

**STATE OF CALIFORNIA  
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
CENTRAL COAST REGION**

**STAFF REPORT FOR THE REGULAR MEETING OF MAY 14, 2004**

Final Draft prepared on April 21, 2004

**ITEM: 45**

**SUBJECT: Rescission of Waste Discharge Requirements for the Gaviota Oil Heating Facility, Arguello, Inc., Santa Barbara County-- Order No. 98-11**

**KEY INFORMATION**

Location: Gaviota, 28 miles west of the City of Santa Barbara  
Type of Waste: Treated sanitary wastewater and waste brines  
Design Capacity: 1.2 million gallons per day (MGD)  
Present Volume: Approximately 0.5 MGD  
Reclamation: None  
Existing Order: Order No. 98-11

**SUMMARY** Arguello, Inc. (Discharger) submitted a complete Notice of Intent (NOI) to comply with the limitations and specifications in *NPDES Permit for Discharges with Low Threat to Water Quality* (Order No. 01-119, NPDES No. CAG993001) (General Permit). Regulation under the General Permit replaces regulation under NPDES Permit No. CA0049018 (Waste Discharge Requirements (WDRs) Order No. 98-11), an individual permit that expired on December 11, 2003. Staff supports the Discharger's proposal because the General Permit is the best tool to regulate the discharge, which contains insignificant concentrations of pollutants. Therefore, staff proposes rescission of Waste Discharge Requirements Order No. 98-11.

**DISCUSSION** On December 12, 2003, the Discharger submitted a complete NOI for enrollment under the General Permit. As discussed in the Executive Officer's report of enrollees under the General Permit in this agenda, the ocean discharge from the oil heating facility contains insignificant pollutant concentrations. Therefore, the General Permit is the appropriate means to regulate this low-threat discharge.

The Discharger has maintained complete compliance with all effluent limitations and other specifications included in Order No. 98-11.

Offshore production platforms in the Discharger's Point Arguello Field produce crude oil, natural gas, and formation water (produced water). Treatment facilities on the offshore platforms separate the oil and gas from the produced water. The water is treated by means of induced-gas flotation and settling, and is discharged to the ocean offshore of the three-mile limit of the State's waters. (An NPDES permit issued by the United States Environmental Protection Agency regulates the discharge.) The oil is pumped onshore, where the Discharger heats it to ease its transit through pipelines to distant refineries. The Discharger desalinates seawater to produce freshwater for the boilers and as a potable water supply. As discussed below, almost all the wastewater in the ocean discharge originates from water treatment and boiler operations. The Discharger adds one to two gallons per day of nontoxic inorganic coagulants, scale inhibitors, and corrosion inhibitors to the water flow through the plant. Total average flow from the plant is about 0.5 MGD and total maximum flow is 1.2 MGD.

Wastewaters discharged to the ocean include the following: 0.001 million gallons per day (MGD) of sewage from an aeration treatment/ultraviolet disinfection system (0.2 percent of the average total flow); 0.14 MGD of reverse osmosis reject brine (28 percent); 0.36 MGD of excess seawater

(72 percent), which is required to ensure that seawater intake pumps operate at the recommended discharge rate); and 0.072 MGD of boiler blowdown (1.4 percent). The ocean discharge also includes the following small flows: excess freshwater from the desalination plant; reverse osmosis filter backwash; brackish water reverse osmosis reject; water softener backwash; and regeneration and rinse waters.

Except for the treated sewage, all the discharge's sub-streams consist only of brine or brackish water. Effluent analyses found the discharge to be approximately as saline as the ocean, which indicates the minor effect of the brine and brackish wastewaters on the salinity of the total discharge. Discharge through an outfall/diffuser system (which provides a minimum initial dilution ratio of at least 72:1 seawater to discharge ratio) reduces the concentration of the secondarily treated sewage to insignificant levels.

In 1998, the Discharger demonstrated the discharge contained no toxic pollutants at levels that could cause exceedances of the California Ocean Plan's water quality objectives, except copper. (In accordance with Order No. 98-11, the Discharger annually certified that it added no compounds in the Ocean Plan, or other toxic compounds, to the discharge.) Some 1998 analyses found copper at slightly elevated concentrations but still below effluent limitations. Accordingly, Waste Discharge Requirements (WDRs) Order No. 98-11 includes an effluent limitation for copper. Copper likely enters the plant's wastewater from the nickel-copper alloy comprising the facility's seawater intake pipeline. No plant processes discharge copper. After 1998, twelve analyses found copper at levels well below effluent limitations. The analyses demonstrate the discharge contains insignificant copper concentrations. Toxicity tests have demonstrated the discharge is not toxic

**CONCLUSION** The discharge poses an insignificant threat to the ocean's water quality and will not impair the ocean's beneficial uses if enrolled under the General Permit. Therefore, staff proposes rescission of Order No. 98-11 and regulating this discharge by means of the General Low-threat Permit..

## COMMENTS

Arguello Inc. – No response  
Santa Barbara County Environmental Health Services – No response

## RECOMMENDATION

Rescind Waste Discharge Requirements Order No. 98-11, as proposed.

## ATTACHMENTS

1. Waste Discharge Requirements Order No. 98-11

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