

Texas Commission on Environmental Quality

CHECKLIST WORKSHEET

IHW BOILER AND INDUSTRIAL FURNACE (BIF)

Regulating Entity Name

Date :

Additional I D:

Investigator Name:

Item Number	Description	Answer	Citations	Notes
	SECTION A: REQUIRED INFORMATION			
Item Number 1	Description			
		BIF regulations became effective after May 22, 1991. In addition to updating the TCEQ Notice of Registration (TCEQ Form 0002) for existing or new BIF unit, has owner/operator also notified EPA (EPA Form 8700-12/ 3010)?		
	Answer			
			335.6(c)	Notes
Item Number 2	Description			
		Was the certificate of pre-compliance (COP) establishing limits of emission and operating parameters submitted by August 21, 1991?		
	Answer			
			266.103(b)	Notes
Item Number 2A	Description			
		If needed, was certificate of pre-compliance revised to reflect operating conditions?		
	Answer			
				Notes
Item Number 3	Description			
		Was the certificate of pre-compliance document, which may include dispersion modeling results, complete and accurate?		
	Answer			
			266.103(b)	Notes
Item Number 4	Description			
		Was the initial certificate of compliance (COC) for an existing BIF unit submitted by August 21, 1992?		
	Answer			
			266.103(c)	Notes
Item Number 5	Description			
		For an interim status non-permitted BIF unit, has owner/ operator revised the certification of compliance (COC) within three years from the previous date of certification or recertification?		
	Answer			
			335.224(11)	Notes
Item Number 6	Description			
		If not, was an extension obtained for COC? Referencing 266.103(c)(7)(ii).		
	Answer			
			335.221(a)(11)	Notes
Item Number 6A	Description			
		Has owner/operator received approval of extension from the IHW Permits Section, Waste Permits Division of the Commission in Austin?		
	Answer			
				Notes
Item Number 7	Description			
		Was the COC test document complete and accurate in establishing operating parameter limits?		
	Answer			
			266.103(c)	Notes
Item Number 8	Description			
		Does the investigation report provide relevant information for the BIF operation?		
	Answer			
				Notes
Item Number 8A	Description			
		Is compliance test summary, EPA Form CC5, or the BIF permit section reviewed and referenced in the report?		
	Answer			
				Notes
Item Number 8B	Description			
		Which BIF Tier screening level is used (Tier I, Tier II, Tier III, Adjusted Tier I) to establish limits for the ten metals, hydrogen chloride, and chlorine?		
	Answer			
				Notes
Item Number 8C	Description			
		Is BIF process flow diagram reviewed and included in the report?		
	Answer			
				Notes

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Item Number	Description	SECTION B: GENERAL INFORMATION	
		Answer	Citations
			Notes
Item Number 1	Description	Has the facility submitted a revised Part B permit application addressing BIF operation and compliance test conditions?	
		Answer	Citations
			Notes
Item Number 2	Description	For a permitted facility (See Authorized Units and Operations Section), check the frequency of sampling and testing for BIF units. Has owner operator completed the latest Stack Test for air emission parameters as scheduled?	
		Answer	Citations
			Notes
Item Number 3	Description	Does the facility have permits for Air Emissions from BIF unit(s)?	
		Answer	Citations
			Notes
Item Number	Description	SECTION C: INCORPORATED FACILITY STANDARDS	
		Answer	Citations
			Notes
Item Number 1	Description	According to permitted or interim facility standards for Burners a BIF facility is also subject to Part 265/264 standards. Exceptions listed under 335.221(a)(8)&(2) are addressed in 335.224(a)(3) (A)-(F), for interim status units, and 335.223, for permitted units. Has the facility revised the Part B permit application (deadline February 22, 1992) to meet these standards?	
		Answer	Citations
			266.103(a)(4)
			Notes
Item Number 2	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the General Facility Standards of 265/264 Subpart B for a BIF facility?	
		Answer	Citations
			265.17
			Notes
Item Number 3	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the Preparedness and Prevention requirements of 265/264 Subpart C for a BIF facility?	
		Answer	Citations
			264.37
			Notes
Item Number 4	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the Contingency Plan and Emergency Procedures of 265/264 Subpart D for a BIF facility?	
		Answer	Citations
			264.51
			Notes
Item Number 5	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the Manifest System, Recordkeeping & Reporting of 265/264 Subpart E for a BIF facility?	
		Answer	Citations
			264.71
			Notes
Item Number 6	Description	Using the CEI Permitted /Interim Facility Checklist, for permitted units only, is owner/operator meeting the Corrective Action requirements of 264 Subpart F for a BIF facility?	
		Answer	Citations
			264.101
			Notes
Item Number 7	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the Closure and Post-Closure requirements of 265/264 Subpart G for a BIF facility?	
		Answer	Citations
			265.111
			Notes
Item Number 8	Description	Using the CEI Permitted /Interim Facility Checklist, is owner/operator meeting the Financial Requirements of 265/264 Subpart H for a BIF facility?	
		Answer	Citations
			265.141
			Notes
Item Number 9	Description	If air emission standards specified under Subpart BB apply [265.1050(e)/264.1050(f)], complete the Subpart BB Checklist, as scheduled.	
		Answer	Citations
			Notes

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Item Number 10	Description	If air emission standards specified under Subpart CC apply [265.1083(c)(1)/264.1080 (c)(1)], complete the Subpart CC Checklist, as scheduled.		
		Answer	Citations	Notes
Item Number	Description	SECTION D: ANALYSIS AND FEED RATE MONITORING		
		Answer	Citations	Notes
Item Number 1	Description	Does the Certificate of Compliance (Form CC-5) or Permit specify operating limits for authorized composite waste streams?		
		Answer	Citations	Notes
Item Number 1A	Description	Is the facility burning waste within the operating limits designated in the Certificate of Compliance or Permit for total hazardous waste?		
		Answer	Citations	Notes
Item Number 1B	Description	Is the facility burning waste within the operating limits for pumpable hazardous waste? (N/A for Tier 1 and adjusted Tier.		
		Answer	Citations	Notes
Item Number 1C	Description	Is the facility burning waste within the operating limits for hazardous metals in total feed streams? (applicable for Tier 1, adjusted Tier 1 metals, and Tier III metals)		
		Answer	Citations	Notes
Item Number 1D	Description	Is the facility burning waste within the operating limits for chlorine and chloride?		
		Answer	Citations	Notes
Item Number 1E	Description	Is the facility burning waste within the operating limits for ash?		
		Answer	Citations	Notes
Item Number 1F	Description	Is the facility burning waste within the operating limits for carbon monoxide concentration, and where required, hydrocarbon concentration in stack gas?		
		Answer	Citations	Notes
Item Number 1G	Description	Is the facility burning waste within the operating limits for maximum production rate when producing normal product?		
		Answer	Citations	Notes
Item Number 1H	Description	Is the facility burning waste within the operating limits for maximum combustion chamber temperature? (N/A for Tier 1 and adjusted Tier 1)		
		Answer	Citations	Notes
Item Number 1I	Description	Is the facility burning waste within the operating limits for minimum combustion chamber temperature?		
		Answer	Citations	Notes
Item Number 1J	Description	Is the facility burning waste within the operating limits for maximum flue gas temperature entering a particulate matter (PM) control device?		
		Answer	Citations	Notes
Item Number 2	Description	Indicate whether the Air Pollution Control Device is a scrubber, particulate matter filter, or other device.		
		Answer	Citations	Notes
Item Number 2A	Description	Is the facility burning waste within the operating limits for parameters for Air Pollution Control Devices?		
		Answer	Citations	Notes
Item Number 3	Description	Are any of the hazardous wastes which are burned listed for dioxin, or derived from any of the following dioxin-listed wastes: F020, F021, F022, F023, F026 or F027? (Note: Prohibition on burning Dioxin-Listed Wastes during Interim Status; applicable only to Interim Status).		
		Answer	Citations	Notes

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Item Number 4	Description	Is hazardous waste being fed into the BIF only when operating conditions (temperature, feed rate, etc.) in the Certificate of Compliance or Permit are being met?	
	Answer		Citations 335.221(a)(6) Notes
Item Number 5	Description	Does the facility have a waste analysis plan that specifies procedures for collecting hazardous waste fuel to determine its physical and chemical characteristics? (Note: Check that all feed streams to the BIF unit are referenced in the Waste Analysis Plan) referencing 265.13(b); referencing 264.13(b).	
	Answer		Citations 266.102(a)(2)(Notes
Item Number 6	Description	Is the facility analyzing the feed streams to obtain as-fed concentrations of metals, chlorides and ash in accordance with their waste analysis plan? Feed rate limits for metals, chlorides, and ash must be established and monitored by knowing the concentration of the substance (i.e., metals, chlorides and ash) in each feed stream and the flow rate of each feed stream referencing 265.13(b); referencing 264.13(b).	
	Answer		Citations 266.102(a)(2)(Notes
Item Number 7	Description	Does the facility blend the waste after analysis, or add filler materials, e.g. sawdust, which could impact concentrations?	
	Answer		Citations Notes
Item Number 7A	Description	If yes, how is this accounted for in the determination of actual metals, chlorides and ash concentrations?	
	Answer		Citations Notes
Item Number 8	Description	If the facility has elected to comply with a 24-hour average for lead, arsenic, cadmium, chromium, or beryllium, is the feed rate of each metal at any time always less than ten times the feed rate that would be allowed on an hourly rolling average basis?	
	Answer		Citations 335.221(a)(11) Notes
Item Number 9	Description	Does the unit always operate within the conditions of operation specified in the Certification of Compliance or the Permit before the waste is fed into the unit? (except waste that is fed solely as an ingredient under the Tier I or adjusted Tier I).	
	Answer		Citations 335.221(a)(12) Notes
Item Number 10	Description	Does the facility retain analysis or documentation to show that hazardous waste with a heating value less than 5000 Btu/lb was not fed to the unit during precompliance (unless it was fed as an ingredient, or for the purpose of testing not to exceed 720 hours). Blending to augment the heating value to 5000 Btu/lb except by bonafide treatment is prohibited. Therefore, the facility must document that all wastes entering a blend tank meet this provision.	
	Answer		Citations 335.221(a)(9) Notes
Item Number 11	Description	Interim status units only: Is the facility meeting the following special requirements for Industrial Furnaces that feed hazardous wastes for a purpose other than solely as an ingredient at any location other than the hot end?	
	Answer		Citations Notes
Item Number 11A	Description	Is the waste fed at a location where the combustion gas temperatures are at least 1800 F?	
	Answer		Citations 335.221(a)(9) Notes
Item Number 11B	Description	Does the facility maintain documentation to show that enough oxygen is present to combust the organic constituents in the waste?	
	Answer		Citations 335.221(a)(9) Notes
Item Number 11C	Description	For cement kiln systems, is the hazardous waste fed to the kiln itself, rather than precalciners / preheaters?	

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		Answer	Citations	335.221(a)(9)	Notes
Item Number 11D	Description	Does the unit comply with the hydrocarbon controls of 266.104(c), or 266.103(c)(5), upon certification of compliance under 266.103(c) irrespective of the CO level achieved during the compliance test?			
		Answer	Citations	335.221(a)(9)	Notes
Item Number 12	Description	Interim status unit only: Is the facility compliant with the following limitations when burning hazardous waste solely as an ingredient?			
		Answer	Citations	335.221(a)(9)	Notes
Item Number 12A	Description	Does the waste contain less than a total of 500 ppm of nonmetal compounds listed in Appendix VIII as-fired?			
		Answer	Citations	335.221(a)(9)	Notes
Item Number 12B	Description	Does the waste have a value less than 5000 Btu/lb as-fired?			
		Answer	Citations	335.221(a)(9)	Notes
Item Number	Description	SECTION E: FUGITIVE EMISSIONS			
		Answer	Citations		Notes
Item Number 1	Description	Does the Regulated Entity control fugitive emissions by keeping the combustion zone totally sealed, maintaining combustion zone pressure lower than atmospheric, or an alternate means?			
		Answer	Citations	335.221(a)(14)	Notes
Item Number 2	Description	Have fugitive emissions data been recorded by the Regulated Entity? Referencing 264.73(b)(5).			
		Answer	Citations	266.102(a)(2)(Notes
Item Number	Description	SECTION F: OPERATION OF AUTOMATIC HAZARDOUS WASTE FEED CUT OFF SYSTEM			
		Answer	Citations		Notes
Item Number 1	Description	Is BIF equipped with a functional waste feed cutoff system to operate when conditions deviate from those established in the certificate of compliance or the permit?			
		Answer	Citations	335.221(a)(13)	Notes
Item Number 2	Description	Is the minimum combustion chamber temperature that occurred during the compliance test or set in the permit maintained after the waste feed cutoff as long as hazardous waste residues remain in the unit?			
		Answer	Citations	335.221(a)(13)	Notes
Item Number 3	Description	Does the Regulated Entity continue to monitor the operating parameters in the compliance certification or in the permit after the waste feed cutoff, and is the hazardous waste feed not re-started until parameters are back within the limit?			
		Answer	Citations	335.221(a)(13)	Notes
Item Number 4	Description	For permitted units only, are the exhaust gases ducted to the air pollution control system as long as hazardous waste residues remain in the unit?			
		Answer	Citations	335.221(a)(6)	Notes
Item Number	Description	SECTION G: MONITORING AND INSPECTIONS			
		Answer	Citations		Notes
Item Number 1	Description	Has the Regulated Entity monitored feed rates (continuously) and composition (through sampling and analysis) of hazardous waste, other fuels and industrial furnace feed stocks, and feed rates of ash, metals and total chloride/chlorine as necessary to ensure compliance with the certification of compliance or the permit?			
		Answer	Citations	335.221(a)(14)	Notes
Item Number 2	Description	Has the Regulated Entity inspected the boiler/industrial furnace and associated equipment at least daily for leaks, spills, fugitive emissions and tampering?			
		Answer	Citations	335.221(a)(14)	Notes

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Item Number 3	Description	Has the Regulated Entity monitored and recorded the carbon monoxide, oxygen and applicable hydrocarbons levels if complying under Tier II on a continuous basis to ensure compliance with the certification limits or the permit?	
	Answer	Citations	Notes
		335.221(a)(14)	
Item Number 4	Description	Has the Regulated Entity tested the automatic waste feed cut off system for operability every 7 days, or at least every 30 days?	
	Answer	Citations	Notes
		335.221(a)(14)	
Item Number 5	Description	If the Regulated Entity tested the system every 30 days, did they provide adequate justification for choosing a 30-day schedule?	
	Answer	Citations	Notes
Item Number 6	Description	For each feedstream identified, does the Regulated Entity perform continuous monitoring and recording of the flow rate?	
	Answer	Citations	Notes
		335.221(a)(11)	
Item Number 7	Description	Do the continuous monitors continuously sample the flow rate without interruption, evaluate the detector response at least once every 15 seconds and record the average value at least every 60 seconds?	
	Answer	Citations	Notes
		335.221(a)(11)	
Item Number	Description	SECTION H: RECORDKEEPING	
	Answer	Citations	Notes
Item Number 1	Description	Are records of investigations and monitoring being kept in the operating record until the closure of the facility?	
	Answer	Citations	Notes
		335.221(a)(14)	
Item Number 2	Description	A residue derived from burning or processing hazardous waste is not excluded from the definition of hazardous waste unless the device meets the requirements stated under 266.112. Does the operating record include complete records associated with handling combustion residues? Reference 265.73; 264.73.	
	Answer	Citations	Notes
		266.102(a)(2)(
Item Number 3	Description	Does the operating record document dates, times and reasons for any waste feed cutoffs?	
	Answer	Citations	Notes
		335.221(a)(13)	
Item Number 4	Description	Interim status only, if a facility is recertifying new conditions, does the operating record include evidence that the allowable 720 waste burning hours have not been exceeded?	
	Answer	Citations	Notes
		335.221(a)(11)	
Item Number	Description	SECTION I: EMISSION STANDARDS	
	Answer	Citations	Notes
Item Number 1	Description	Does the Certificate of Compliance specify emission standards for particulate matter, toxic metals, hydrogen chloride, chlorine, carbon monoxide, hydrocarbons, and dioxins / furans?	
	Answer	Citations	Notes
Item Number 1A	Description	Is the facility compliant with emission standards designated in the Certificate of Compliance for particulate matter?	
	Answer	Citations	Notes
		266.105(a)	
Item Number 1B	Description	Is the facility compliant with emission standards for toxic metals?	
	Answer	Citations	Notes
		335.221(a)(17)	
Item Number 1C	Description	Is the facility compliant with emission standards for hydrogen chloride?	
	Answer	Citations	Notes
		266.107(e)	
Item Number 1D	Description	Is the facility compliant with emission standards for chlorine?	
	Answer	Citations	Notes
		266.107(c)	
Item Number 1E	Description	Is the facility compliant with emission standards for carbon monoxide?	

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	Answer	Citations	266.104(b)	Notes
Item Number 1F	Description	Is the facility compliant with emission standards for hydrocarbons?		
	Answer	Citations	266.104(c)	Notes
Item Number 1G	Description	Is the facility compliant with emission standards for dioxins / furans?		
	Answer	Citations	335.221(a)(15)	Notes
Item Number 2	Description	Does facility measure stack carbon monoxide and oxygen concentrations using Continuous Emission Monitoring Systems (CEMS) and meet the performance standard in 40 CFR Part 266, Appendix IX, Section 2.1?		
	Answer	Citations	335.221(a)(15)	Notes
Item Number 3	Description	Does facility properly calibrate (daily, quarterly, yearly) all CEMS to evaluate and monitor CEMS performance in accordance with 40 CFR Part 266, Appendix IX, Section 2.1?		
	Answer	Citations	266.102(e)(8)(Notes