

STATE OF CALIFORNIA
STATE WATER RESOURCES CONTROL BOARD

In the Matter of the Petition of)
the Amigos de Bolsa Chica for)
Review of Order No. 78-205 of)
the California Regional Water)
Quality Control Board, Santa Ana)
Region, Waste Discharge Require-)
ments for Aminoil USA, Inc. Our)
File No. A-215.)

Order No. WQ 79-33

BY THE BOARD:

On October 20, 1978, after a public hearing, the California Regional Water Quality Control Board, Santa Ana Region, (Regional Board) adopted Order No. 78-205, revising waste discharge requirements for Aminoil USA, Inc. (Aminoil). On November 16, 1978, the State Board received the petition of the Amigos de Bolsa Chica (Amigos) requesting that the State Board review Regional Board Order No. 78-205. The petition requests that the State Board find that the area governed by Order No. 78-205 is wetlands within the meaning of the Clean Water Act and that the subject Aminoil waste discharge must be governed by an NPDES ^{1/} permit, pursuant to Chapter 5.5, Division 7 of the California Water Code and Section 402 of the Clean Water Act.^{2/} On December 5, 1978, Aminoil USA, Inc.

1. "NPDES" means National Pollutant Discharge Elimination System as that term is used in the Clean Water Act, described herein in footnote number 2.
2. As it is used in this order, "Clean Water Act" means Public Law 95-217 and Public Law 92-500, inclusive, which are codified at 33 USC, Section 1251, et seq. The section numbers referred to in this order correspond to the section numbers set forth in PL 95-217 and PL 92-500.

filed a response to the petition; and on February 15, 1979, the Signal Bolsa Corporation filed a petition to intervene in the matter.

At its April 1979 public workshop session, in which the representatives of the Amigos, Aminoil, the Signal Bolsa Corporation, and the Regional Board participated, it was determined that we would review the subject waste discharge requirements based upon the record of these proceedings before the Regional Board without any additional public hearing.

BACKGROUND

Aminoil USA, Inc. operates oil and gas wells in the Huntington Beach Oil and Gas Field. These operations produce rotary drilling muds and centrifuged industrial wastewater treatment residues, which are discharged to approximately 12 acres within a 45-acre site leased from the Signal Bolsa Corporation and located within the area known as "Bolsa Chica". The 12-acre site is used by Aminoil as a temporary drying area for the drilling wastes. After drying, the material is removed and used in building or maintaining levee roads or disposed of to a land fill.

The Bolsa Chica area is a lowlands area adjacent to the Pacific Ocean and near the City of Huntington Beach in Orange County, California. The area is part of an estuarine ecological system and the remnant of a large saltwater marsh which was historically subject to tidal inundation but which has changed dramatically as a result of development activities starting in

the late 1800's. These activities have included the installation of tidal floodgates, levees, roads, and oil drilling facilities.

The size of the areas subject to tidal inundation has been drastically reduced since the early 1900's. However, the area is inundated seasonally by rainfall, and even during dry periods some ponded areas remain. (Regional Board hearing, October 20, 1978, Reporter's Transcript (RT) at page 31.) The general lowlands area serves as a resting and feeding habitat for numerous water associated birds and mammals (RT at page 31 and U. S. Fish and Wildlife Service, Exhibit 1) and now contains diked saltwater marsh, saltwater coastal flat, and freshwater marsh wetland types within it. (RT, U. S. Fish and Wildlife Service, Exhibit 1: Draft Special Report.) Much of the area is at or near mean sea level.

Regional Board Order No. 78-205, which is the subject of the Amigos' petition, contains the following finding, among others:

"4. The area of the discharge cannot be denied as national wetlands. Therefore, an NPDES permit is not necessary."

Presently, Aminoil discharges to only about 12 acres of the 45-acre site covered by the waste discharge requirements. Order No. 78-205, which modifies the waste discharge requirements issued to Aminoil in 1976, was adopted after a duly noticed public hearing which was conducted in response to the request of the U. S. Fish and Wildlife Service that the area of the Aminoil waste disposal be declared wetlands. Since the Regional Board did not find the area to be wetlands, Order

No. 78-205 was issued pursuant to the provisions of the State law, especially Chapter 4 of the Porter-Cologne Water Quality Control Act (California Water Code, Division 7, commencing with Section 13000).

DISCUSSION

1. Contention: Petitioner contends that the 45-acre waste disposal site governed by Regional Board Order No. 78-205 is wetlands, as defined for the implementation of the federal Clean Water Act.

Finding: Based on the evidence in the record before the Regional Board, we have concluded that the area must be considered wetlands and, therefore, waters of the United States under the jurisdiction of the Clean Water Act. Therefore, the provisions of the federal Clean Water Act and federal regulations, as implemented by the State and Regional Boards, must govern the subject Aminoil waste discharge activities.

The definition of "wetlands" which applies^{3/} for the purposes of the order is contained in regulations promulgated by the U. S. Environmental Protection Agency and found at Title 40, Code of Federal Regulations, Section 122.3(t)(6). Section 122.3 defines "navigable waters" as "waters of the United States, including the territorial seas", which include:

3. Pursuant to Water Code Section 13373, definitions of terms contained in the Clean Water Act apply to NPDES permits issued by the Regional and State Boards. Pursuant to Section 402 of the Clean Water Act, the State and Regional Boards have assumed the responsibility of issuing NPDES permits under the federal act in California,

"(3) All other waters such as intrastate lakes, rivers, streams (including intermittent streams), mudflats, sandflats and wetlands, the use, degradation or destruction of which would affect or could affect interstate or foreign commerce including any such waters:

* * *

"(6) Wetlands adjacent to waters identified in paragraphs (1)-(5) of this section ('Wetlands' means those areas that are inundated or saturated by surface or ground water at a frequency and duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions. Wetlands generally includes playa lakes, swamps, marshes, bogs, and similar areas such as sloughs, prairie potholes, wet meadows, prairie river overflows, mudflats, and natural ponds); provided that waste treatment systems (other than cooling ponds meeting the criteria of this paragraph) are not waters of the United States."

This definition is identical to that applied by the U. S. Corps of Engineers in considering the issuance of permits under Section 404 of the Clean Water Act for dredging and filling activities (33 CFR 323.2).

Our analysis is somewhat complicated by the changes wrought in the Bolsa Chica area by development. However, it is our opinion that these activities have not changed the essential character of the entire area or the subject disposal site as wetlands, excluding the dikes, roads and similar upland areas constructed in the past. From the record before us, there seems no dispute that the disposal site and the surrounding area were once regularly inundated by tidal action, that these diked areas are still seasonally inundated by rainfall and run-off, and that the disposal area in particular has not become "fast land", although its productivity as a wetland area has been severely diminished.

In response to the U. S. Fish and Wildlife Service request that the Aminoil disposal activities be regulated under the Clean Water Act, the Regional Board staff recommended that the area not be considered wetlands based on the definition contained in EPA regulations and the staff's interpretation of the Corps of Engineers documents entitled "Preliminary Guide to Wetlands of the West Coast". In applying the definition to the disposal site, the Regional Board staff relied heavily upon the sparseness of typical marsh-type aquatic vegetation and the absence of periodic tidal inundation with respect to the disposal site, both of which are primarily attributable to human activities (RT at pages 7-8). Based on the "Preliminary Guide", the staff indicated that the area approached the definition of the wetlands type "coastal salt flat" (RT at page 4).

The component of the definition of wetlands which we feel is determinative of this case is the requirement that the area be "inundated or saturated at a frequency or duration sufficient to support, and that under normal circumstances do support, a prevalence of vegetation typically adapted for life in saturated soil conditions", (40 CFR Section 122.3(t)(6).) (Emphasis added.) It is our opinion that consistent with the spirit and intent of the Clean Water Act, "under normal circumstances" must be interpreted to mean in the absence of interference due to man's activities. Saturation or inundation may occur due to tidal action, freshwater inflow, rising groundwater or other cause. Absent such interference, the subject area must be considered wetlands both historically and in the present.

The evidence in the record before us indicates that historically the area in question was subject to periodic inundation and that it would still be subject to periodic inundation in the absence of a substantial number of man-made obstructions affecting both tidal flows and drainage patterns. There can be little doubt that absent the activities of man, the area would support vegetation representative of typical wetlands. (RT at pages 14-16, 22-29.) In addition, the record reflects that a portion of the disposal site presently supports typical aquatic vegetation and, along with the surrounding area, constitutes diked wetlands during the rainy season. (RT at pages 29, 40-41, 48-49, 52.) Relatively undisturbed portions of some diked areas adjoining the disposal site have been identified by the U. S. Fish and Wildlife Service as seasonal wetlands. Except for the Aminoil disposal activities, these areas appear to be indistinguishable from the 45-acre site here in question, and typical wetlands vegetation would be expected to occur at the disposal site.

The stated objective of the Clean Water Act is the restoration and maintenance of the chemical, physical, and biological integrity of the waters of the United States, including wetlands. (Section 101(a) of the Clean Water Act, 33 USCA 1251(a).) As stated by the court in Avoyelles Sportmen's League, Inc. v. Alexander (USDC, LA, 1979) 13 ERC 1353, 1358):

"A basic policy of the FWPCA is the protection of our nation's wetlands and the important functions they serve. The legislative history of the Clean Water Act amendments of 1977 reflects an abiding

congressional concern with the functional importance of wetlands. 10/" (The Court's footnote number 10 is set forth below in full as footnote number 4.)

The Court's remarks apply equally to the dredge and fill permit program established under the Clean Water Act as to the regulation of waste discharges in wetlands areas under the NPDES permit system, pursuant to Sections 301 and 402 of the Act. The U. S. Corps of Engineers regulations implementing the dredge and fill permit program set forth a policy of wetlands protection. 5/ The importance of wetlands protection is further

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4. "10. During the Senate debates on the § 404 permit program, Senator Stafford stated:

'The Federal Water Pollution Control Act amendments of 1972 mandated the restoration and maintenance of the chemical, physical, and biological integrity of the nation's waters. Full implementation of a § 404 decision making process is imperative if we are to achieve this objective. The § 404 process is an essential tool for preventing the unnecessary degradation of water quality by discharges of dredged or fill material. Without it, critical aquatic areas including swamps, marshes, and submerged grass flats, which are such an important segment of this Nation's water resource and are essential to the preservation of migratory and resident fish, bird and other animal populations, might otherwise be irrevocably destroyed.

'The lasting benefits that society derives from coastal and inland wetlands often far exceed the immediate advantage their owners might from draining or filling them; we are losing wetlands at the rate of some 300,000 acres per year. The committee recognizes the need for a program which regulates the discharge of dredged or fill material into our waters and wetlands.' Legislative History 881-882."

5. 33 CFR 320.4(b)(1) states in pertinent part:

"Wetlands are vital areas that constitute a productive and valuable public resource, the unnecessary alteration or destruction of which should be discouraged as contrary to the public interest."

illustrated by the remarks of Senator Muskie quoted in the Avoyelles decision at page 1361.

"There is no question that the systematic destruction of the nation's wetlands is causing serious, permanent ecological damage. The wetlands and bays, estuaries and deltas are the nation's most biologically active areas. They represent a principal source of food supply. They are the spawning ground for much of the fish and shell fish which populate the oceans, and they are passages for numerous upland game fish. They also provide nesting areas for a myriad species of birds and wildlife." (Remarks of Sen. Muskie during Senate debate on Section 404. Leg. History 869.)

The State of California also has a wetlands preservation policy which is to be observed by state agencies when developing or authorizing or issuing permits for activities which may harm wetlands of the State. (See also Water Code Section 13142.5.) The policy which was issued by Secretary Johnson on September 19, 1977, declares:

"It is the basic policy of the Resources Agency that its Departments, Boards, and Commissions will not authorize or approve projects that fill or otherwise harm or destroy coastal, estuarine, or inland wetlands."

In Sierra Club v. Leslie Salt Company (DC NCal. (1976) 412 F.Supp. 1096, 10 ERC 2042), the Court found that navigable waters with respect to the U. S. Corps of Engineers' Pacific Coast regulatory jurisdiction pursuant to Section 404 of the Clean Water Act extended to the mean higher high water (MHHW) line. The Court concluded that the Leslie Salt Company's diked ponds constituted navigable waters within the meaning of the Clean Water Act, although the dikes prevented normal tidal inundation of the area. The ponds were considered navigable waters since the area

would have been subject to tidal action if it existed in an unobstructed natural state, consistent with the definition on navigability presented in Economy Light Co. v. United States (256 US 113 (1921)), and the area had not become improved solid upland, pursuant to the limitations on navigability set forth in United States v. Stoeco Homes (498 F.2d 597 (1974) US cert. den. 420 US 927).

On appeal, the Sierra Club case was reversed in part, modified in part, and remanded in part. (Leslie Salt Company v. Froehlke (USCA, 9th Cir. (1978) 11 ERC 1729).) Pertinent to this decision is the ruling of the Circuit Court of Appeals that the Leslie Salt Company ponds in their present state constituted navigable waters within the meaning of the Clean Water Act and that the jurisdiction of the Corps pursuant to the Act extended to but was not limited to the Pacific Coast MHHW. The Court stated:

"The District Court ... was correct insofar as its holding subjected to the Corps jurisdiction under the FWPCA waters which are no longer subject to tidal inundation because of Leslie's dikes, without regard to the location of historic tidal water lines in their unobstructed, natural state." (11 ERC 1730.)

The Court makes it clear that the jurisdictional limits of the Clean Water Act were intended by Congress to extend to the Constitutional limits of the federal regulation under the Commerce Clause and found that Leslie's salt ponds affected interstate commerce. Under a similar analysis, there can be little doubt that the oil producing activities of Aminoil must be considered to have an affect on interstate commerce.

This court has indicated that the term "navigable waters" within the meaning of the FWPCA is to be given the broadest possible constitutional interpretation under the Commerce Clause (citations omitted). Also in Phelps Dodge, supra, 391 F.Supp. 1187, the court interpreted the FWPCA in finding that "... a legal definition of 'navigable waters' or 'waters of the United States' within the scope of the Act includes any waterway within the United States also including normally dry arroyos through which water may flow, where such water will ultimately end up in public waters such as a river or stream, tributary to a river or stream, lake, reservoir, bay, gulf, sea or ocean either within or adjacent to the United States."

In our opinion, the disposal site constitutes an area which was historically wetlands. Therefore, the area is now subject to regulation by the Corps of Engineers under the Section 404 dredge and fill permit program prescribed by the Clean Water Act and the NPDES permit program. The same definition of "wetlands" applies to both the Section 404 program and to the Section 402 NPDES permit program. It would be anomalous to apply to waste disposal activities in the Bolsa Chica area a different definition of "wetlands", and thus "navigable waters", than that implemented under Section 404 specifically to achieve wetlands protection in furtherance of the objectives of the Clean Water Act.

In addition, the record before us indicates that the disposal site can presently be considered wetlands and therefore subject to the issuance of permits under the Clean Water Act. The

U. S. Fish and Wildlife Service testimony before the Regional Board and the draft report presented as Exhibit 1 indicate that the productivity and type of vegetation which characterize the disposal site differs from what would probably occur in a natural state without man's activities, but nonetheless constitutes typical wetlands. Therefore, we must conclude that the waste disposal constitutes a discharge of pollutants to wetlands as defined by federal regulation and thus to waters of the United States pursuant to the federal Clean Water Act and Chapter 5.5, Division 7 of the California Water Code.

2. Contention: The Amigos de Bolsa Chica contend that an NPDES permit is required to regulate the Aminoil waste discharge covered by Regional Board Order No. 78-205.

Finding: The Clean Water Act prohibits the discharge of pollutants to navigable waters unless a permit is issued allowing the discharge. (Clean Water Act, Sections 301, 402, and 502.) Navigable waters include wetlands, as defined pursuant to the Clean Water Act, and we have concluded that the Aminoil disposal site must be considered wetlands within the purview of the Act. The Aminoil waste discharge activity is described as waste disposal, rather than fill activity, which is defined by and subject to regulations implemented by the

Corps of Engineers.^{6/} Therefore, we must conclude that the waste disposal constitutes a discharge of pollutants which

6. Regulations for the Section 404 permit program provide the following definitions of "fill material" and "discharge of fill material" (40 CFR Part 230, Appendix A(6) and (7)):

"(6) 'Fill material.' The term 'fill material' means any pollutant used to create fill in the traditional sense of replacing an aquatic area with dry land or of changing the bottom elevation of a water body for any purpose. 'Fill material' does not include the following:

"(i) Material resulting from normal farming, silviculture, and ranching activities, such as plowing, cultivating, seeding, and harvesting, for the production of food, fiber, and forest products;

"(ii) Material placed for the purpose of maintenance, including emergency reconstruction of recently damaged parts of currently serviceable structures such as dikes, dams, levees, groins, riprap, breakwaters, causeways, and bridge abutments or approaches, and transportation structures;

"(iii) Additions to these categories of activities that are not 'fill' will be considered periodically and these regulations amended accordingly.

"(7) 'Discharge of fill material.' The term 'discharge of fill material' means the addition of fill material into navigable waters for the purpose of creating fastlands, elevations of land beneath navigable waters, or for impoundments of water. The term generally includes, without limitation, the following activities in a navigable water: placement of fill that is necessary to the construction of any structure; the building of any structure or impoundment requiring rock, sand, dirt, or other pollutants for its construction; site-development fills for recreational, industrial, commercial, residential, and other uses; causeways or road fills; dams and dikes; artificial islands, property protection and/or reclamation devices such as riprap, groins, seawalls, breakwalls, and bulkheads and fills; beach nourishment; levees, sanitary landfills; fill for structures such as sewage treatment facilities, intake and outfall pipes associated with power plants, and subaqueous utility lines, and artificial reefs.

should be governed by an NPDES permit issued by the Regional Board pursuant to the Clean Water Act and Chapter 5.5, Division 7 of the California Water Code. If, in the future, fill activities are proposed in the area of the waste disposal the U. S. Corps of Engineers should be requested to determine whether the proposed activity will require a permit pursuant to Section 404 of the Clean Water Act.

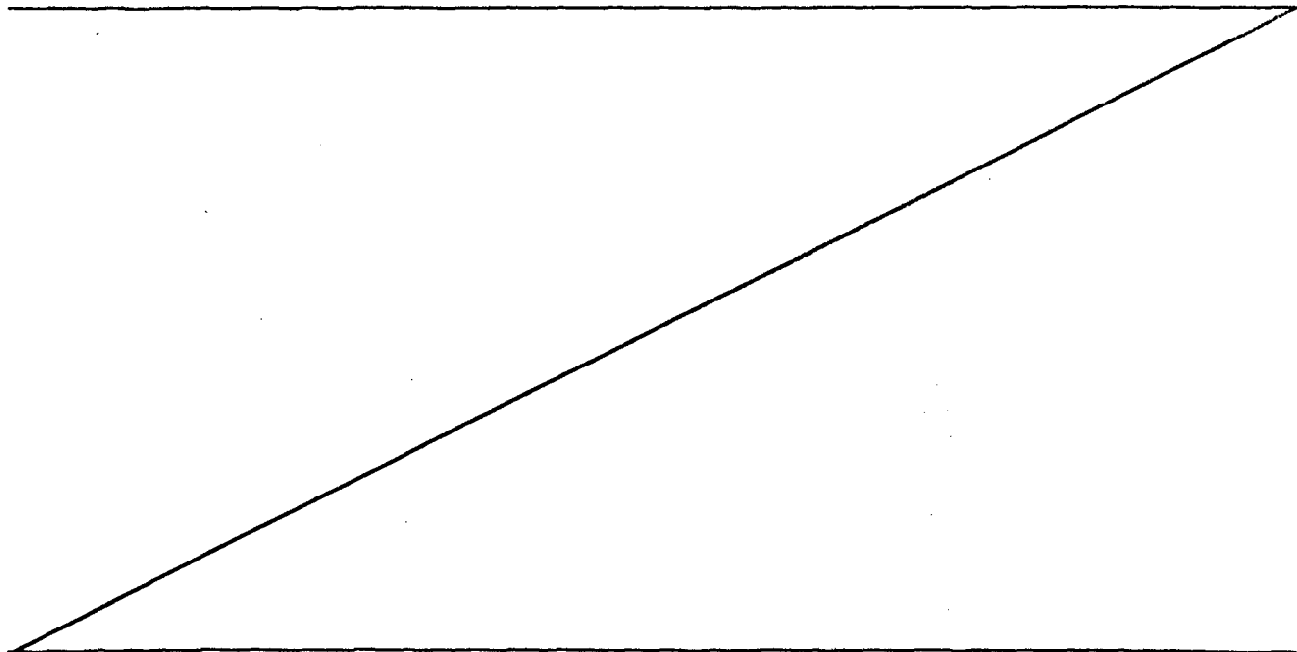
3. The Record before the State Board

The record before the State Board for consideration of the petition by the Amigos de Bolsa Chica consists of the record of the matter before the Regional Board, including Regional Board files, the October 20, 1978, hearing transcript and exhibits, and items presented to the Regional Board for the purpose of illustrating testimony. Subsequent to our determination to review this matter on the record before the Regional Board, we have received requests to consider additional evidence, to exclude certain evidence, and to conduct additional hearings. The record before us supports our determinations herein, and it is neither necessary nor appropriate to receive additional evidence or to conduct further hearings. Among the items we consider to be additional evidence and which have not been reviewed for this opinion are the photographs which accompanied the Amigos' Reply Brief, which was submitted in February 1979, and the U. S. Fish and Wildlife Service Special Report. The latter is essentially the final version of the draft Special Report which accompanied the testimony of representatives of the U. S. Fish and Wildlife Service before the Regional Board on October 20, 1978. The

Special Report in its final form should be considered by the Regional Board in future proceedings concerning the Bolsa Chica area.

CONCLUSIONS

After consideration of the petition of the Amigos de Bolsa Chica and the responses of Aminoil USA, Inc. and the Signal Bolsa Corporation, and after our review of the record before the Santa Ana Regional Board in this matter, the Board concludes that the waste disposal site currently used by Aminoil pursuant to Regional Board Order No, 78-205 must be considered wetlands within the meaning of the Clean Water Act and Chapter 5.5 of the Porter-Cologne Water Quality Control Act and must be considered subject to the provisions of the NPDES permit program of the Clean Water Act. Therefore, the Regional Board should be directed to consider the issuance of an NPDES permit for the subject Aminoil waste discharge.



ORDER

IT IS, THEREFORE, ORDERED that:

1. The Aminoil waste disposal site governed by Order No. 78-205 of the California Regional Water Quality Control Board, Santa Ana Region, is considered wetlands and, therefore, navigable waters within the meaning of the Clean Water Act;

2. The Regional Board is directed to consider the issuance of an NPDES permit for the Aminoil waste discharges described in Regional Board Order No. 78-205;

3. Order No. 78-205 is remanded to the Santa Ana Regional Board for further proceedings consistent with this opinion; and

4. In all other respects the petition of the Amigos de Bolsa Chica is dismissed.

Dated: **SEP 20 1979**

/s/ Carla M. Bard
Carla M. Bard, Chairwoman

/s/ William J. Miller
William J. Miller, Vice Chairman

/s/ W. Don Maughan
W. Don Maughan, Member

ABSENT
L. L. Mitchell, Member

EXHIBIT B

STATE WATER RESOURCES CONTROL BOARD

ORDER NO. WQ 79-34
NPDES NO. CA0048721

WASTE DISCHARGE REQUIREMENTS
FOR
WESTERN LNG TERMINAL ASSOCIATES
POINT CONCEPTION FACILITY
SANTA BARBARA COUNTY.

The California State Water Resources Control Board (State Board) finds that:

1. On January 12, 1979, the California Regional Water Quality Control Board, Central Coast Region (Regional Board) adopted Order No. 79-09 (NPDES Permit No. CA0048721), waste discharge requirements for Western LNG Terminal Associates, Point Conception Facility, Santa Barbara County (Western Terminal).
2. The California Department of Fish and Game (Department) and the California Coastal Commission (Commission) filed petitions for review of Regional Board Order No. 79-09 with the State Board on February 13 and 14, 1979.
3. On June 21, 1979, the State Board adopted Order No. 79-23 revising findings and provisions in the Regional Board Order (incorporated herein) pertaining to Western Terminal's proposed seawater intake system at Point Conception.
4. Order No. 79-23 contained the following actions by the State Board:

"4. The State Board retains jurisdiction over this matter for the purpose of making a decision pursuant to Section 13142.5(b), California Water Code. Representatives of the State Board will participate in PUC hearings pertaining to the seawater intake system for the purpose of obtaining information to make said decision.
5. With the foregoing modifications, Order No. 79-09 is found to be appropriate and is remanded to the Regional Board for all purposes not covered in 4. above."
5. Western LNG Terminal Associates (Western Terminal) submitted a Report of Waste Discharge dated April 19, 1978, and amended May 8, 1978, and November 2, 1978, to apply for a permit to discharge wastes under the National Pollutant Discharge Elimination System.

6. Western Terminal proposes to discharge wastes from its Point Conception LNG Facility into the Pacific Ocean, a water of the United States, at a point 3.5 miles east of Point Conception (Latitude N34°26'27", Longitude W120°24'43").
7. The Point Conception Liquified Natural Gas (LNG) plant is proposed for an annual average throughput equivalent to 1.3 billion cubic feet of natural gas per day (bcf/d) ($36.8 \times 10^6 \text{M}^3/\text{day}$) with an additional 0.3 bcf/d ($8.5 \times 10^6 \text{M}^3/\text{day}$) of peaking capacity. The applicant proposes to use seawater to vaporize the 1.3 bcf/d and to use gas fired vaporizers to provide for peaking.
8. The heat required to serve the 1.3 bcf/d maximum average daily throughput will come from a continual stream of seawater at a rate of roughly 128,000 gpm (gal/min.) ($485 \text{M}^3/\text{min.}$). Heat abstraction by the vaporization process will reduce the temperature by 15°F (8.3°C). The actual temperature of the discharge depends upon the seawater at the intake which varies according to the time of day and the season of the year. Since average temperatures from the surface to roughly 35 feet (12 meters) in depth ranges between 54°F and 64°F (12°C-13°C) the discharge will range between 39°F and 49°F (3.7°C-9.7°C). Because the discharge will be in deeper and cooler water than the intake, the discharge plume will be 15°F (8.3°C) or less below ambient temperature at the point of discharge. Intake water temperatures may fall below 50°F for a short period during the year. When this occurs, the seawater flowrate can be increased to roughly 160,000 gal/min. ($605 \text{M}^3/\text{min.}$) to reduce the temperature difference from intake to discharge to 12°F (6.7°C).
9. Biofouling of the seawater system will be controlled by injection of sodium hypochlorite at the screening caisson. Chlorine will be neutralized with sulfur dioxide prior to discharge. Western Terminal proposes to maintain a continuous concentration of no more than 0.2-0.5 mg/l of chlorine at the vaporizer discharge. Intermittent chlorination may be found to be as effective as continuous chlorination. A study is required to determine if intermittent chlorination can be used to effectively control bio-fouling.
10. Both Bunker C and diesel fuel will be stored and bunkered during the operation of the terminal. Bunker C, a heavy residual oil, will be used in the LNG ship and diesel fuel will be used in tug and line-handling craft.
11. The waste discharges are described as follows:

Discharge 001

Seawater, screened and taken from the ocean about 3,200 feet (970 meters) from shore, will be used to provide the heat necessary to vaporize the liquid natural gas. It will be discharged about 5,240 feet (1609 meters) from shore at a depth

of 38 feet (11.5 meters) below MLLW. Design flow is 230 MGD (871,000 M³/day).

Discharge 002

This discharge has been eliminated by redesign of the seawater intake system.

Discharge 003 - Supply Basin, Pipe Trench, Tunnel, and Cofferedam Dewatering

Water used in trenching and excavation for the seawater lines, and the seawater supply basin during construction, will be pumped to a settling basin. Discharge from the basin will be through an existing culvert into the ocean at 34°27'16"N Latitude and 120°24'30"W Longitude

Discharge 004 - LNG Storage Tank Hydrotest Discharge

Approximately 14 MG of seawater will be used to pressure test each of the two LNG storage tanks after construction. It will be discharged through the seawater outfall line at a rate of 4,900 gpm (18.5M³/min.). Sodium sulfite will be added to the water at a concentration of 8-10 times that of dissolved oxygen to act as a corrosion inhibitor.

Discharge 005 - Surface Runoff

During construction onsite and offsite storm runoff will be collected and settled in three basin before being released to the ocean. No oily stormwater will be handled by these systems during construction. During operation, onsite stormwater will be treated in the oil water separator. Flows will depend upon rainfall rates.

Discharge 006 - Sanitary Wastes

Sanitary wastes will undergo biological secondary treatment and chlorination before being combined with 001 flow and discharged through the seawater outfall.

Estimated flow: 8,520 GPD (30 M³/day).

Discharge 007 - Oily Wastes

Oil wastes from bilges and fuel storage area runoff will be treated in an oily water separator and coalescer before being combined with 001 and discharged through the seawater outfall.

Estimated flow: 1,500 GPD (6 M³/day).

12. The State Water Resources Control Board adopted the Water Quality Control Plan for Ocean Waters of California on January 19, 1978. This plan contains water quality objectives for the Pacific Ocean.
13. A Water Quality Control Plan Report for the Central Coast Basin was adopted by the Regional Board on March 14, 1975. The Basin Plan Report contains beneficial uses for the Pacific Ocean in the area of Point Conception.
14. Beneficial uses of the Pacific Ocean in the vicinity of the discharge include: industrial service supply, water contact recreation, non-contact water recreation, navigation, marine habitat, shellfish harvesting, and ocean, commercial and sport fishing.
15. The California Public Utilities Commission has prepared a final environmental impact report in accordance with the California Environmental Quality Act (Public Resources Code, Section 2100 et seq.) and the State Guidelines. That report identifies adverse water quality effects related to entrainment of marine organisms, the cold water discharge, and temporary disruptions due to construction.

The California Public Utilities Commission has caused the project to be changed. The original seawater intake system which included a velocity cap at the intake and a fish return system on shore has been changed to incorporate an offshore intake and screening device which will prevent fish and other larger animals from entering the system or being impinged upon the screens. This change of the project avoids some of the adverse environmental impacts of the project.

Existence of the cold water discharge plume could disrupt organisms in the immediate vicinity. Design of the discharge system minimizes this effect by locating the terminus outside the kelp bed, by angling the stream upward, away from the ocean bottom, and by keeping the maximum temperature differential to less than 15° F.

Construction of the project will cause temporary impacts on local benthic communities as the conduits and trestle are built. These effects will be minimized by the use of slow burning explosives and an eight-foot overburden for trench blasting.

Other agencies have the responsibility for minimizing the impacts, other than water quality, of this project.

16. Western Terminal's proposed seawater system design concept with offshore caisson intake structure is the best feasible technology available to minimize the intake and mortality of adult and juvenile fish at Point Conception.

17. The destruction of plankton by operation of the seawater system may be reduced by intermittent chlorination.
18. The caisson intake structure, intake pipe, and discharge line are located, generally, in the best feasible area to minimize impact on marine organisms. Specific alignment and caisson location must be based on a thorough reconnaissance survey of the area by an independent entity to pinpoint reefs, sand transport areas, kelp bed locations, and populations of marine organisms to be avoided.
19. The conceptual design of the caisson while, generally, the best available feasible alternative has not been finalized. Hydraulic modeling studies must be completed to determine the final design for minimizing mortality to marine life.
20. The concept of the screen washing and sluicing systems at the intake while generally the best available feasible alternative have not undergone detailed final design. Final design of these systems must have as a goal the highest possible survival of impinged organisms. Specifically, this should include double screen washing systems, frequent screen rotation, and adequate sluicing systems returning any live organisms to the ocean.
21. Western Terminal has shown compliance with California Water Code Section 13142.5(b) with the exception of the design, operation, and location details discussed above. The final design and location details and a proposed chlorination study plan must be approved by the State Board before they can be implemented by final construction and operation.
22. The total impact of facility operation on marine organisms can be reduced by decreasing the intake flow by 20 percent and increasing the temperature decrement from 12°F to 15°F.
23. On August 21, 1979, the State Board notified the discharger and interested agencies and persons of its intent to revise waste discharge requirements for the proposed discharge and has provided them with an opportunity for a public hearing and/or to submit their written views and recommendations.
24. The Regional Board in public meetings on July 14, 1978, and January 12, 1979, heard and considered all comments pertaining to the discharge.
25. Representatives of the State Board participated in California Public Utilities Commission hearings concerning Western Terminal's Seawater System on June 19 and 20, June 26 and 27, and July 10 and 11, 1979. The record of those proceedings is part of the record of this matter.

26. The State Board at a public workshop on September 5, 1979, and at a regular scheduled public meeting on September 20, 1979, heard and considered all comments pertaining to the Western Terminal Seawater Intake System.
27. The State Board also held a public hearing on its own motion on September 20, 1979, and received testimony concerning revisions to discharge limitations in this permit.

IT IS HEREBY ORDERED, Western LNG Terminal Associates, its agents, successors, and assigns, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Federal Water Pollution Control Act and regulations and guidelines adopted thereunder, shall comply with the following at the Point Conception LNG Plant:

A. Discharge Limitations

Discharges 001 and 004

1. The maximum daily volume discharged shall not exceed 184.3 MG ($7.0 \times 10^5 M^3$) unless intake water temperatures drop below 50°F (27.8°C) then the maximum daily volume discharged shall not exceed 230.5 MG ($8.7 \times 10^5 M^3$).
2. The temperature of the discharge shall not be depressed more than 15°F (8.3°C) below the intake temperature for more than 12 hours in any calendar day, or 24 hours in any seven day period.
3. The discharges, as a result of Western Terminal's operation, shall not contain constituent concentrations in excess of the following limitations:

Constituent	Unit of Measurement	Limiting Concentrations		
		Monthly (30 day) Average	Weekly (7 day) Average	Maximum at Any Time
Grease and Oil	mg/l	25	40	75
Settleable Solids	ml/l	1.0	1.5	3.0
Turbidity	JTU	75	100	225
pH	units	Within limits of 6.0 to 9.0 at all times		
Toxicity Concentration	tu	1.5	2.0	2.5

4. The discharge shall not contain constituent concentrations in excess of the following:

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
Arsenic	mg/l	0.06	0.32	0.85
Cadmium	mg/l	0.03	0.13	0.33
Total Chromium	mg/l	0.02	0.09	0.2
Copper	mg/l	0.04	0.2	0.5
Lead	mg/l	0.09	0.4	0.9
Mercury	mg/l	0.0009	0.006	0.02
Nickel	mg/l	0.2	0.9	2.2
Silver	mg/l	0.003	0.02	0.05
Zinc	mg/l	0.18	0.8	2.1
Cyanide	mg/l	0.06	0.2	0.6
Phenolic Compounds	mg/l	0.3	1.3	3.3
Total Chlorine Residual	mg/l	0.02	0.13	1.4
Ammonia (expressed as Nitrogen)	mg/l	6.6	26.4	66.0
Toxicity Concentration	tu	0.5		
Total Chlorinated Pesticides & PCB's	mg/l	0.002	0.004	0.006
Radioactivity		Not to exceed limits specified in Section 30269 of the California Administrative Code.		

5. Addition of pollutants to the seawater system other than as identified in Findings 9 and 11 is prohibited.

Discharges 003 and 005

1. The discharges shall comply with the following:

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>Limiting Concentrations</u>		
		<u>Monthly (30 day Average)</u>	<u>(7 day Average)</u>	<u>Maximum at Any Time</u>
Grease and Oil	mg/l	25	40	75
Suspended Solids	mg/l	75 Percent Removal		
Settleable Solids	mg/l	1.0	1.5	3.0
Turbidity	JTU	75	100	225
pH	Units	within limits of 6.0 to 9.0 at all times		
Toxicity Concentration	tu			2.5

2. The concentrations set forth below shall not be exceeded in the discharges:

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
Arsenic	mg/l	0.008	0.032	0.08
Cadmium	mg/l	0.003	0.012	0.03
Total Chromium	mg/l	0.002	0.008	0.02
Copper	mg/l	0.005	0.020	0.05
Lead	mg/l	0.008	0.032	0.08

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>6-Month Median</u>	<u>Daily Maximum</u>	<u>Instantaneous Maximum</u>
Mercury	mg/l	0.00014	0.00056	0.0014
Nickel	mg/l	0.02	0.08	0.2
Silver	mg/l	0.00045	0.0018	0.0045
Zinc	mg/l	0.020	0.08	0.2
Cyanide	mg/l	0.005	0.02	0.05
Phenolic Compounds	mg/l	0.03	0.12	0.3
Total Chlorine Residual	mg/l	0.002		
Ammonia (Expressed as Nitrogen)	mg/l	0.6	2.4	6.0
Toxicity Concentration	tu	0.05	---	---
Total Chlorinated Pesticides and PCB's	mg/l	0.002	0.004	0.006
Radioactivity	Not to exceed limits specified in Section 30269 of the California Administrative Code.			

<u>Constituent</u>	<u>Unit of Measurement</u>	<u>Monthly (30 day) Average</u>	<u>Weekly (7 day) Average</u>	<u>Maximum</u>
BOD, 5-day	mg/l kg/day	30* 1.2	45 1.7	90 3.8
Total Non-Filterable Residue (Suspended Solids)	mg/l kg/day	30* 1.2	45 1.7	90 3.8
Grease and Oil	mg/l	25	40	75
Settleable Solids	mg/l	1.0	1.5	3.0
Turbidity	JTU	75	100	225
Toxicity Concentration	tu	1.5	2.0	2.5

*The arithmetic mean of the BOD (5-day) and suspended solids values, by weight, for effluent samples collected in a period of 30 consecutive calendar days shall not exceed 15 percent of the arithmetic mean of the respective values, by weight, for influent samples collected at approximately the same time during the same period (85 percent removal).

2. The maximum daily dry weather discharge shall not exceed 10,000 gallons per day.

Discharge 007

1. The discharge from the oil-water separation process shall not contain grease and oil concentrations in excess of 25 mg/l for a 30-day average nor 75 mg/l at any time.

B. Receiving Water Limitations

The discharges of wastes by Western Terminal at the Point Conception LNG Terminal shall not cause violation of the following objectives:

1. Bacteriological Characteristics

Within a zone bounded by the shoreline and a distance of 1,000 feet from the shoreline or the 30-foot depth contour, whichever is further from the shoreline, and in areas outside this zone used for body-contact sports and shellfishing,

the following bacteriological objectives shall be maintained throughout the water column:

The median total coliform concentration shall not exceed 70 per 100 ml, and not more than 10 percent of the samples shall exceed 230 per 100 ml.

2. Floating particulates and grease and oil shall not be visible.
3. The discharge of waste shall not cause aesthetically undesirable discoloration of the ocean surface.
4. The transmittance of natural light shall not be significantly reduced at any point outside the initial dilution zone.
5. The rate of deposition of inert solids and the characteristics of inert solids in ocean sediments shall not be changed such that benthic communities are degraded.
6. The dissolved oxygen concentration shall not be depressed more than 10 percent from that which occurs naturally.
7. The pH shall not be changed more than 0.2 units from that which occurs naturally.
8. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
9. The concentration of substances set forth in Discharge 001 Limitation A.4. of this Order shall not be significantly increased in marine sediments and the water column above that present under natural conditions.
10. There shall be no visible solids or oil deposited on the shore resulting from the discharge.
11. Foam shall be controlled to the extent practicable such that marine communities are not degraded.
12. The concentration of organic materials in marine sediments shall not be increased above that which could degrade marine life.
13. Nutrient materials shall not cause objectionable aquatic growths or degrade indigenous biota.
14. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded outside the zone of initial dilution.

15. The discharge shall not cause an acutely toxic condition to exist in the receiving water.
16. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.
17. This discharge shall not cause a violation of any other applicable existing water quality standard for receiving waters adopted pursuant to the Federal Water Pollution Control Act and implementing regulations. If more stringent applicable water quality standards are promulgated or approved pursuant to Section 303 of the Federal Water Pollution Control Act, or amendments thereto, the Regional Board shall revise and modify this Order in accordance with such more stringent standards.

C. Provisions

1. Any spills of toxic compounds shall be contained and cleaned up immediately. The discharger shall notify the Regional Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within one week of the telephone notification. The spill residue shall be disposed of in a manner which meets the approval of the Regional Executive Officer. Water shall not be used to wash down the spill area until an inspection is made by the Regional Board's staff and clearance is given for further cleanup procedures. The written notification shall include pertinent information explaining reasons for the spill and shall indicate what steps were taken to correct the problem and the dates of such actions, and what steps are being taken to prevent the problem from recurring.
2. Four months prior to bunkering operations at Point Conception, Western Terminal shall submit oil and toxic compound spill prevention and contingency plans to the Regional Board for its approval. The plan shall contain the best feasible technology for the prevention of spills and the most effective methods and equipment for containing and clean-up of spills should they occur.

3. Within twenty-four (24) months of the date of Regional Board Order No. 79-09, the discharger shall submit any requests for exceptions as provided for in those laws and regulations of the Federal Water Pollution Control Act. Such requests shall be accompanied by all necessary supporting data and studies as required by the Regional Board or the State Board or applicable State or Federal regulations. If such requests are required at an earlier date by regulation established pursuant to Sections 304 or 316 of the Federal Water Pollution Control Act, the request shall be made by the prescribed date.
4. The specific location of the caisson intake structure, the intake pipe and discharge line shall be submitted to the State Board by Western Terminal along with a report of why that location is the best available including the independent reconnaissance survey indicated in Finding 18 of this Order. The State Board will decide as soon as possible after receipt of the survey results and Western Terminal's final specific location and alignment proposal whether compliance with California Water Code Section 13142.5(b) as it relates to site has been achieved.
5. The Maximum Allowable Daily Mass Emission Rate for each constituent listed in Item A.4. shall be calculated from the allowable total waste flow occurring each specific day and the concentration specified in waste discharge requirements as Daily Maximum.
6. The Maximum Allowable 6-Month Median Mass Emission Rate for each constituent listed in Item A.4. shall be calculated from the allowable total waste flow occurring on the day of the median effluent concentration and the concentration specified in waste discharge requirements as 6-Month Median.
7. This Order expires January 12, 1984. The discharger must file a report of waste discharge in accordance with Title 23, Chapter 3, Subchapter 9, of the California Administrative Code, not later than 180 days in advance of such expiration date as application for issuance of new waste discharge requirements.
8. This Order includes all but Items A.5., A.12., A.17., C.7., and C.8. of the attached "Standard Provisions and Reporting Requirements".
9. The Regional Board may require additional independent baseline studies of the Point Conception marine environment prior to operation to supplement those required by the California Public Utilities Commission.
10. This Order includes the attached "Monitoring and Reporting Program". As a part of the monitoring program, the Executive Officer of the Regional Board may require that Western Terminal perform studies of the marine environment to show the impact of facility construction and operation.

11. This Order does not alleviate the responsibility to obtain other necessary local, state, and federal permits to construct facilities necessary for compliance with this Order, nor does this Order preclude imposition of additional standards, requirements, or conditions by any other regulatory agency.
12. Western Terminal shall submit prior to commencing construction, final design details as described in Findings 19 and 20 for State Board approval. In addition, Western Terminal shall submit by January 15, 1980, for State Board Executive Director approval, a comprehensive plan for a study to investigate the use of intermittent chlorination for bio-fouling control in their seawater system. This plan shall include design descriptions indicating that the proposed chlorination system can be used in an intermittent regime. Results of the study including onsite tests shall be completed and submitted to the State Board within 18 months after the start of facility commercial operation. This deadline may be extended by the State Board Executive Director.
13. The seawater system shall be constructed to allow the use of intermittent chlorination. Construction may proceed on all elements of the Western Terminal seawater system except on those requiring further approval by the State Board as specified in Provisions 4 and 12 of this Order.
14. Total non-filterable residue concentrations in discharges 001 and 004 shall not exceed the natural variability found in the ocean near Point Conception.
15. All portions of this Order are remanded to the Regional Board for administration and enforcement except Provisions 4 and 12. The State Board retains jurisdiction over these provisions for the purpose of making further decisions concerning the seawater intake system pursuant to Section 13142.5(b), California Water Code.

This Order shall serve as a National Pollutant Discharge Elimination System permit pursuant to Section 402 of the Federal Water Pollution Control Act, or amendment thereto, and shall take effect ten (10) days after adoption.

I, LARRY F. WALKER, Executive Director, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the State Water Resources Control Board, on September, 20, 1979.

/s/ Larry F. Walker
Executive Director