

There are no discharges of drilling fluids and cuttings from coastal operators except for those in Cook Inlet. The volumes and locations of discharges are discussed in more detail in Section VI. By July 1996, the scheduled date for promulgation of this rule, EPA estimates that there will be 216 facilities operated by 122 operators discharging produced water. This is based on data obtained directly from industry, the 1993 Coastal Oil and Gas Questionnaire, and state permit records.

D. Waste Streams

The primary wastewater sources from the exploration and development phases of the coastal oil and gas extraction industry include the following:

- Drilling fluids.
- Drill cuttings.
- Sanitary wastes.
- Deck drainage.
- Domestic wastes.

The primary wastewater sources from the production phase of the industry include the following:

- Produced water.
- Produced sand.
- Well treatment, workover, and completion fluids.
- Deck drainage.
- Domestic wastes.
- Sanitary wastes.

Drilling fluids and drill cuttings are the most significant waste streams from exploratory and development operations in terms of volume and pollutants. Produced water is the largest waste stream from production activities in terms of volumes of discharged and quantity of pollutants. Deck drainage,

sanitary wastes, domestic wastes, produced sand, and well treatment, completion, and workover fluids are often classified under the term miscellaneous wastes.

A summary of the sources and characteristics of each of these wastes is presented in Section VI of this notice. Detailed discussions of the origins and characteristics of the waste water effluents from exploration, development, and production are included in the Coastal Technical Development Document. EPA has primarily focused data gathering efforts and data analyses on drilling fluids, drill cuttings, and produced water due to their volumes and potential toxicity. Information on the other waste streams discussed above is more limited. Their volumes are generally smaller, and in most cases are either infrequently discharged or are commingled with the major waste streams. However, EPA has determined that it is appropriate to propose regulations for these wastes as well.

E. Current NPDES Permits

Discharges from coastal oil and gas operations in the Gulf of Mexico, California, and Alaska are regulated by general and individual NPDES permits based on BPT, State Water Quality Standards, and on Best Professional Judgment (BPJ) of BCT and BAT levels of control. Table 3 lists the requirements in these permits.

EPA's Region VI has developed general NPDES permits for each phase of oil and gas operations (drilling and production). The drilling permits for

Louisiana and Texas were proposed in 1990 and a final permits published on September 21, 1993 (58 FR 49126). Region VI proposed general production permits on December 22, 1992 (57 FR 60926), and final permits on January 9, 1995 (60 FR 2387).

EPA's Region X issued a BPT and BPJ general NPDES permit for oil and gas operations in the Upper Cook Inlet. However, although expired, conditions of this general permit are still fully effective and enforceable until the permit is reissued. Region X is currently in the process of reissuing the BPT and BPJ/BAT general permit for this area with proposal expected in early 1995. In addition to the general permit, the Region issued an individual permit regulating discharges from exploratory drilling operations in Upper Cook Inlet in May 1993. The individual permit was also based on BPT and BPJ/BAT.

The State of Alabama, which has been authorized to administer the NPDES program, has also issued a final NPDES general permit covering facilities in state waters, including offshore and coastal facilities (including Mobile Bay). (Permit #ALG280000, May 25, 1994). This permit specifically prohibits the discharge of drilling fluids and cuttings, and produced water. The permit also does not allow the discharge of produced sands or treatment, workover and completion fluids.

Regional permit requirements are based on other factors, in addition to technology pollutant removal performance, including water quality criteria.

TABLE 3.—NPDES PERMIT REQUIREMENTS ¹
[Regional Permit Requirements]

Wastestream	Region X (CI 1986 BPT permit)	Region X exploration permit (1993)	Region VI final drilling permit (1993)	Region VI production permit (final) (1995)	Region IV permit (1994)
Produced Water	Monitor daily flow rate Oil & Grease: Phillips A Platform 20 mg/l daily max 15 mg/l mo. ave. Other facilities: 48/72 mg/l pH=6-9.	Not applicable	Covered in Production Permit.	No Discharge	No Discharge.
Produced Sand	No free oil (Static Sheen)	Not applicable	Not applicable	No Discharge	No Discharge.
Drilling Fluids and Cuttings.	(1) Toxicity: Discharge only approved generic muds. (2) No free oil- static sheen ... (3) No discharge oil-based muds. (4) 10 percent oil content for cuttings. (5) No diesel oil	(1) Flowrate = 750 bbl/hr	No Discharge	Not applicable.	No Discharge.
	(6) 1/3 mg/kg Hg/Cd in dry barite. (7) Flow rate	(2) Use authorized muds only. (3) Toxicity: 30,000 ppm in SPP. (4) No free oil. (5) No discharge of oil-based fluids. (6) 5 percent (wt) oil content in cuttings. (7) No discharge of diesel oil. (8) 1 mg/kg Hg and 3 mg/kg Cd in stock barite.			
	>40m = 1000 bbl/hr				