted? (For other than non-enterable underground tanks and for ancillary equipment) [3745-66-91(B)(5)(b)] Yes No N/A RMK#
- g. Is assessment certified by an independent, registered P.E.? [3745-66-91(A)] Yes No N/A RMK#

2. Have the tests specified in 1e and 1f been conducted annually on the tanks and ancillary equipment until secondary containment is provided? [3745-66-93(I)] *If so,* Yes ___ No N/A RMK# ___
- a. Have tests been certified by an independent, registered P.E.? Yes ___ No N/A RMK# ___
3. For tanks without secondary containment used to store or treat wastes which become hazardous wastes after July 14, 1986, has the assessment been completed within 12 months of the date the waste became a hazardous waste? [3745-66-91(C)] Yes ___ No N/A RMK# ___

TANK SYSTEM - GENERAL OPERATING REQUIREMENTS (OAC 3745-66-94)

1. Does the o/o follow the general operating requirements below:
- a. Does the o/o prevent placement of hazardous waste or treatment reagents in tank or secondary containment if such placement can cause the system to leak, rupture, corrode, or otherwise fail? [3745-66-94(A)] Yes No N/A ___ RMK# ___
- b. Does the o/o use appropriate controls to prevent spills or overflows from the system (e.g., check valves, dry disconnect couplings, high level alarms, etc.)? [3745-66-94(B)] Yes No N/A ___ RMK# ___
- c. If a leak or spill has occurred in the tank system, has the o/o complied with 3745-66-96? [3745-66-94(C)] Yes ___ No N/A RMK# ___

TANK SYSTEM - INSPECTION REQUIREMENTS (OAC 3745-66-95)

1. Has the o/o documented the inspections required in 3745-66-95, in the operating record, including inspection of the following:
- a. Spill control equipment (daily)? [3745-66-95(A)(1)] Yes No N/A ___ RMK# ___
- b. Above ground portion of tank (daily)? [3745-66-95(A)(2)] Yes No N/A ___ RMK# ___
- c. Data from leak detection equipment (daily)? [3745-66-95(A)(3)] Yes No N/A ___ RMK# ___

- d. Construction material and area immediately surrounding the tanks for signs of erosion or release of hazardous waste (daily)? [3745-66-95(A)(4)] Yes No N/A RMK#
- e. Where applicable, the cathodic protection system to confirm proper operation within six months of initial installation and annually thereafter? [3745-66-95(B)(1)] Yes No N/A RMK#
- f. Where applicable, all sources of impressed current at least bi-monthly? [3745-66-95(B)(2)] Yes No N/A RMK#

TANK SYSTEMS STORING IGNITABLE OR REACTIVE WASTES (OAC 3745-66-98 AND 3745-66-99)

1. For tanks used to treat or store ignitable or reactive wastes, has the o/o complied with one of the following: [3745-66-98(A)]
- a. Is the waste treated immediately after placement in the tank so that the resultant mixture is no longer ignitable or reactive and the o/o has conducted such activities in compliance with 3745-65-17(B)? [3745-66-98(A)(1)]; OR Yes No N/A RMK#
- b. Is the waste stored or treated to protect it from materials or conditions which may cause ignition or reaction? [3745-66-98(A)(2)]; OR Yes No N/A RMK#
- c. The tank is used solely for emergencies? [3745-66-98(A)(3)] Yes No N/A RMK#
2. If ignitable or reactive waste is stored or treated, are protective distances maintained between waste management areas and any public streets, alleys or adjoining property lines as required by the NFPA Flammable and Combustible Liquids Code (1996)? [3745-66-98(B)] Yes No N/A RMK#
3. Has the o/o placed incompatible wastes or materials into the same tank system, or into a tank system that has not been decontaminated and which previously held an incompatible waste or material? [3745-66-99] Yes No N/A RMK#
- a. *If so*, have the requirements of 3745-65-17(B) been met? Yes No N/A RMK#

TANK SYSTEM - WASTE ANALYSIS REQUIREMENTS (OAC 3745-66-100)

1. In addition to conducting the waste analysis required by 3745-65-13, when the tank system is used to store or treat a waste which is substantially different or uses a substantially different process than previously used, has the o/o done one of the following: [3745-66-100] Yes ___ No ___ N/A X RMK# ___
- a. Conducted waste analysis and trial treatment or storage tests? [3745-66-100(A)]; OR Yes ___ No ___ N/A X RMK# ___
- b. Obtained written documentation on similar waste under similar operating conditions to show that the proposed storage/treatment will meet the requirements of OAC 3745-66-94? [3745-66-100(B)] Yes ___ No ___ N/A X RMK# ___

TANK SYSTEMS FOUND TO BE LEAKING OR UNFIT FOR USE (OAC 3745-66-96)

1. Has there been a leak or spill from any tank system or has any tank system been found unfit for use? *If so*, did the o/o: Yes ___ No X N/A ___ RMK# ___
- a. Immediately cease flow of material into tank and investigate the cause of the release? [3745-66-96(A)] Yes ___ No N/A X RMK# ___
- b. Remove waste from tank system to prevent further release within 24 hours of detection or earliest practicable time? [3745-66-96(B)(1)] Yes ___ No N/A X RMK# ___
- c. Remove all material released into secondary containment system within 24 hours or as timely as possible to prevent harm to human health and the environment? [3745-66-96(B)(2)] Yes ___ No N/A X RMK# ___
- d. Immediately conduct a visual inspection of the release? [3745-66-96(C)] Yes ___ No N/A X RMK# ___
- e. Prevent further migration of the leak or spill to soils or surface waters? [3745-66-96(C)(1)] Yes ___ No N/A X RMK# ___
- f. Properly dispose of any visibly contaminated soil or surface water? [3745-66-96(C)(2)] Yes ___ No N/A X RMK# ___
- g. Report the release to the director within 24 hours unless it was less than one pound and was cleaned up immediately? [3745-66-96(D)(1)(2)] Yes ___ No N/A X RMK# ___
- h. Submit a written report of the incident to the director within 30 days of the release? [3745-66-96(D)(3)] Yes ___ No N/A X RMK# ___

i. Remediate the spill and repair the unit prior to returning it to service? [3745-66-96(E)] Yes No N/A RMK# _____

j. For a release from a tank system without secondary containment, did the o/o provide secondary containment meeting the requirements of 3745-66-93 for the unit prior to putting it back into service? [3745-66-96(E)(4)] Yes ___ No N/A RMK# _____

NOTE: *The requirements noted 1.j. do not apply if the release was from an above ground component of the tank which can be inspected visually after being put back into service.*

2. In the event that the repairs to the tank system were major (replacement of liner, repair of ruptured primary or secondary containment structure), did the o/o obtain a certification from an independent, registered P.E. attesting that the repaired unit is capable of handling hazardous waste? [3745-66-96(F)] Yes ___ No N/A RMK# _____

a. Was a copy of the certification submitted to the director within seven days after returning the system to use? [3745-66-96(F)] Yes ___ No N/A RMK# _____

3. If the o/o was unable to repair and return the unit to service as described in 1.a through 1.e, was the tank system closed in accordance with 3745-66-97? [3745-66-96(E)(1)] Yes ___ No N/A RMK# _____

4. Does the o/o have a tank system **with a variance from secondary containment** from which a release has occurred but has not migrated beyond the zone of engineering control? **If so,** Yes ___ No ___ N/A RMK# _____

a. Has the o/o complied with 3745-66-96(A) through (F) and decontaminated soils? [3745-66-93(G)(3)] Yes ___ No N/A RMK# _____

b. If soils cannot be contaminated/removed, has the o/o complied with 3745-66-97(B)? [3745-66-93(G)(3)] Yes ___ No N/A RMK# _____

5. Does the o/o have a tank system **with a variance from secondary containment** from which a release occurred and has migrated from the zone of engineering control? **If so,** Yes ___ No ___ N/A RMK# _____

a. Has the o/o complied with 3745-66-96(A) through (D), prevented migration, and decontaminated soil? [3745-66-93(G)(4)] Yes ___ No N/A RMK# _____

- b. If soils cannot be decontaminated/removed, or if the groundwater has been contaminated, has the o/o complied with 3745-66-97(B)? [3745-66-93(G)(4)] Yes ___ No N/A RMK# ___

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REMARKS

1. These items will be assessed upon receipt of the written tank assessment.

