## RULE 420 EFFLUENT OIL WATER SEPARATORS

(Adopted 12-13-84 and revised 8-25-93.)

### **CONTENTS**

PARTI	GENERAL	
1.1	Purpose	1
1.2	Applicability	2
1.3	Exemptions	2
1.4	Effective Dates	2
1.5	References	2
PART 2	DEFINITIONS	2
DADE 2	DECLUDE VENERALD AND CEANDAND	_
	REQUIREMENTS AND STANDARDS	
3.1	Solid Cover	
3.2	Pontoon Cover	
3.3	Floating Cover	1
3.4	Vapor Recovery System	3
DADT 4	A DMINHOTD A TIME DECLUDEMENTO	_
PAKI 4	ADMINISTRATIVE REQUIREMENTS	1
PART 5	TEST METHODS	4
5.1	Control Device Efficiency	2
5.2	Reid Vapor Pressure	
5.3	Sulfide Content	/
5.4	Source Testing Procedures	4

## PART 1 GENERAL

# 1.1 Purpose

The purpose of this Rule is to limit the emissions of vapors of organic and sulfur compounds from effluent oil water separators.

# 1.2 Applicability

The provisions of this Rule shall apply to oil water separators at oil fields and petroleum refineries unless specifically exempted by the provisions of this Rule.

# 1.3 Exemptions

The provisions of this Rule shall not apply to the following separators:

- 1.3.1 a separator that recovers less than 200 gallons per day of petroleum products;
- 1.3.2 a separator that handles hydrocarbons with a Reid vapor pressure less than 0.5 pounds; or
- 1.3.3 a separator that is used exclusively in conjunction with the production of crude oil, if the water fraction of the oil-water effluent entering the separator contains less than five (5) parts per million hydrogen sulfide, organic sulfides, or a combination thereof.

#### 1.4 Effective Dates

This Rule has been in effect since December 13, 1984. The Rule in its present form is effective August 25, 1993.

#### 1.5 References

The requirements of this Rule arise from the provisions of the California Clean Air Act and amendments (Health and Safety Code Section 40910 *et seq.*) and the federal Clean Air Act and amendments (42 U.S.C. Section 7401 *et seq.*)

### PART 2 DEFINITIONS

Reserved

## PART 3 REQUIREMENTS AND STANDARDS

No person shall use any compartment or any vessel or device operated for the recovery of oil from effluent water from any equipment which processes, refines, stores, or handles hydrocarbons unless such compartment is equipped with one of the following vapor control devices:

#### 3.1 Solid Cover

a solid cover with all openings sealed and totally enclosing the liquid contents of that compartment;

#### 3.2 Pontoon Cover

a floating pontoon or double-deck-type cover, equipped with closure seals, to enclose any space between the edge of the cover and the compartment wall;

## 3.3 Floating Cover

a floating cover which contacts at least 90 percent of the liquid surface area, is impermeable to vapors, and is kept closed at all times except during attended maintenance operations; or

# 3.4 Vapor Recovery System

a vapor recovery system which reduces the emission of all hydrocarbon vapors by at least 90 percent by weight. Vapor control efficiency shall be determined according to the method specified in Part 5.

#### PART 4 ADMINISTRATIVE REQUIREMENTS

Any person claiming exemption from this Rule based on vapor pressure or oil recovery rate shall maintain daily records of the vapor pressure or amount of petroleum products recovered to substantiate such exemption. Each such record shall be maintained for a period of two (2) years and provided to the District upon request.

#### PART 5 TEST METHODS

## 5.1 Control Device Efficiency

Control device efficiency shall be determined using EPA Method 2 for measurement of flow rate and EPA Methods 25A or EPA Method 25B for measurement of vapor concentration (40 CFR 60, Appendix A).

# 5.2 Reid Vapor Pressure

Reid vapor pressure shall be determined using American Society of Testing and Materials Method D 323-82 for Vapor Pressure of Petroleum Products.

### 5.3 Sulfide Content

Hydrogen sulfide and organic sulfides shall be determined using the appropriate methods selected from Method 4500 of Standard Methods for the Examination of Water and Wastewater.

# 5.4 Source Testing Procedures

All source testing shall be performed in compliance with the District Source Testing Procedures Manual.

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