Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

IHW CEI SUBPART AA

Reg Ent Name: **Date:**

Add ID: **Investigator Name:**

Item No	Description	Answer	Citations	Notes
	PROCESS VENTS APPLICATIONS - PART 264/265 SUBPART AA			
	SECTION A: Applicability			
	A NO answer to questions 1-3 means that the AA requirements do not apply to the process vents at the facility. (Note: General exemptions found in 40 CFR 264/5.1 apply)			
1	Does the TSDF facility have affected units permitted under Part 270; or is it permitted under Part 270 with permit-exempt recycling units; or is it a less than 90-day accumulation unit exempt from permitting, which is not a recycling unit under 40 CFR 261.6?			
2	Does the TSDF manage hazardous waste in at least one of the following methods: distillation, fractionation, thin-film evaporation, solvent extraction, or air/steam stripping units?			
3	Is the hazardous waste managed in the unit from question two at least 10 ppmw organic concentration?			
	SECTION B: Waste Streams			
1	If the O/O claims waste streams are below 10 ppmw, was a proper concentration determination completed?		265.1034(d) 264.1034(d) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
1A	If the determination is based on analysis was a minimum of four (4) grab samples, representative of the waste, collected and used in the determination?		265.1034(d)(1)(i) 264.1034(d)(1)(i) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
1B	If the determination is based on knowledge is supporting documentation maintained?		265.1034(d)(2) 264.1034(d)(2) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
2	Was date of initial determination before their effective date?		265.1034(e)(1) 264.1034(e)(1) 335.69(a)(1) 262.34(a)(1) 335.112(a)(19) 335.152(a)(17)	
3	Was the determination updated annually, upon change to waste stream, or change to the process that generates or treats the waste?		265.1034(e)(2) 265.1034(e)(3) 264.1034(e)(2) 264.1034(e)(3) 262.34(a)(1) 335.69(a)(1)	

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		.	335.112(a)(19) 335.152(a)(17)	
	SECTION C: Standards Facility Emissions Rates			
1	Has the owner/operator reduced the total organic emissions from all affected process vents below 3 lb/hr and 3.1 t/yr, or reduced by use of a control device total organic emissions from all affected process vents by 95 weight % (Note: If control device was installed it must meet the requirements of §264/5.1033)?	.	265.1032(a) 264.1032(a) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
1A	If performance tests were made in order to document vent emission and emission reduction, were they made according to 264/5.1034(c)?	.	265.1032(c) 264.1032(c) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
1B	If engineering calculations were used to document vent emission and emission reduction , were they made according to 264/5.1035 (b)2(ii)?	.	265.1032(c) 264.1032(c) 335.69(a)(1) 262.34(a)(1) 335.152(a)(17) 335.112(a)(19)	
	SECTION D: Record Keeping			
1	Are records of all affected process vents, annual throughput, operating hours of each affected unit, estimated emission rates for each affected vent and for the overall facility and approximate location of each affected unit maintained?	.	265.1035(b)(2)(i) 262.34(a)(1) 264.1035(b)(2)(i) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
2	Is information and data supporting determinations of vent emissions and emission reductions achieved based on engineering calculations or source tests with the unit operating under capacity load maintained?	.	265.1035(b)(2)(ii) 264.1035(b)(2)(ii) 262.34(a)(1) 335.112(a)(19) 335.69(a)(1) 335.152(a)(17)	
3	If performance test was used to demonstrate the efficiency of the control device is a performance test plan maintained along with all test results? If Yes, does the plan include:			
3A	A description of the determination under highest load, estimated or design flow rate and organic content of each vent stream, acceptable operating ranges of key process and control device parameters?	.	265.1035(b)(3)(i) 264.1035(b)(3)(i) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
3B	Does the test plan include a detailed engineering description of the closed vent system and control device including: manufacturer's name & model; type of control device; dimensions of control device; capacity; construction materials?	.	265.1035(b)(3)(ii) 264.1035(b)(3)(ii) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
3C	A detailed description of sampling and monitoring procedures including: sampling locations and frequency; monitoring locations and frequency; equipment to be used; and analytical procedures for sample analysis?	.	265.1035(b)(3)(iii) 264.1035(b)(3)(iii) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4	Was a design analysis used for the closed vent system?			

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4A	Is a list of all information references and sources used documented?		265.1035(b)(4)(i) 264.1035(b)(4)(i) 262.34(a)(1) 335.112(a)(19) 335.69(a)(1) 335.152(a)(17)	
4B	Are records of compliance testing including dates maintained? (no detectable emissions or negative pressure)		265.1035(b)(4)(ii) 264.1035(b)(4)(ii) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4C	If engineering calculations are used in the design analysis of a control device are the specifications, drawings, schematics, piping, and instrumentation diagrams along with design documentation provided by the manufacturer or vendor maintained?		265.1035(b)(4)(iii) 264.1035(b)(4)(iii) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4D	For a thermal vapor incinerator did the design analysis completed to demonstrate performance consider the vent stream composition, constituent concentrations, and flow rate?		265.1035(b)(4)(iii)(A) 264.1035(b)(4)(iii)(A) 335.69(a)(1) 262.34(a)(1) 335.112(a)(19) 335.152(a)(17)	
4E	Did the design analysis for the thermal vapor incinerator establish the design minimum and average temperature in the combustion zone and residence time?		265.1035(b)(4)(iii)(A) 264.1035(b)(4)(iii)(A) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4F	For a catalytic vapor incinerator did the design analysis, completed to demonstrate performance consider the vent stream composition, constituent concentrations, and flow rate?		265.1035(b)(4)(iii)(B) 262.34(a)(1) 264.1035(b)(4)(iii)(B) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4G	Did the design analysis for the catalytic vapor incinerator establish the design minimum and average temperatures across the catalyst bed inlet and outlet?		265.1035(b)(4)(iii)(B) 264.1035(b)(4)(iii)(B) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4H	For a boiler or process heater did the design analysis, completed to demonstrate performance, consider the vent stream composition, constituent concentrations, and flow rate?		265.1035(b)(4)(iii)(C) 264.1035(b)(4)(iii)(C) 335.69(a)(1) 262.34(a)(1) 335.152(a)(17) 335.112(a)(19)	
4I	For a boiler or process heater did the design analysis establish the design minimum and average flame zone temperatures, combustion zone residence time, and description of method and location where the vent stream is introduced into the combustion zone?		265.1035(b)(4)(iii)(C) 264.1035(b)(4)(iii)(C) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
4J	For a flare did the design analysis completed to demonstrate performance consider the vent stream composition, constituent concentrations, and flow rate?		265.1035(b)(4)(iii)(D) 264.1035(b)(4)(iii)(D) 262.34(a)(1)	

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		.	335.69(a)(1)	
		.	335.112(a)(19)	
			335.152(a)(17)	
4K	For a condenser did the design analysis completed to demonstrate performance consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature?	.	265.1035(b)(4)(iii)(E)	
		.	264.1035(b)(4)(iii)(E)	
		.	262.34(a)(1)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4L	Did the design analysis, for the condenser, establish the design outlet organic compound concentration level, design average temperature of the exhaust vent stream, and design average temperatures of the coolant fluid at the condenser inlet and outlet?	.	265.1035(b)(4)(iii)(E)	
		.	264.1035(b)(4)(iii)(E)	
		.	262.34(a)(1)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4M	For a regenerating type carbon adsorption system did the design analysis completed to demonstrate performance consider vent stream composition, constituent concentration, flow rate, relative humidity, and temperature?	.	265.1035(b)(4)(iii)(F)	
		.	264.1035(b)(4)(iii)(F)	
		.	262.34(a)(1)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4N	Did the design analysis for the regenerating type carbon adsorption system establish the design exhaust vent stream organic compound concentration level, the number and capacity of beds, the type and working capacity of the activated carbon, the design total steam flow over the period of each complete regeneration cycle, the duration of the steaming and cooling/drying cycles, the design temperature after regeneration, the design regeneration time, and the carbon service life.	.	265.1035(b)(4)(iii)(F)	
		.	262.34(a)(1)	
		.	264.1035(b)(4)(iii)(F)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4O	For the non-regenerating type carbon adsorption system did the design analysis completed to demonstrate performance consider the vent stream composition, constituent concentrations, flow rate, relative humidity, and temperature?	.	265.1035(b)(4)(iii)(G)	
		.	264.1035(b)(4)(iii)(G)	
		.	262.34(a)(1)	
		.	335.112(a)(19)	
		.	335.69(a)(1)	
		.	335.152(a)(17)	
4P	Did the design analysis for the non-regenerating type carbon adsorption system establish the design outlet organic concentration level, capacity of carbon bed, type and working capacity of activated carbon used, the design carbon replacement interval based on the total carbon working capacity of the control device, and source operating schedule?	.	265.1035(b)(4)(iii)(G)	
		.	262.34(a)(1)	
		.	264.1035(b)(4)(iii)(G)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4Q	Did the O/O certify in writing that the operating parameters used in the design analysis reasonably represent the conditions when the unit would be operating at the highest load or capacity?	.	265.1035(b)(4)(iv)	
		.	264.1035(b)(4)(iv)	
		.	262.34(a)(1)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	
4R	A certification by the O/O that the control device is designed to operate at 95% efficiency unless the total organic concentration limit or total organic emission limit of §264/265.1032(a) is achieved at an efficiency <95 weight percent or a certification by the control device manufacture or vendor that the device meets the design specifications? (Note: The control device used to obtain emission limits must involve vapor recovery)	.	265.1035(b)(4)(v)	
		.	264.1035(b)(4)(v)	
		.	262.34(a)(1)	
		.	335.69(a)(1)	
		.	335.112(a)(19)	
		.	335.152(a)(17)	

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5	Is design documentation and monitoring , operating, and inspection information for each closed vent system and control device recorded and kept up to date in the facility operating record?		265.1035(c) 264.1035(c) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5A	For a thermal vapor incinerator designed to operate with a minimum residence time of 0.05 second at a minimum temperature of 760 C is the period when the combustion temperature below 760 C recorded?		264.1035(c)(4)(i) 265.1035(c)(4)(i) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5B	For a catalytic vapor incinerator is the periods when temperature of the vent stream at the catalyst bed inlet is more than 28 degrees C below the average temperature of the inlet vent stream?		264.1035(c)(4)(iii)(A) 265.1035(c)(4)(iii)(A) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5C	For a catalytic vapor incinerator when the occurrence of the temperature difference across the catalyst bed is less than 80% of the design average recorded?		264.1035(c)(4)(iii)(B) 265.1035(c)(4)(iii)(B) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5D	For a boiler or process heater are periods when the flame zone temperature is more than 28 degrees C below the design average recorded?		264.1035(c)(4)(iii)(A) 265.1035(c)(4)(iv)(A) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5E	Are periods recorded when the position changes where the vent stream is introduced to the combustion zone in a boiler or process heater?		264.1035(c)(4)(iv)(B) 265.1035(c)(4)(iv)(B) 335.69(a)(1) 262.34(a)(1) 335.112(a)(19) 335.152(a)(17)	
5F	Is the occurrence when the pilot flame is not ignited for a flare recorded?		265.1035(b)(4)(v) 264.1035(c)(4)(v) 262.34(a)(1) 335.112(a)(19) 335.69(a)(1) 335.152(a)(17)	
5G	For the condenser that is equipped with a continuous recorder to measure the concentration level, are periods recorded when the organic compound concentration readings in the exhaust vent stream are more than 20% greater than the design outlet concentration?		264.1035(c)(4)(vi) 265.1035(c)(4)(vi) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5H	For the condenser that is equipped with a continuous recorder to monitor temperature are periods recorded when the temperature of the exhaust vent stream from the condenser is more than 6 degrees C above the design average or when the temperature of the coolant fluid exiting the condenser is more than 6 degrees C above the design average?		265.1035(c)(4)(vii) 264.1035(c)(4)(vii) 262.34(a)(1) 335.112(a)(19) 335.69(a)(1) 335.152(a)(17)	

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5I	For a regeneration carbon adsorption system equipped with a monitoring device to measure the concentration level of the organic compounds in the exhaust vent stream from the carbon bed are periods when the organic concentration in the exhaust stream are more than 20% greater than the design concentration level?		265.1035(c)(4)(viii) 264.1035(c)(4)(viii) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5J	For a regeneration carbon adsorption system equipped with a monitoring device to measure a parameter that indicates the carbon is regenerated on a regular predetermined time cycle, are periods recorded when the vent stream continues to flow through the control device beyond the predetermined regeneration time?		265.1035(c)(4)(ix) 264.1035(c)(4)(ix) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5K	Is an explanation recorded for each period for when the control device operating parameter exceeded the design value and the measures implemented to correct the control device operation?		265.1035(c)(5) 264.1035(c)(5) 262.34(a)(1) 335.112(a)(19) 335.69(a)(1) 335.152(a)(17)	
5L	For carbon adsorption systems that regenerate directly to the control device and systems that do not regenerate but replace the carbon at regular predetermined time, is the date when the carbon is replaced with fresh carbon recorded?		265.1035(c)(6) 264.1035(c)(6) 262.34(a)(1) 335.69(a)(1) 335.112(a)(19) 335.152(a)(17)	
5M	For carbon adsorption systems that do not regenerate but replace the carbon immediately upon breakthrough, is the date and time when the control device is monitored for breakthrough along with the monitoring device reading and the date when the carbon was replaced, recorded?		265.1035(c)(7)(i) 335.152(a)(17) 262.34(a)(1) 335.69(a)(1) 264.1035(c)(7)(ii) 264.1035(c)(7)(i) 265.1035(c)(7)(ii) 335.112(a)(19)	
5N	Is the date of each control device startup and shutdown recorded?		335.112(a)(19) 264.1035(c)(8) 335.69(a)(1) 265.1035(c)(8) 262.34(a)(1) 335.152(a)(17)	
5O	Has the O/O recorded the identification, an explanation of why it is unsafe to monitor and a monitoring plan for each component that has been designated as unsafe to monitor in the operating record?		264.1035(c)(9) 335.152(a)(17) 265.1035(c)(9) 335.112(a)(19) 335.69(a)(1) 262.34(a)(1)	
5P	When a leak is detected does the O/O record the identification number of the instrument and component; the operators name, initials or identification number; the date the leak was detected; the date of first attempt to repair; the date of successful repair; the maximum instrument reading after repair; the reason if repair has been delayed?		335.69(a)(1) 265.1035(c)(10) 335.112(a)(19) 262.34(a)(1) 264.1035(c)(10) 335.152(a)(17)	
5Q	If the repair was delayed because there was a depletion of stocked parts is there documentation that spare parts were sufficiently stocked on-site before depletion and the reason for depletion?		335.152(a)(17) 335.112(a)(19) 335.69(a)(1) 265.1035(c)(10)(v)(B) 262.34(a)(1)	

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6	Are records of monitoring, operating and inspection information maintained for at least three (3) years following the date of each occurrence?		335.69(a)(1) 262.34(a)(1) 264.1035(d) 265.1035(d) 335.152(a)(17) 335.112(a)(19)	
7	For a control device other than a thermal vapor incinerator, catalytic vapor incinerator, flare, boiler, process heater, condenser, or carbon adsorption system has the O/O kept records as directed by the ED or RA?		335.112(a)(19) 265.1035(e) 335.152(a)(17) 264.1035(e) 262.34(a)(1)(i) 335.69(a)(1)	
	SECTION E: Reporting (for Permitted facilities only)			
1	For facilities with final permits incorporating this rule, have they submitted a semi-annual reports of exceedances lasting longer than 24 hours (Note; due date specified by RA or ED and if during reporting period no exceedances occurred then no report is required [264.1036(b)])?		264.1036 335.152(a)(17)	
1A	Did the report include: EPA Id number; name and address of the facility; dates when the control device exceeded the design specifications when not corrected within 24 hours or that a flare operated with visible emissions; the duration and cause of each exceedance and corrective action taken?		264.1036(a)(2) 264.1036(a)(1) 335.152(a)(17)	