

ANTELOPE VALLEY AIR QUALITY MANAGEMENT DISTRICT

RULE 1179 -- PUBLICLY OWNED TREATMENT WORKS OPERATIONS

(Adopted: 06/07/91; Amended: 03/06/92)

(a) **Applicability**

This rule applies to all existing Publicly Owned Treatment Works (POTWs).

(b) **Definitions**

For the purpose of this rule, the following definitions shall apply:

- (1) **EXEMPT COMPOUNDS** are any of the following compounds:
 - (A) **Group I (General)**
 - chlorodifluoromethane (HCFC-22)
 - dichlorotrifluoroethane (HCFC-123)
 - tetrafluoroethane (HFC-134a)
 - dichlorofluoroethane (HCFC-141b)
 - chlorodifluoroethane (HCFC-142b)
 - (B) **Group II (Under Review)**
 - methylene chloride
 - 1,1,1-trichloroethane (methyl chloroform)
 - trifluoromethane (FC-23)
 - trichlorotrifluoroethane (CFC-113)
 - dichlorodifluoromethane (CFC-12)
 - trichlorofluoromethane (CFC-11)
 - dichlorotetrafluoroethane (CFC-114)
 - chloropentafluoroethane (CFC-115)
- (2) **LARGE-CAPACITY POTWs** are Publicly Owned Treatment Works that have a design capacity of 10 million gallons per day, or greater.
- (3) **ODOR** is a characteristic of a substance that is detectable by the human olfactory organs and may contribute to a public nuisance.
- (4) **ODOROUS EMISSIONS** are odor parameters measured by dynamic dilution olfactometry and odor panels. Odor emissions are expressed as dilution-to-thresholds ratios or odor concentration units.
- (5) **PUBLICLY OWNED TREATMENT WORKS (POTWs)** are wastewater treatment or reclamation plants owned or operated by a public entity, including all operations within the boundaries of the wastewater and sludge treatment plant.

- (6) SMALL-CAPACITY POTWs are Publicly Owned Treatment Works that have a design capacity of less than 10 million gallons per day.
- (7) VOLATILE ORGANIC COMPOUND (VOC) is any compound of carbon, excluding carbon monoxide, carbon dioxide, carbonic acid, metallic carbides, carbonates, methane, and the exempt compounds.

(c) Requirements for Large-Capacity POTWs

- (1) On or before June 1, 1992, the operator of each POTW shall submit an Emissions Inventory Plan to the Executive Officer for approval. The Emissions Inventory Plan shall:
 - (A) Include and specify the procedures, source test protocols, methods of analysis, and combustion source test data, where available, that will be used to quantify VOC and odorous emissions as part of a facility-wide VOC Emissions Inventory Report and Odor Evaluation Report, respectively.
 - (B) Include a description, the name, the operating agency, and the exact location of the facility.
 - (C) Provide the plant parameters, including, but not limited to, the plant design capacity, the operating capacity, projected capacity, the diurnal and seasonal flow profiles, and a list identifying and quantifying the unit processes and operations used at the facility.
 - (D) Provide a detailed description of the service area, including the geographic location of the service area boundary in terms of Universal Transverse Mercator (UTM) coordinates, and a plot plan of the main sewer and interceptor lines.
 - (E) Provide the disaggregated population estimates for service area from the 1991 Air Quality Management Plan, and the projected service population for the years 1995, 2000, 2005, and 2010. Provide the methodology used to project plant flow from population data.
- (2) The operator of each POTW shall, within 180 days of approval of the Emissions Inventory Plan, implement the Emissions Inventory Plan as approved by the Executive Officer, and shall submit to the District a facility-wide VOC Emissions Inventory Report. The facility-wide VOC Emissions Inventory Report shall:
 - (A) Provide separate, quantitative measurements of the controlled and uncontrolled VOC emissions for each unit process and unit operation at the POTW, except for combustion processes or sources.

- (B) Provide a quantitative estimate of the total facility-wide VOC emissions, including the VOC emissions resulting from combustion processes or sources.
- (3) The operators of each POTW shall, within 180 days of approval of the Emissions Inventory Plan, prepare and submit to the District an Odor Evaluation Report based on the approved Emissions Inventory Plan. The Odor Evaluation Report shall:
- (A) Provide quantitative measurements of the controlled and uncontrolled odorous emissions for each unit process and unit operation at the POTW.
 - (B) Identify all existing and potential sources of odorous emissions, and specify the likely physical and biological conditions leading to the generation of odorous emissions.
 - (C) Provide the facility's equipment and process breakdown history for the past two years that have led to odor complaints, and the total number of odor-related citizen complaints received for the past two years.
 - (D) Recommend any processes, procedures, or operations for facility-wide odorous emissions abatement or elimination.

(d) Requirements for Small-Capacity POTWs

- (1) On or before July 1, 1992, the operators of each POTW shall submit a Facility Description Report to the District. The Facility Description Report shall:
- (A) Include a description, the name, the operating agency, and the exact location of the facility.
 - (B) Provide the plant parameters, including, but not limited to, the plant design capacity, the operating capacity, the projected capacity, the diurnal and seasonal flow profiles, and a list identifying and quantifying the unit processes and operations used at the facility.
 - (C) Provide a detailed description of the service area, including the geographic location of the service area boundary in terms of Universal Transverse Mercator (UTM) coordinates, and a plot plan of the main sewer and interceptor lines.
 - (D) Provide the disaggregated population estimates for service area from the 1991 Air Quality Management Plan, and the projected service population for the years 1995, 2000, 2005, and 2010. Provide the methodology used to project plant flow from population data.

- (2) On or before January 1, 1993, the operators of each POTW shall submit a wastewater analysis report that provides the mass rate of VOCs present in the influent and effluent wastewater. The analysis shall include measurements for average and peak flow rates.

(e) **Joint VOC Emissions Testing**

Except for headworks and grit chambers for all large-capacity POTWs, and sedimentation tanks and activated sludge systems for POTWs with a design capacity of 50 million gallons per day or greater, joint VOC emissions testing of unit processes and unit operations may be conducted by two or more of the large-capacity POTWs provided the following conditions are met:

- (1) A written request for joint VOC emissions testing is incorporated in the Emissions Inventory Plan required by paragraph (c)(1), including detailed protocols and program description;
- (2) A demonstration is made that emissions estimates derived for each unit process or unit operation will be representative of emissions from this type of unit process or unit operation at any of the POTWs involved in the joint VOC testing program;
- (3) That emissions estimates developed under joint VOC emissions testing be correlated against wastewater parameters and other POTW emissions data for the same unit process or unit operation; and
- (4) That written approval from the Executive Officer is granted.

(f) **Exemptions**

Odorous emissions resulting from combustion sources are exempt from the requirements of subparagraphs (c)(1)(A) and (c)(3)(A).

[SIP: Approved 10/4/94, 59 FR 50498, 40 CFR 52.220(c)(189)(i)(A)(5)]