**State of Oklahoma**
**Department of Environmental Quality**

**Facility:** _____
**Date:** _____

# AIR EMISSIONS CHECKLIST - Subpart CC
# Large Quantity Generators and Interim Status

Note: The Oklahoma Hazardous Waste Management Regulations [Oklahoma Administrative Code (OAC) 252:205] incorporates by reference at OAC 252:205-3-2 the applicable federal hazardous waste regulations and used oil regulations of 40 CFR 260-279. Additional state regulations of OAC 252:205 are further identified.

A potential violation is indicated with "__**No**" in bold.

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## Section A - Applicability

1. Is the facility a large quantity generator? __Yes __No* __N/A

2. Does any of the following exceptions from 40 CFR 265.1080(b) apply to this facility? __Yes* __No

- *Unit did not receive HW after 12/6/96 (Check if applicable)* __
- *Using containers of less than 26 gallons capacity* __
- *Unit undergoing closure* __
- *Unit used in an on-site RCRA of CERCLA clean-up* __
- *Unit with CAA, NESHAPS or NSPS controls* __
- *Tanks with process vents (subject to Subpart AA)* __

3. Does any of the following exemptions from 40 CFR 265.1083(c) apply to this facility? __Yes* __No

- *Waste stream is less than 500 ppmw average VO, and waste determination was done (per 265.1084). (Check if applicable)* __
- *Organic content of waste already reduced by treatment* __
- *Tank is used for biological treatment* __
- *All waste placed in unit meets LDR limits* __
- *All waste placed in unit has been treated to limits as specified in 268.42(c)(4)(ii)* __
- *Tank is used for bulk feed to incinerator and requirements of 265.1083(5)(i)-(iii) are met* __
- *Mass removal rate ((cc)(2)(iii))* __
- *Miscellaneous treatment ((c)(2)(v))* __
- *Organic reduction efficiency ((c)(2)(vi))* __
- *Combustion processes ((c)(2)(vii) or (viii))* __

4. Does any of the following exemptions/exclusions from 40 CFR 265.1 apply to this facility? __Yes* __No

- *Hazardous waste recycling unit exemption (Check if applicable)* __
- *Satellite accumulation area* __
- *Totally enclosed treatment facility exemption* __
- *Elementary neutralization unit (corrosive)* __
- *Wastewater treatment in tanks exemption* __
- *Emergency or spill management exemption* __

***This checklist is not applicable to these units.***

## Section B - VO Concentration

1. Is the average volatile organic concentration of each unit more than 500 ppmw determined on an average annual basis at the point of origination? (40 CFR 265.1084(a)) __Yes **__No** __N/A
   If yes, list the number of units and the concentration:
   _____
   _____
   If no, is the determination in the operating record? __Yes **__No** __N/A

2. How was the determination done?__Knowledge of process
   __ Sampling
   a. If knowledge was used, is there documentation on file? __Yes **__No** __N/A
   b. If sampling was used, was the sampling done by an EPA approved method? (Method _____) __Yes **__No** __N/A
   c. Does the facility have a written sampling plan? __Yes **__No** __N/A
   d. Did the facility make new determinations when the waste stream changed? __Yes **__No** __N/A

3. Did the facility install controls on the units that are applicable to the Subpart CC rule? (If yes, go to question #5) __Yes **__No** __N/A

4. Does the facility have an implementation schedule on site in their operating record? __Yes **__No** __N/A

5. Does the implementation schedule contain the following info.:
   a. Installation could not be completed by 12/06/96. __Yes **__No** __N/A
   b. Show dates by which designs and construction will be initiated & completed, and include supporting information e.g. contracts, purchase orders, performance tests. __Yes **__No** __N/A
   c. Install equipment as soon as possible __Yes **__No** __N/A
   d. Documentation that any schedule change cannot be reasonably avoided. __Yes **__No** __N/A
   e. Schedule should have been in operating log since 12/06/96. __Yes **__No** __N/A

## Section C - Tanks

**LEVEL 1 CONTROLS** - Fixed roof with no control device (40 CFR 265.1085(c)):

A. If Level 1 controls are used, are the following conditions met?

| | | | |
|---|---|---|---|
| 1. Waste maximum organic vapor pressure is less than cutoff for tank design capacity. | __Yes | **__No** | __N/A |
| 2. No heating to or above temperatures at which vapor pressure is determined. | __Yes | **__No** | __N/A |
| 3. No waste stabilization in tank. | __Yes | **__No** | __N/A |

**LEVEL 2 CONTROLS**

| | | | |
|---|---|---|---|
| 1. Is HW having an average of 500 ppm or more organics being placed in a tank with Level 2 controls? (40 CFR 265.1085(b)(1)) | __Yes | __No | __N/A |
| 2. Does the facility have any waste stabilization tanks on site? | __Yes | __No | __N/A |
| a. Are Level 2 controls installed? | __Yes | **__No** | __N/A |
| b. If not, when will they be installed?_____ | | | |

(*Note: Waste stabilization tanks had until 12/08/98 to install controls)*

LEVEL 2 CONTROLS - OPTION 1 - Fixed roof with internal floating roof (IFR) (40 CFR 265.1085(e)):

| | | | |
|---|---|---|---|
| A. Is the IFR designed so that it floats on the liquid surface? (Exception - when roof is supported by leg supports) | __Yes | **__No** | __N/A |
| B. Is there a continuous seal between the wall of the tank and the Floating edge that meets either of the following requirements: ___A liquid-mounted seal, a metallic seal ___Two continuous seals mounted one over the other (the lower seal may be vapor mounted between the wall of the tank and the floating roof edge.) | __Yes | **__No** | __N/A |
| C. Are all the openings in the IFR closed at all times? | __Yes | **__No** | __N/A |
| D. Are the automatic bleeder vents closed when the roof is floating, except when roof is being floated off or is landed on its leg supports? | __Yes | **__No** | __N/A |
| E. Prior to filling each tank, are the cover, access hatch, gauge float well, and lid openings bolted or fastened closed i.e. no visible gaps? | __Yes | **__No** | __N/A |
| F. Are rim spaces open only when floating roof is not floating or when pressure beneath the rim exceeds the manufacture recommended setting? | __Yes | **__No** | __N/A |
| G. Is filling or emptying continuous when IFR is siting on leg supports? | __Yes | **__No** | __N/A |
| H. Was the safety device in a closed position during normal operations? | __Yes | **__No** | __N/A |
| I. Was the safety device activated recently? (If so, why?_____ _____) | __Yes | __No | __N/A |

J. Were any of the defects applicable to the IFR? __Yes __No __N/A
___The IFR is not floating on the surface of the liquid.
___Liquid has accumulated on top of IFR
___Any portion of the roof seals have detached from the roof rim
___Holes, tears, or other openings are visible in seal fabric
___Gaskets no longer close off waste surfaces from the atmosphere; or
___The slotted membrane has more than 10% open area

K. Was a defect detected during the facility's last inspection? __Yes __No __N/A
(If so, what was done? _____)

LEVEL 2 CONTROLS - OPTION 2 - External Floating Roof (40 CFR 265.1085(f)):

*Note: Tanks not exceeding the Level 1 vapor pressures and tank capacities may use this tank option. Tanks that exceed the Level 1 criteria must use this option OR another Level 2 option.*

A. Is the floating roof a pontoon type or double deck type cover that rests on the surface of the waste with no fixed roof? __Yes **__No** __N/A

B. Is the roof floating on the waste? __Yes **__No** __N/A

C. If the roof is not floating on the waste, is the floating roof supported by leg supports? __Yes **__No** __N/A

D. Is there 2 continuous seals between the wall of the tank and roof edge, one above the other? (The lower seal is referred to as the primary seal; the upper seal is referred to as the secondary seal). __Yes **__No** __N/A

E. Is the primary seal a metallic shoe seal or a liquid-mounted seal? __Yes **__No** __N/A

F. Is the total area of gaps between the tank wall and primary seal within the limit of 212 sq cm per meter (230 sq in per foot) of tank diameter and the width of gaps must not exceed 3.8 cm (1.50 in)? __Yes **__No** __N/A

G. Are all the openings in the EFR closed at all times? __Yes **__No** __N/A

H. Are the automatic bleeder vents closed when the roof is floating, except when roof is being floated off or is landed on its leg supports? __Yes **__No** __N/A

I. Prior to filling each tank, are the cover, access hatch, gauge float well, and lid openings bolted or fastened closed i.e. no visible gaps? __Yes **__No** __N/A

J. Are rim spaces open only when floating roof is not floating or when pressure beneath the rim exceeds the manufacture recommended setting? __Yes **__No** __N/A

K. Is filling or emptying continuous when EFR is sitting on leg supports? __Yes **__No** __N/A

L. Was the safety device in a closed position during normal operations? __Yes **__No** __N/A

M. Was the safety device activated recently? __Yes __No __N/A
(If so, why? _____)

LEVEL 2 CONTROLS - OPTION 3 - Fixed roof tank venting through a closed vent system, to a control device that would destroy or reduce at least 95% of vapors (40 CFR 265.1085(g)):

| | | | |
|---|---|---|---|
| A. Is the fixed roof forming a continuous barrier over the entire surface area of the liquid in the tank? | __Yes | **__No** | __N/A |
| B. Are emissions vented to a control device? | __Yes | __No | __N/A |
| C. Are all openings in the roof not venting to the control device fixed with a closure device? | __Yes | **__No** | __N/A |
| D. If the vapor pressure underneath the fixed roof cover is less than atmospheric pressure when control device is working, the closure devices when closed, are there any visible cracks, holes, gaps, or other open spaces between cover opening and closure device? | __Yes | **__No** | __N/A |
| E. If vapor pressure below the fixed roof cover is equal to or greater than atmospheric pressure when the control device is working, are the cover and closure device designed to operate with no detectable emissions? | __Yes | **__No** | __N/A |
| F. Are the cover and closure devices closed at all times and the vapor headspace vented to a control device except when<br>• Performing inspections<br>• Performing maintenance or other normal operations<br>• Accessing the tank<br>• Removing accumulated sludge and other residues from the bottom of the tank. | __Yes | **__No** | __N/A |

LEVEL 2 CONTROLS - OPTION 4 - A pressure tank is used under negative pressure so that there is no venting to the atmosphere (40 CFR 265.1085(h)):

| | | | |
|---|---|---|---|
| A. Is the pressure tank designed not to vent to the atmosphere during filling to tank design capacity as a result of compression of the vapor headspace in the tank? | __Yes | **__No** | __N/A |
| B. Are there any safety devices on the tank? | __Yes | **__No** | __N/A |
| C. Are all openings equipped with closure devices designed to operate with no detectable emissions? | __Yes | **__No** | __N/A |
| D. Is the tank operated as a closed system except when a safety device opens to avoid an unsafe situation? | __Yes | **__No** | __N/A |
| E. If any defects were detected during an inspection, answer the Following questions: | | | |
| 1. Was attempt made to repair the defect in five days? | __Yes | **__No** | __N/A |
| 2. Was the tank repaired or removed from service after 45 days? | __Yes | **__No** | __N/A |
| 3. If there is no alternative tank capacity and repairs were delayed, were these repairs done the next time the process or unit generating the HW was shut down? If no, explain. | __Yes | **__No** | __N/A |
| F. For waste transfer of HW between tanks, does facility maintain hard piping or other closed systems? | __Yes | **__No** | __N/A |

LEVEL 2 CONTROLS - OPTION 5 - Enclosure vented to an enclosed combustion control device (40 CFR 265.1085(i)):

A. Is the HW inside an enclosure which meets the criteria for a permanent total enclosure in Procedure T? __Yes **__No** __N/A
B. Is the enclosure vented to a combustion device? __Yes **__No** __N/A
C. Was the verification process for Procedure T done initially? __Yes **__No** __N/A
D. Was it done annually after that? __Yes **__No** __N/A

*Note: Procedure T - Criteria for and Verification of a Permanent or Temporary Enclosure, 40 CFR 52.741 Appendix B. Requires that an enclosure be connected via a closed-vent system to a control device.*

## Section D - Containers

(Note: Applies to containers of HW with an average VO concentration of >50 ppmw.)

Light liquid service: For a hazardous waste to be in light liquid service, the vapor pressure of one or more of the organic constituents in the material must be greater than 0.3 Kilopascals (0.044 psi) at 20 degrees C and the total concentration of pure organic constituents having a vapor pressure greater than 0.3 Kilopascals at 20 degrees centigrade is equal to or greater than 20 percent by weight.

**Level One**:
- Containers must be >0.1 cubic meters (26.4 gal) and < or = to 119 gallons. If the organic waste is not in light liquid service, it can be above 119 gallons.
- Meet DOT standards.
- Use a cover and closure device on the container and ensure that there are no visible gaps into the interior of the container OR
- Use vapor suppressing barrier on or above the hazardous waste in the container.

**Level Two**:
- Containers are larger than 0.46 cubic meters (122 gal) and are in light liquid service.
- The container must meet DOT specifications.
- Operates with no detectable emissions from the container under Method 21.
- Demonstrated to be vapor tight within the last twelve months using Method 27.

**Level Three**:
- Container can be used for waste stabilization.
- Vent vapors from containers and remove or destroy them in a control device.
- Put container in a Procedure T enclosure and vent vapors and destroy them in a control device.

1. What level of control is the facility using to comply with Subpart CC regulations?
___ Level One ___ Level Two ___ Level Three ___None

**Level One Container Requirements (40 CFR 265.1087(c)):**

1. Is HW having an average volatile organic concentration of more than 500 ppmw placed in containers with capacity above 0.1 cubic meter? __Yes __No __N/A
2. Are the containers equipped with a cover which operates with no detectable organic emissions when all container openings (e.g., lids, bungs, container openings, etc.) are secured in a closed, sealed position? __Yes **__No** __N/A
3. Were all containers checked for leaks by Method 27 before HW was first placed into them? __Yes **__No** __N/A

**Level Two Container Requirements (40 CFR 265.1087(d)):**

1. Is HW having an average volatile organic concentration of more than 500 ppmw placed in containers with capacity above 0.46 cubic meter? __Yes **__No** __N/A
2. Has it been demonstrated within the last 12 months that the container is organic vapor tight when all container closings are in a closed, sealed position (e.g., the container hatches or lids are gasketed and latched)? __Yes **__No** __N/A

*Note: For the purpose of meeting the requirements of this paragraph, a container is organic vapor tight if the container sustains a pressure change of not more than 750 pascals within 5 minutes after it has been pressurized to a minimum of 4500 pascals. This condition has to be demonstrated using Method 27 of 40 CFR Part 60.*

3. Is that container equipped with a cover and complies with all the applicable DOT on packaging HW for transport under 49 CFR Part 178?

*Note: A container that is managed in accordance with the requirements of 49 CFR Part 178 for the purpose of complying with this subpart is not subject to any exceptions to the 49 CFR Part 178 except as noted in paragraph (b).* __Yes **__No** __N/A

4. If a concentration of more than 100 ppmw is placed in a container that is attached to or forms a part of any truck, trailer, or railcar, is it vapor tight? __Yes **__No** __N/A

**Level Three Container Requirements (40 CFR 265.1087(e)):**

1. Is the owner of the facility treating HW in a container by either a waste stabilization process, any process that requires heating, or any process that produces an exothermic reaction? __Yes __No __N/A
2. If the answer to the question above is yes, is the container located in an enclosure that is vented to a closed vent system to a control device when it is open? __Yes **__No** __N/A
3. Is the enclosure a structure that has been designed and operated with requirements of Procedure T? __Yes **__No** __N/A

*Note: Procedure T - Criteria for and Verification of a Permanent or Temporary Enclosure, 40 CFR 52.741 Appendix B. Requires that an enclosure be connected via a closed-vent system to a control device.*

4. Is the closed vent system designed and operated in accordance with the requirements of 264.1087 (routing emissions from HWMU to control device)? __Yes **__No** __N/A
5. When transferring waste into a container having a capacity greater than 0.46 cubic meters, are the following requirements met?
   a. The waste is transferred by pumping using a conveyance system that uses a tube (e.g. a hose, pipe)? __Yes **__No** __N/A
   b. Is the container cover in place and all other openings maintained in a closed sealed position except for the openings through which the tube enters the container? __Yes **__No** __N/A
   c. Is the tube continuously submerged below the surface of the waste at all times waste is flowing through the tube? __Yes **__No** __N/A
   d. Is the lower bottom edge of the tube outlet located at a distance no greater than the two inside diameters of the tube or 15.25 cm, whichever is greater from the bottom of the container at all times waste is flowing through the tube? __Yes **__No** __N/A
   e. Is the tube connected to a permanent port mounted on the bottom of the container so that the lower edge of the port opening inside the container is located at a distance equal to or less than 15.25 from the container bottom? __Yes **__No** __N/A

## Section E - Surface Impoundments

1. Did the facility install emissions control (e.g. air-supported structure or a rigid cover) that is connected through a closed vent system to a control device on its surface impoundments? (40 CFR 265.1086(b)(2)) __Yes **__No** __N/A
2. Did the facility install a floating membrane cover over its surface impoundment? (40 CFR 265.1086(b)(1)) __Yes **__No** __N/A

*Note: A facility is allowed to install a floating membrane cover without additional controls when the HW is not mixed, stirred, agitated, circulated within the impoundment, not heated and not treated by using a waste stabilization process.*