REGULATION 8 ORGANIC COMPOUNDS RULE 8

WASTEWATER COLLECTION AND SEPARATION SYSTEMS

INDEX

8-8-100	GENERAL
8-8-101	Description
<u>8-8-102</u>	<u>Applicability</u>
8-8-110	Exemption, Less Than 760 Liters
8-8-111	Deleted November 1, 1989
8-8-112	<u>Limited</u> Exemption, Wastewater <u>Critical Organic Compound Concentration Or</u> Temperature
8-8-113 8-8-1134	<u>Limited Exemption, Wastewater Critical Total Organic Compound Concentration</u> <u>Limited Exemption, Secondary Wastewater Treatment Processes and Stormwater Sewer Systems</u>
8-8-11 <mark>45</mark>	<u>Limited</u> Exemption, Bypassed Oil-Water Separator or Air Flotation Influent
8-8-11 5 6	Exemption, Municipal Wastewater Collection, Separation and Treatment Facilities
8-8-11 6 7	Limited Exemption, Oil-Water Separation Trenches
8-8-118	Limited Exemption, Refineries
8-8-119	Limited Exemption, Inspection, Maintenance, Repair and Sampling at Refineries
<u> </u>	Emmod Exemption, mopositor, maintenance, respair and camping at remientes
8-8-200	DEFINITIONS
8-8- <u>201</u>	Air Flotation Unit
8-8- <mark>202</mark>	Alternative Feedstock
8-8- <mark>203</mark>	Critical Total Organic Compound
8-8- 204	Free Phase Organic Liquid
8-8- <mark>205</mark>	Full Contact Fixed Cover
8-8- <mark>206</mark>	Junction Box
8-8- <mark>207</mark>	Leak (or Leakage)
8-8- <mark>208</mark>	Leak Minimization
8-8- <mark>209</mark>	Leak Repair
8-8- <mark>210</mark>	Lift Stations
8-8- <u>211</u>	Manholes
8-8- <u>212</u>	Non-aqueous Phase Hydrocarbon Streams
8-8- <u>213</u>	Oil-Water Separation Trench
8-8- <u>214</u>	Oil-Water Separator Effluent
8-8- <u>215</u>	Oil-Water Separator Effluent Channel/Pond
8-8- <u>216</u>	Oil-Water Separator Slop Oil
8-8- <u>217</u>	Oil-Water Separator Slop Oil Vessel
8-8- <u>218</u>	Organic Compounds
8-8- <u>219</u>	Deleted November 3, 2021
8-8- <u>220</u>	Pre-Air Flotation Unit Flocculation Sump, Basin, Chamber, or Tank
8-8- <u>221</u>	Process Drains
8-8- <u>222</u>	Reaches
8-8- <u>223</u>	Refinery
8-8- <u>224</u>	Secondary Treatment Processes
8-8- <u>225</u>	Sewer Line
8-8- <u>226</u>	Sludge-dewatering Unit
8-8- <u>227</u>	Stormwater Sewer System
8-8- <u>228</u>	Sumps
8-8- <u>229</u>	Total Organic Compounds
8-8- <mark>230</mark>	Trenches

8-8- <u>231</u> 8-8- <u>232</u> 8-8- <u>233</u> <u>8-8-234</u>	Vapor-tight Vent pipe Wastewater Wastewater Collection System Components
<u>8-8-235</u>	Wastewater (Oil-Water) Separator
<u>8-8-236</u>	Wastewater Separation System Components
8-8-237 8-8-238	Wastewater Separator Forebay Water Seal or Equivalent Control
8-8-300	STANDARDS
8-8-301	Wastewater Separators Designed Rated Capacity Greater Than 760 Liters per Day and Smaller Than 18.9 Liters per Second
8-8-302	Wastewater Separators Rated Capacity Larger Than or Equal to 18.9 Liters per Seconds
8-8-303	Gauging and Sampling Devices
8-8-304	Sludge-dewatering Unit
8-8-305	Oil-Water Separator And/Or and/or Air Flotation Unit Slop Oil Vessels
8-8-306	Oil-Water Separator Effluent Channel, Pond, Trench, or Basin
8-8-307	Air Flotation Unit
8-8-308	Junction Box
8-8-309	Deleted October 6, 1993
8-8-310	Deleted October 6, 1993
8-8-311	Deleted October 6, 1993
8-8-312	Controlled Wastewater Collection System Components at Petroleum Refineries
8-8-313	Uncontrolled Wastewater Collection System Components at Petroleum Refineries
8-8-314	New Wastewater Collection System Components at Petroleum Refineries
<u>8-8-315</u>	Wastewater Collection System and Wastewater Separation System Components at Refineries
<u>8-8-316</u>	Prohibition of Discharge at of Free Phase Organic Liquid Streams at Refineries
8-8-400	ADMINISTRATIVE REQUIREMENTS
8-8-401	Deleted (October 6, 1993)
8-8-402	Wastewater Collection and Separation System Identification and Inspection and
	Maintenance Plan at Petroleum Refineries
8-8-403	Refinery Compliance Schedule
8-8-404	Uncontrolled Wastewater Collection System Components Election
8-8-405	Repair Schedule for Leak Excesses at Refineries
8-8-406	Recurrent Leak Schedule
8-8-500	MONITORING AND RECORDS
8-8-501	API Separator or Air Flotation Bypassed Wastewater Records
8-8-502	Wastewater Critical Total Organic Compound Concentration Or Temperature Records
8-8-503	Inspection and Repair Records
8-8-504	Portable Hydrocarbon Detector
8-8-505	Records for Wastewater Collection and Separation System Components at Petroleum
	Refineries
8-8-506	Source Test Requirements at Refineries
8-8-507	Wastewater Organic Concentration Monitoring at Refineries
8-8-508	Wastewater Organic Concentration Recordkeeping Requirements at Refineries
8-8-600	MANUAL OF PROCEDURES
8-8-601	Wastewater Analysis for Critical <u>Total</u> Organic Compounds
8-8-602	Determination of Emissions

8-8-603	Inspection Procedures
---------	-----------------------

8-8-604 8-8-605

Determination of Abatement Efficiency
Determination of Organic Concentration in Wastewater

REGULATION 8 ORGANIC COMPOUNDS RULE 8

WASTEWATER COLLECTION AND SEPARATION SYSTEMS

(Adopted January 17, 1979)

	(Adopted danally 17, 1070)
8-8-100	GENERAL
8-8-101	Description : The purpose of this Rule is to limit the emissions of <u>total</u> organic compounds from wastewater collection and separation systems that handle liquids <u>containing total</u> organic compounds from industrial processes.
<u>8-8-102</u>	Applicability: This Rule applies to any person who operates a wastewater collection system and/or a wastewater separation system component.
8-8-110	Exemption, Less Than 760 Liters: The requirements of Section 8-8-301 shall not apply to any wastewater separator which processes less than 760 liters (200 gals.) per day of wastewater containing organic liquids. This exemption shall not apply to wastewater separators at refinery complexes after March 1, 1980.
8-8-111	Deleted November 1, 1989
8-8-112	Limited Exemption, Wastewater Critical Organic Compound Concentration Or Temperature: The requirements of Sections 8-8-301, 302, 306, 307, and 308 shall not apply to any wastewater separation system component that processes influent wastewater with a temperature of less than 20 degrees C (68 °F) except at refineries. To qualify for this limited exemption, the owner or operator shall comply with requirements of Section 8-8-502. (Adopted 11/1/89; Amended 9/15/04; 11/3/21)
8-8-113	Limited Exemption, Wastewater Critical Total Organic Compound Concentration: Wastewater having a concentration of less than 1.0 ppm (volume) critical total organic compounds, as defined in Section 8-8-210203, dissolved in the water samples, is exempt from the following: 113.1 At non-refinery facilities, from the requirements of Sections 8-8-301, 302, 306, 307, and 308, 312, and 313. To qualify for this limited exemption, the owner or operator shall comply with the requirements of Section 8-8-502 must be met. 113.2 At any refinery, from the requirements of Section 8-8-315. To qualify for this limited exemption, the owner or operator shall comply with the requirements of Section 8-8-502. This limited exemption does not apply to wastewater processed at any of the following wastewater system components at any refinery: 113.2.1 New wastewater collection system components; 113.2.2 Gauging and sampling devices; 113.2.3 Sludge-dewatering units; or 113.2.4 Oil-water separator and/or air flotation unit slop oil vessels.
8-8-113 <u>4</u>	Limited Exemption, Secondary Wastewater Treatment Processes Aand Stormwater Sewer Systems: The following requirements shall not apply to any secondary wastewater treatment processes or stormwater sewer systems, as defined in Sections 8-8-208225 and 216228, respectively, that are used as a wastewater polishing step or for collection of stormwater that is segregated from the process wastewater collection system— 114.1 At non-refinery facilities, the requirements of Sections 8-8-301, 302, 306, and 308_ 114.2 At any refinery, the requirements of Section 8-8-315. This limited exemption does not apply to any of the following wastewater system components at any refinery: 114.2.1 Wastewater collection system components; 114.2.2 Air flotation units; 114.2.3 Gauging and sampling devices; 114.2.4 Sludge-dewatering units; or

114.2.5 Oil-water separator and/or air flotation unit slop oil vessels.

- **8-8-1145** Limited Exemption, Bypassed Oil-Water Separator or Air Flotation Influent: The following requirements shall not apply for to wastewater which that bypasses either the oilwater separator or air flotation unit provided that: (1) the requirements of Section 8-8-501 are met; and (2) on that day the District did not predict an excess of the Federal Ambient Air Quality Standard for ozone-:
 - 115.1 At non-refinery facilities, the requirements of Sections 8-8-301, 302, and 307.
 - At any refinery, the requirements of Section 8-8-315. This limited exemption does not apply to wastewater processed at any of the following wastewater system components at any refinery:
 - 115.2.1 Wastewater collection system components;
 - 115.2.2 Oil-water separator effluent channels;
 - 115.2.3 Ponds, trenches, or basins;
 - 115.2.4 Junction boxes;
 - 115.2.5 Gauging and sampling devices;
 - 115.2.6 Sludge-dewatering units; or
 - 115.2.7 Oil-water separator and/or air flotation unit slop oil vessels.

(Adopted November 1, 1989)

8-8-1156 Exemption, Municipal Wastewater Collection, Separation and Treatment Facilities: The requirements of Sections 8-8-301, 302, 303, 304, 305, 306, 307, 308, 312, 313, and 314315 and 316 shall not apply to any publicly owned municipal wastewater treatment facility.

(Adopted 11/1/89; Amended 9/15/04)

8-8-1167 Limited Exemption, Oil-Water Separation Trenches: The requirements of Sections 8-8-312, 313315 or 314 shall not apply to oil-water separation trenches used as part of maintenance or turnaround activities.

(Adopted September 15, 2004)

- <u>Limited Exemption, Refineries:</u> The requirements of Sections 8-8-301, 302, 303, 305, 306, 307, and 308 shall not apply to any wastewater collection system component or separation system component located at any refinery. The requirements of Section 8-8-304 continue to apply at any refinery.
- <u>Limited Exemption, Inspection, Maintenance, Repair and Sampling at Refineries:</u>

 The requirements of Section 8-8-315 shall not apply to wastewater collection system and wastewater separation system components at refineries when in use for active inspection, active maintenance, active repair, or active sampling. Active repair timelines are included in Sections 8-8-405 and 406. Active inspection, active maintenance, and active sampling shall be performed expeditiously without interruption and shall be completed as quickly as possible.
- 8-8-200 DEFINITIONS
- **8-8-201 Air Flotation Unit:** Any device, equipment, or apparatus in which wastewater is saturated with air or gas under pressure and removes floating oil, floating emulsified oil, or other floating liquid precursortotal organic compounds by skimming. Also included in this definition are: induced air flotation units and pre-air flotation unit flocculant sumps, tanks, or basins. [Formerly Section 8-8-209]

(Adopted November 1, 1989)

8-8-202 Alternative Feedstock: Any feedstock, intermediate, product or byproduct material that contains organic material that is not derived from crude oil product, coal, natural gas, or any other fossil-fuel based organic material. [Formerly Section 8-8-233]

(Adopted November 3, 2021)

8-8-203 Critical Total Organic Compound: Any compound of carbon that may be emitted during separation, processing, transportation, or storage of wastewater, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates and ammonium carbonate, emitted during separation, processing, transportation or storage of wastewater, andor any organic compound having a carbon number greater thanef C-14 or

less (excluding phenolic compounds) that is not listed in Regulation 2, Rule 5, Table 2-5-1 as a Toxic Air Contaminant). [Formerly Section 8-8-210] (Adopted 11/1/89; Amended 9/15/04) 8-8-<mark>204</mark> Free Phase Organic Liquid: A term to describe hydrocarbon liquid, that is present as a discrete liquid phase, rather than dissolved in the wastewater phase, commonly floating on the water and visible at the surface. 8-8-<mark>205</mark> Full Contact Fixed Cover: A stationary separator cover that which is always in full contact with the liquid surface of the oil-water separator. [Formerly Section 8-8-207] (Adopted November 1, 1989) 8-8-<mark>206</mark> Junction Box: Any structure where one or more sewer lines meet. and one or more wastewater streams are co-mingled. [Formerly Section 8-8-217] (Amended September 15, 2004) 8-8-<mark>207</mark> Leak (or Leakage): The concentration of total organic compounds (expressed as methane) above background, as measured in accordance with Section 8-8-603. [Source: Rule 8-18: Equipment Leaks, Section 8-18-2081 8-8-<mark>208</mark> Leak Minimization: Reducing the leak to the lowest achievable level using best modern practices and without shutting down the process the equipment serves. [Formerly Section 8-8-2191 (Adopted September 15, 2004) 8-8-209 Leak Repair: The tightening, adjustment, or addition of material, or the replacement of the equipment, which that reduces leakage to the atmosphere from the entire piece of equipment (e.g. the entire cover, the entire seal, the entire inspection hatch, the entire piece of gasketing material, etc.) to below 500 parts per million (ppm) by volume total organic compounds (expressed as methane) above background. [Formerly Section 8-8-220] (Adopted September 15, 2004) Lift Stations: Any structure whose function is to take water from a low point on a gradient 8-8-210 and transport it to the treatment system via a pumping mechanism. [Formerly Section 8-8-221] (Adopted September 15, 2004). 8-8-<mark>211</mark> Manholes: Any service entrance into sewer lines that allows access for inspection and cleaning. [Formerly Section 8-8-222] (Adopted September 15, 2004) 8-8-212 Non-aqueous Phase Hydrocarbon Streams: Organic liquids not dissolved in, or mixed with, wastewater. 8-8-**213** Oil-Water Separation Trench: Any grated open topped culvert used to separate debris from oil-water during equipment washing or steaming associated with maintenance or turnaround. [Formerly Section 8-8-223] (Adopted September 15, 2004) Oil-Water Separator Effluent: Any process wastewater downstream of the oil-water 8-8-<mark>214</mark> separator that has not been treated by an air flotation unit. [Formerly Section 8-8-214] (Adopted November 1, 1989) 8-8-<mark>215</mark> Oil-Water Separator Effluent Channel/Pond: An open channel, trench, pond, or basin that which handles wastewater downstream of an oil-water separator that has not been treated by an air flotation unit (usually located between the separator and the air flotation unit). [Formerly Section 8-8-206] (Adopted November 1, 1989) 8-8-<mark>216</mark> Oil-Water Separator Slop Oil: Floating oil, flocculant sludge, and solids that which accumulate in an oil-water separator or air flotation unit or slop oil vessel. [Formerly Section 8-8-205] (Adopted November 1, 1989) 8-8-<mark>217</mark> Oil-Water Separator Slop Oil Vessel: Any vessel that which, as its sole function, treats

(Adopted November 1, 1989)

or dewaters oil-water separator slop oil. [Formerly Section 8-8-213]

8-8-<mark>218</mark> Organic Compound: Any compound of carbon, excluding methane, carbon monoxide, carbon dioxide, carbonic acid, metallic carbides or carbonates, and ammonium carbonate. [Formerly Section 8-8-201] (Amended 11/1/89; 9/15/04) 8-8-219 **Deleted November 3, 2021** [Formerly Section 8-8-224] (Adopted September 15, 2004) 8-8-220 Pre-Air Flotation Unit Flocculation Sump, Basin, Chamber, or Tank: Any facility that which pretreats the air flotation unit's influent with chemical coagulants, and/or adjusts the influent's pH. [Formerly Section 8-8-212] (Adopted November 1, 1989)

Process Drains: Any point in the wastewater collection system where a stream or streams 8-8-<mark>221</mark> from a source or sources enter the collection system. A process drain may be connected to the main process sewer line or to trenches, sumps, or ditches. [Formerly Section 8-8-225]

(Adopted September 15, 2004)

- 8-8-<u>222</u> Reaches: Any segments of sewer pipe that convey wastewater between two manholes or other sewer components such as lift stations or junction boxes. [Formerly Section 8-8-226] (Adopted September 15, 2004)
- 8-8-<mark>223</mark> Refinery: An establishment that is located on one or more contiguous or adjacent properties that processes any petroleum or alternative feedstock, to produce more usable products such as gasoline, diesel fuel, aviation fuel, lubricating oils, asphalt or petrochemical feedstocks, or any other similar product. Refinery processes include separation processes (e.g., atmospheric or vacuum distillation, and light ends recovery), conversion processes (e.g., cracking, reforming, alkylation, polymerization, isomerization, coking, and visbreaking), treating processes (e.g., hydrodesulfurization, hydrotreating, chemical sweetening, acid gas removal, and deasphalting), feedstock and product handling (e.g., storage, crude oil blending, non-crude oil feedstock blending, product blending, loading, and unloading), and auxiliary facilities (e.g., boilers, waste water treatment, hydrogen production, sulfur recovery plant, cooling towers, blowdown systems, compressor engines, and power plants). [Formerly Section 8-8-234]

(Adopted November 3, 2021)

8-8-<u>224</u> Secondary Treatment Processes: Any wastewater treatment process that which is downstream of the air flotation unit, any other biological treatment process at a refinery, or any treatment process which is regulated by the EPA National Categorical Pretreatment Standards. These treatment processes are considered to be wastewater polishing steps and include: activated sludge tanks/basins, trickling or sand filters, aerated lagoons, oxidation ponds, rotating biological contactors, and other biological wastewater treatment processes. [Formerly Section 8-8-208]

(Adopted November 1, 1989)

- 8-8-<u>225</u> Sewer Line: A lateral, trunk line, branch line, ditch, channel, or other conduit used to convey wastewater to downstream oil-water separators. [Formerly Section 8-8-218]
 - (Adopted November 1, 1989)
- Sludge-dewatering Unit: Any device that which, as its sole function, is used to dewater 8-8-226 oil-water separator and air flotation slop oil/sludge. [Formerly Section 8-8-215] (Adopted November 1, 1989)
- 8-8-<mark>227</mark> Stormwater Sewer System: A drain and collection system that is designed and operated for the sole purpose of collecting stormwater and is segregated from the wastewater collection system. [Formerly Section 8-8-216]

(Adopted 11/1/89; Amended 9/15/04)

8-8-<u>228</u> Sumps: Any below-grade structure typically used as a collection point for wastewater from multiple sewer lines prior to pumping or overflow to wastewater treatment. [Formerly Section 8-8-2271

(Adopted September 15, 2004)

8-8-229 Total Organic Compounds: The concentration of organic compounds and methane as indicated by a hydrocarbon analyzer as specified by Section 8-8-504. [Source: Rule 8-18: Equipment Leaks, Section 8-18-219]

8-8-230 Trenches: Any open-topped culvert used to transport wastewater from the point of process discharge to subsequent wastewater collection system components, such as junction boxes and lift stations. [Formerly Section 8-8-228]

(Adopted September 15, 2004)

8-8-231 Vapor-tight: A leak of less than 500 ppm by volume total organic compounds (expressed as methane) above background, measured at the interface of the component in accordance with Section 8-8-603. [Formerly Section 8-8-204]

(Amended 11/1/89; 9/15/04)

8-8-232 Vent Pipes: Any piping used to ventilate a wastewater collection system component or a wastewater separation system. [Formerly Section 8-8-229]

(Adopted September 15, 2004)

8-8-233 Wastewater: Any process water <u>thatwhich</u> contains oil, emulsified oil, or other <u>total</u> organic compounds which is not recycled or otherwise used within a facility. <u>[Formerly Section 8-8-211]</u>

(Adopted November 1, 1989)

8-8-234 Wastewater Collection System Components: Any structure or part of structures used to collect and transport wastewater prior to any treatment. These structures are usually located before oil/water separators and may include but are not limited to process drains, sewer lines, trenches, manholes, junction boxes, reaches, sumps and lift stations (including vent pipes). [Formerly Section 8-8-230]

(Adopted September 15, 2004)

8-8-235 Wastewater (Oil-Water) Separator: Any device used to separate liquid <u>total</u> organic compounds from oil-water waste streams (excluding wastewater separator forebays, air flotation (AF) units, sludge-dewatering units, oil-water separator and /or AF Unit slop oil vessels, and junction boxes). [Formerly Section 8-8-202]

(Amended November 1, 1989)

8-8-236 Wastewater Separation System <u>Components</u>: Any structure used to remove oil from water via a physical process including but not limited to oil-water separators, dissolved air flotation units or dissolved gas flotation units. <u>[Formerly Section 8-8-231]</u>

(Adopted September 15, 2004)

8-8-237 Wastewater Separator Forebay: That section of a gravity-type separator <u>that</u>which (a) receives the untreated, contaminated wastewater from the preseparator flume, and (b) acts as a header which distributes the influent to the separator channels. <u>[Formerly Section 8-8-203]</u>

(Amended November 1, 1989)

8-8-238 Water Seal or Equivalent Control: Any seal pot, p-leg trap, or other type of trap filled with a liquid not containing total organic compounds in order to create a barrier between the sewer and the atmosphere, or an equivalent physical seal, enclosed piping, pollution prevention measure or abatement device that meets the criteria of Regulation 2, Rule 1. [Formerly Section 8-8-232]

(Adopted September 15, 2004)

8-8-300 STANDARDS

- 8-8-301 Wastewater Separators Greater than 760 Liters per Day and Smaller than 18.9 Liters per Second: A person shall not No person shall operate any wastewater separator and/or forebay with a design rated or maximum allowable capacity greater than 760 liters per day and smaller than 18.9 liters per second (oil-water separators and/or forebays between 200 gals per day to 300 gals per min.) unless such wastewater separator and/or forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the following:
 - 301.1 A solid, gasketed, fixed cover totally enclosing the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall;

and that the access doors and other openings are closed and gasketed properly; or

- 301.2 A floating pontoon or double-deck vapor-tight type cover. All floating roofs must rest entirely on the liquid surface. The floating roof shall consist of two seals, one above the other, the one below shall be referred to as the primary seal, while the other seal shall be referred to as the secondary seal.
 - Oil-Water Separator Liquid-Mounted Primary Seal Gap Criteria: No gap between the separator wall and the liquid-mounted primary seal shall exceed 3.8 cm (1.5 inch). No continuous gap greater than 0.32 cm (0.125 inch) shall exceed 10 percent of the perimeter of the separator. The cumulative length of all primary seal gaps exceeding 1.3 cm (0.5 inch) shall be not more than 10 percent of the perimeter and the cumulative length of all primary seal gaps exceeding 0.32 cm (0.125 inch) shall be not more than 40 percent of the perimeter.
 - 2.2 Oil-Water Separator Secondary aAnd Wiper Seals Gap Criteria: No gap between the separator wall and the secondary and wiper seals shall exceed 1.5 mm (0.06 inch). The cumulative length of all secondary and wiper seals gaps exceeding 0.5 mm (0.02 inch) shall be not more than 5 percent of the perimeter of the separator. The secondary and wiper seals must exert a positive pressure against the separator such that the seal surface in contact with the separator wall does not pull away from the separator wall more than the gaps allowed.
 - 2.3 Primary aAnd Secondary Seal Gap Inspection: The primary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every 5 years thereafter in accordance with the requirements of Section 8-8-301.2.1. The secondary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every year thereafter in accordance with the requirements of Section 8-8-301.2.2. The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in Sections 8-8-301.2.1 and 301.2.2; or
- 301.3 An total organic compound vapor recovery system with a combined collection and destruction efficiency of at least 95 percent, by weight.
- 301.4 Deleted October 6, 1993

(Amended 11/1/89; 10/6/93; 9/15/04)

- 8-8-302 Wastewater Separators Larger than or Equal to 18.9 Liters per Second: A person shall not No person shall operate any wastewater separator and/or forebay with a rated or maximum allowable capacity larger than or equal to 18.9 liters per second (300 gals per min.) unless such wastewater separator and/or forebay is operated within its design rated or maximum allowable capacity and is equipped with one of the following:
 - 302.1 A solid, vapor-tight, full contact fixed cover which totally encloses the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed and sealed, except when the opening is being used for inspection, maintenance, or wastewater sampling; or
 - 302.2 A floating pontoon or double-deck vapor-tight type cover. All floating roofs must rest on the liquid surface. The floating roof shall consist of two seals, one above the other, the one below shall be referred to as the primary seal, while the other seal shall be referred to as the secondary seal.
 - 2.1 Oil-Water Separator Liquid-Mounted Primary Seal Gap Criteria: No gap between the separator wall and the liquid-mounted primary seal shall exceed 3.8 cm (1.5 inch). No continuous gap greater than 0.32 cm (0.125 inch) shall exceed 10 percent of the perimeter of the separator. The cumulative length of all primary seal gaps exceeding 1.3 cm (0.5 inch) shall be not more than 10 percent of the perimeter and the cumulative length of all primary seal gaps exceeding 0.32 cm (0.125 inch) shall be not more than 40 percent of the perimeter.

- 2.2 Oil-Water Separator Secondary Aand Wiper Seals Gap Criteria: No gap between the separator wall and the secondary and wiper seals shall exceed 1.5 mm (0.06 inch). The cumulative length of all secondary and wiper seals gaps exceeding 0.5 mm (0.02 inch) shall be not more than 5 percent of the perimeter of the separator. The secondary and wiper seals must exert a positive pressure against the separator such that the seal surface in contact with the separator wall does not pull away from the separator wall more than the gaps allowed.
- 2.3 Primary Aand Secondary Seal Gap Inspection: The primary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every 5 years thereafter in accordance with the requirements of Section 8-8-302.2.1. The secondary seal shall be inspected within 60 calendar days after initial installation of the floating roof and once every year thereafter in accordance with the requirements of Section 8-8-302.2.2. The owner or operator shall make necessary repairs within 30 calendar days of identification of seals not meeting the requirements listed in Sections 8-8-302.2.1 and 302.2.2; or
- 302.3 A vapor-tight fixed cover with an total organic compound vapor recovery system which has a combined collection and destruction efficiency of at least 95 percent, by weight, inspection and access hatches shall be closed except when the opening is being used for inspection, maintenance, or wastewater sampling; or
- 302.4 A solid, sealed, gasketed, fixed cover which totally encloses the separator tank, chamber, or basin (compartment) liquid contents, with all cover openings closed and sealed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include a pressure/vacuum valve. The concentration of total organic compounds, measured at the interface of the roof seals, fixed cover, access doors, pressure/vacuum valve, and other openings shall not exceed 1,000 ppm (expressed as methane) above background. Roof seals, fixed cover, access doors, and other openings shall be inspected initially and semiannually thereafter to ensure that there are no emission leaks greater than 1,000 ppm. Any emission leak greater than 1,000 ppm must be reported to the APCO and repaired within 15 days.
- 302.5 Deleted October 6, 1993
- 302.6 Roof seals, fixed covers, access doors, and other openings at refineries shall be inspected initially and semiannually thereafter to ensure that they are vapor tight. A leak in any component that is not vapor tight must be minimized within 24 hours and repaired within 7 days.

(Adopted 1/1/89; Amended 10/6/93; 9/15/04; 11/3/21)

8-8-303 Gauging and Sampling Devices: Any compartment or access hatch shall have a vapor <u>-</u> tight cover. Any gauging and sampling device in the compartment cover shall be equipped with a vapor<u>-</u>tight cover, seal, or lid. The compartment cover and gauging or sampling device cover shall at all times be in a closed position, except when the device is in use for inspection, maintenance, or wastewater sampling.

(Amended, Renumbered November 1, 1989)

8-8-304 Sludge-dewatering Unit: Any sludge-dewatering unit, equipment, machinery, apparatus, or device shall be totally enclosed and vented to an control abatement device which has a minimum combined collection and destruction efficiency of 95 percent by weight; or shall have vapor-tight covers on the unit, conveyer belts, and storage bins or tanks except during inspection, maintenance or when the solids storage bin is in use. Sludge must be maintained in vapor—tight containers during storage.

(Adopted 11/1/89; Amended 10/6/93; 9/15/04)

8-8-305 Oil-Water Separator And/Or and/or Air Flotation Unit Slop Oil Vessels: A person shall not No person shall store any oil-water separator and/or air flotation unit sludges in an oil-water separator slop oil vessel unless such oil-water separator slop oil vessel is equipped with one of the following:

- 305.1 A solid, gasketed, fixed cover totally enclosing the vessel liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include an atmospheric vent or a pressure/vacuum valve. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or
- 305.2 An total organic compound vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.
- 305.3 Deleted October 6, 1993

(Adopted 11/1/89; Amended 10/6/93; 9/15/04)

- 8-8-306 Oil-Water Separator Effluent Channel, Pond, Trench, or Basin: A person shall not No person shall operate any oil-water separator effluent channel, pond, trench, or basin a design rated or maximum allowable capacity greater than 25.2 liters per second (any oil-water separator effluent channel, pond, trench, or basin greater than 400 gals per min) unless such oil-water separator effluent channel, pond, trench, or basin is operated within its design rated or maximum allowable capacity and is equipped with one of the following:
 - A solid, gasketed, fixed cover totally enclosing the oil-water separator effluent channel, pond, trench, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or
 - 306.2 An total organic compound vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.
 - 306.3 Deleted October 6, 1993

(Adopted 11/1/89; Amended 10/6/93; 9/15/04)

- **8-8-307** Air Flotation Unit: A person shall not No person shall operate any air flotation unit and/or pre-air flotation unit flocculation sump, basin, chamber, or tank with a design rated or maximum allowable capacity greater than 25.2 liters per second (air flotation units and/or pre-air flotation unit flocculation sump, basin, chamber, or tank greater than 400 gals per min.) unless such air flotation unit and/or pre-air flotation unit flocculation sump, basin, chamber, or tank is operated within its design rated or maximum allowable capacity and is equipped with one of the following:
 - 307.1 A solid, gasketed, fixed cover totally enclosing the air flotation and pre-air-flotation-unit flocculation tank, chamber, or basin (compartment) liquid contents, with all cover openings closed, except when the opening is being used for inspection, maintenance, or wastewater sampling. The cover may include an atmospheric vent or pressure/vacuum valve. Roof seals, access doors, and other openings shall be checked by visual inspection initially and semiannually thereafter to ensure that no cracks or gaps greater than 0.32 cm (0.125 inch) occur in the roof or between the roof and wall; and that the access doors and other openings are closed and gasketed properly; or
 - 307.2 An total organic compound vapor recovery system with a combined collection and destruction efficiency of at least 70 percent, by weight.
 - 307.3 Deleted October 6, 1993

(Adopted 11/1/89; Amended 10/6/93; 9/15/04)

8-8-308 Junction Box: Any junction box shall be equipped with either a solid, gasketed, fixed cover totally enclosing the junction box or a solid manhole cover. Junction boxes may include openings in the covers and vent pipes if the total open area of the junction box does not exceed 81.3 cm² (12.6 in²) and all vent pipes are at least 3 feet in length.

(Adopted 11/1/89; Amended10/6/93)

8-8-309 Deleted October 6, 1993 8-8-310 Deleted October 6, 1993

8-8-311 Deleted October 6, 1993

8-8-312 Controlled Wastewater Collection System Components at Refineries: Effective January 1, 2006, all controlled wastewater collection system components at refineries shall be vapor tight except when in use for active inspection, maintenance, repair or sampling. A leak in any controlled wastewater collection system component that is not vapor tight must be minimized within 24 hours and repaired within 7 days.

(Adopted September 15, 2004, amended November 03, 2021)

- 8-8-313 Uncontrolled Wastewater Collection System Components at Refineries: Refineries shall comply with either Section 8-8-313.1 or 313.2 below:
 - 313.1 Each uncontrolled wastewater collection system component must be equipped with a water seal or equivalent control according to the schedule in Section 8-8-403. Any uncontrolled collection system component that is not vapor tight must be minimized. Upon installation of a water seal or equivalent control, the provisions of Section 8-8-312 will apply; or
 - 313.2 Effective January 1, 2006 and until January 1, 2007, each uncontrolled wastewater collection system component must be inspected bi-monthly. Effective January 1, 2007, each uncontrolled wastewater system component must be inspected semi-annually. Any uncontrolled wastewater collection system component that is not vapor tight shall be identified, minimized within 24 hours and re-inspected every 30 days. The component may be returned to a semi-annual inspection schedule if it is vapor tight during three consecutive 30-day inspections. Any uncontrolled wastewater collection system component that is not vapor tight during any three inspections in a five-year period must be equipped with a water seal or equivalent control within 30 days after the third inspection. Upon installation of the water seal or equivalent control, the provisions of Section 8-8-312 shall apply. Unless previously identified by the refinery, any wastewater system component discovered by the APCO not to be vapor tight must be minimized within 24 hours and repaired within 7 days.

(Adopted 9/15/04; Amended 11/3/21)

8-8-314 New Wastewater Collection System Components at Refineries: Effective January 1, 2005, any new wastewater collection system component at a refinery shall be equipped with a water seal or equivalent control.

(Adopted 9/15/04; Amended 11/3/21)

- 8-8-315

 Wastewater Collection System Components and Wastewater Separation System
 Components at Refineries: The owner or operator of a wastewater collection system
 component or a wastewater separation system component at a refinery shall comply with
 one of the following:
 - All wastewater collection system components and wastewater separation system components shall be vapor-tight. Any component discovered by the owner or operator not to be vapor-tight shall be repaired in accordance with the schedule in Section 8-8-405. Any component discovered by the APCO not to be vapor-tight shall constitute a violation of this Rule and shall be repaired within 24 hours in accordance with Section 8-8-405.3; or
 - Operate a vapor-tight collection system that is routed to a vapor recovery or abatement system that has a minimum destruction efficiency of 95 percent, by weight, for abating emissions of total organic compounds from the component or components, as determined in accordance with the requirements in Section 8-8-506.
- <u>Prohibition of Discharge at Refineries:</u> The owner or operator of a wastewater collection system component, separation system component or secondary treatment process component at a refinery shall not discharge non-aqueous phase hydrocarbon streams into wastewater collection system components and shall not discharge any free phase organic

liquid streams into wastewater secondary treatment process components. The organic concentration in wastewater shall be determined by the methods specified in Section 8-8-605.

- 8-8-400 ADMINISTRATIVE REQUIREMENTS
- 8-8-401 Deleted October 6, 1993
- 8-8-402 Wastewater Collection and Separation System Identification and Inspection and Maintenance Plan at Refineries: All refineries must implement an inspection and maintenance plan that meets all of the following requirements:
 - 402.1 By October 1, 2005, Aall wastewater collection system and separation system components must be equipped with a unique color coded tag and permanent identification code. The tag color and identification code shall be used to differentiate between vapor-tight components and those components routed to a vapor recovery or abatement system.
 - identified and the APCO must be provided with lists, diagrams or other information sufficient to locate all components. It shall not be violation of this requirement if the refinery discovers that a component has been omitted from the list, diagram, or other information and submits information to the APCO regarding the component. Effective October 1, 2005, any wastewater collection system component found by the APCO that was not identified pursuant to the provisions of this section shall constitute a violation.
 - 402.2 By October 1, 2005, an initial inspection of all wastewater collection system components must be completed by the refinery. The results of the initial inspection shall be made available to the APCO, but any wastewater collection system component that is not vapor tight shall not trigger the requirements of Section 8-8-313 before the effective date of that Section.
 - 402.3 Effective January 1, 2006, for refineries that elect to comply with Section 8-8-313.2, the plan must provide for the identification and minimization of leaking components and a re-inspection within 30 days of discovery. The plan must also provide for reinspections every thirty days until the affected component is either controlled or is returned to the inspection schedule in Section 8-8-313.2.
 - 402.4 Effective January 1, 2006, Except as provided under Section 8-8-405.5, each controlled wastewater collection or separation system component shall be inspected quarterly. semi-annually.
 - 402.5 Records must be maintained pursuant to Section 8-8-505.

(Adopted 9/15/04; Amended 11/3/21)

- **8-8-403** Refinery Compliance Schedule: Any refinery electing to comply with Section 8-8-313.1 shall install controls on uncontrolled wastewater collection system components according to the following schedule:
 - 403.1 By October 31, 2005, install controls on 25% of wastewater collection system components that were uncontrolled as of January 1, 2005.
 - 403.2 By April 30, 2006, install controls on 50% of wastewater collection system components that were uncontrolled as of January 1, 2005.
 - 403.3 By October 31, 2006, install controls on 75% of wastewater collection system components that were uncontrolled as of January 1, 2005.
 - 403.4 By April 30, 2007, install controls on 100% of wastewater collection system components that were uncontrolled as of January 1, 2005.

(Adopted 9/15/04; Amended 11/3/21)

8-8-404 Uncontrolled Wastewater Collection System Components Election: By November 1, 2004, each refinery shall choose a compliance option from Section 8-8-313 and notify the APCO in writing indicating which option has been chosen.

(Adopted 9/15/04; Amended 11/3/21)

- **8-8-405** Repair Schedule for Leak Excesses at Refineries: For any leak that is not vapor-tight, the owner or operator shall meet the following requirements:
 - 405.1 The date, location, and value of each excess shall be recorded and the location shall be marked.

- 405.2 If the leak has been discovered by the owner or operator, the leak shall be minimized within 24 hours and repaired within seven (7) days; or
- 405.3 If the leak has been discovered by the APCO, the leak must be repaired within 24 hours.
- <u>Any equipment found to have a leak shall be reinspected within 24 hours after</u> any leak repair or minimization.
- 405.5 If any equipment is found leaking more than three (3) consecutive quarters, the inspection frequency shall change from quarterly to monthly pursuant to Section 8-8-406.
- <u>Recurrent Leak Schedule at Refineries:</u> For any equipment found leaking in more than three consecutive quarters, a person subject to this Rule shall comply with the following requirements:
 - 406.1 The inspection frequency shall be changed from quarterly to monthly.
 - 406.2 If the equipment remains leak free for four consecutive months the inspection frequency will revert back to quarterly upon request and after APCO approval.

8-8-500 MONITORING AND RECORDS

8-8-501 API Separator or Air Flotation Bypassed Wastewater Records: Any person who bypasses wastewater past their API Separator or Air Flotation unit shall maintain records on the amount of bypassed wastewater, duration, date, causes for bypasses, and dissolved critical total organic compound concentration (volume). These records shall be retained and available for inspection by the APCO for at least 24-months five years.

(Adopted 11/1/89; Amended 9/15/04)

8-8-502 Wastewater Critical Total Organic Compound Concentration Organic Records: Any person who seeks an exemption of exempts their wastewater separator because of either wastewater critical total organic compound concentration or temperature shall sample and test the wastewater initially and semiannually thereafter and maintain records on the date, time of test, location, and wastewater temperature and/or critical total organic compound concentration (volume). These records shall be retained and available for inspection by the APCO for at least 24 months five years.

(Adopted 11/1/89; Amended 9/15/04)

8-8-503 Inspection and Repair Records: Records of inspections and repairs as required by Sections 8-8-301, 302, 305, 306, or 307, 315, 402, 405 or 406 shall be retained and made available for inspection by the APCO for at least 24 months five years.

(Adopted October 6, 1993)

8-8-504 Portable Hydrocarbon Detector: Any instrument used for the measurement of <u>total</u> organic compounds shall be a <u>combustible</u> gas detector that <u>has been approved by the APCO and</u> meets the specifications and performance criteria of and has been calibrated in accordance with EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted June 15, 1994)

- 8-8-505 Records for Wastewater Collection <u>System and Wastewater Separation</u> System Components at Refineries: Any person subject to the requirements of this rRule shall:
 - 505.1 Maintain records of the type and location of each wastewater collection system and separation system component.
 - 505.2 Record the date of each wastewater collection system and separation system component inspection, and re-inspection and leak concentration measured for each inspection or re-inspection.
 - 505.3 Record a description of the minimization or repair efforts on each leaking component that is not vapor—tight.
 - 505.4 Maintain required records for at least 5 five years and make them available to the APCO for inspection at any time.

(Adopted 9/15/04; Amended 11/3/21)

- 8-8-506

 Source Test Requirements at Refineries: Any owner or operator who uses an abatement device to comply with the requirements set forth in Section 8-8-315 of this Rule shall perform a source test on the system verifying operation at the required abatement efficiency at least once in any calendar year in which the system is used to comply with this Rule. Source testing, including prior notification of the Air District, shall be performed in accordance with the Manual of Procedures, Volume IV. This section does not apply to any device that collects all emissions and vents them to a fuel gas collection system for combustion, or to any device that is subject to periodic source testing in accordance with an Air District permit to operate.
- 8-8-507 Wastewater Organic Concentration Monitoring at Refineries: The owner or operator of wastewater separation system components or secondary treatment processes at a refinery shall monitor the concentrations of oil and grease, total organic carbon, and volatile organic compounds in wastewater along with total wastewater flowrate at the inlet to oilwater separators, inlet to secondary treatment system, and outlet of secondary treatment system. Monitoring shall be conducted on the following frequency:
 - 507.1 Effective XXX (date of rule adoption) until YYY (6 months after rule adoption date), at least once every 30 days.
 - 507.2 Effective YYY (6 months after rule adoption date), at least once every 90 days.
- <u>Wastewater Organic Concentration Recordkeeping Requirements at Refineries:</u> The owner or operator of wastewater separation system components or secondary treatment processes at a refinery shall keep the following records in a form suitable for inspection for a period of at least five years and made available to the APCO upon request:
 - 508.1 Concentration of oil and grease.
 - 508.2 Concentration of total organic carbon.
 - 508.3 Concentration of volatile organic compounds.
 - <u>508.4</u> <u>Location of each recorded concentration (inlet to oil-water separator, inlet to secondary treatment system).</u>

8-8-600 MANUAL OF PROCEDURES

- 8-8-601 Wastewater Analysis for Critical <u>Total</u> Organic Compounds: Samples of wastewater as specified in this <u>Rule shall be taken at the influent stream for each wastewater collection system and wastewater separation system unit and analyzed for the concentration of dissolved critical <u>total</u> organic compounds as prescribed in the <u>by any of the following methods</u>, or latest revision, where applicable:</u>
 - 601.1 Concentration of organic compounds having a carbon number of C-14 or less shall be determined by BAAQMD Manual of Procedures, Volume III, Lab Method 33.
 - 601.2 Concentration of methane shall be determined by ASTM Method D8028-17.
 - 601.3 Concentration of organic Toxic Air Contaminants listed in Regulation 2, Rule 5, Table 2-5-1 shall be determined by EPA Methods 8260, 8290A, and 8315A.
 - Any alternative method to those listed above if determined to be equivalent by the EPA and approved by the APCO.

(Amended 11/1/89; 10/6/93; 9/15/04)

8-8-602 Determination of Emissions: Emissions of total organic compounds as specified in Sections 8-8-301.3, 8-8-302.3, 8-8-304, 8-8-305.2, 8-8-306.2, and 8-8-307.2, and 315.2 shall be measured as prescribed by any of the following methods: 1) BAAQMD Manual of Procedures, Volume IV, ST-7, 2) EPA Method 25, or 25A), or 3) any other method approved by the APCO. A source shall be considered in violation if the total organic compound emissions measured by any of the referenced test methods exceed the standards of this rRule.

(Amended 11/1/89; 10/6/93; 6/15/94; 9/15/04, 11/3/21))

8-8-603 Inspection Procedures: For the purposes of Sections 8-8-301, 302, 303, 304, 312315, 313 and 402, 405, and 406, leaks shall be measured using a portable combustible gas detector as prescribed in EPA Reference Method 21 (40 CFR 60, Appendix A).

(Adopted 6/15/94; Amended 9/15/04)

- 8-8-604 Determination of Abatement Efficiency: Abatement efficiency of an abatement device as specified in Section 8-8-506 shall be determined as prescribed in the Manual of Procedures, Volume IV, ST-7.
- <u>B-8-605</u>
 <u>Determination of Organic Concentration in Wastewater</u>: The organic concentration determination as specified by Section 8-8-507 shall be measured using any of the following methods, or latest revision, where applicable:
 - 605.1 Oil and grease content shall be determined using EPA Method 1664A.
 - 605.2 Total organic carbon content shall be determined by using EPA Method 9060A or Method SM 5310D.
 - 605.3 Volatile organic compounds content shall be determined by EPA Method 8260.
 - Any alternative method to those listed above if determined to be equivalent by the EPA and approved by the APCO.