

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
NPDES PERMIT NO. CAG039001**

**FACT SHEET**

**FOR**

**DISCHARGES FROM  
SHIP CONSTRUCTION, MODIFICATION, REPAIR, AND  
MAINTENANCE  
FACILITIES AND ACTIVITIES  
LOCATED IN  
THE SAN DIEGO REGION  
(TTWQ/CPLX 1A)**

1. The shipbuilding and repair industry is engaged in the construction, conversion, alteration, repair, and maintenance of all types of military and commercial ships and vessels. Shipbuilding and repair encompasses a large number and variety of activities and industrial processes including, but not limited to, formation and assembly of steel hulls and superstructures; application of paint systems; installation and repair of a large variety of mechanical, electrical, and hydraulic systems and equipment; repair of damaged vessels; removal and replacement of expended/failed paint systems; and provision of entire utility/support systems to ships (and crew) during repair.
2. Typical industrial processes at a shipyard might include:
  - a. Structural (aluminum and steel) repairs and refit aboard ship
  - b. Ship prefabrication ashore
  - c. Surface preparation (abrasive blasting, slurry blasting, hydroblasting, scaling, paint removal)
  - d. Paint/primer application
  - e. Rigging of shipboard components from small pumps and motors to large structures and main engines
  - f. Electrical/electronics repairs and alterations
  - g. Sheetmetal fabrication for berthing, messing, and sanitary spaces
  - h. Component inspection and testing
  - i. Tank cleaning

- j. Mechanical repair
- k. Integrity/hydrostatic testing
- l. Hydraulic repair
- m. Pipe fitting
- n. Tank emptying
- o. Fueling
- p. Patternmaking
- q. Shipfitting
- r. Boiler cleaning
- s. Carpentry
- t. Refurbishing/modernization
- u. Air conditioning/refrigeration repair
- v. Fiberglass repair
- w. Electroplating/metal finishing
- x. Blacksmithing
- y. Printing
- z. Photo processing

3. Shipyards conduct a wide range of support activities listed above that may use a variety of chemicals, and generate many types of waste. Frequently vessels are cleaned of marine fouling organisms while on a floating drydock or marine railway, in a graving dock, or docked at berths or piers. When ship hulls are refinished, antifouling paints and primers are removed, and new primers/paints are applied to inhibit the growth of marine fouling organisms and/or to inhibit corrosion. Removal can be accomplished by abrasive grit media, slurry abrasive, and/or hydroblasting. Antifouling paints may contain significant quantities of toxic substances such as copper, lead, zinc, chromate, tin, mercury, and arsenic. New paint/primer may be applied by brushes, rollers, or sprayed. Tank cleaning operations utilize steam to remove dirt and sludges from internal tanks, particularly fuel tanks and bilges. Detergents, cleaners, and hot water may be injected into the steam supply hoses; and wastewater is generated. Boiler cleaning involves the use of solvent and caustic cleaners. Integrity/hydrostatic testing is conducted on hull, tank, or pipe repairs and generates significant water flow. Pipe fitting involves pickling, brazing, and welding. Steel fabrication and machining uses cutting oils, fluids, acetone, methyl ethyl ketone, and chlorinated solvents. Sheetmetal fabrication involves the use of degreasing solvents, chromic acid, alkaline cleaners, and acid cleaners.
4. Wastes generated at shipyard facilities can include spent abrasives, paint and paint chips, primer, marine organisms, rust, bilge water and other oily wastewater, blast wastewater, oils (engine, cutting, and hydraulic), lubricants, grease, fuels, sludges, solvents, thinners, demolition waste, trash from

sweeping, asbestos, sewage, spent hydrocarbon or chlorinated solvents, electroplating/metal finishing wastes, acid wastes, caustic wastes, and aqueous wastes. Activities that could result in introducing waste to San Diego Bay from shipyard operations include floating drydock deballasting, floating drydock submergence/emergence, graving dock floodwaters, gate leakage, hydrostatic relief flow, and shipbuilding ways floodwaters/gate leakage, hydrostatic relief flows. Activities that could result in direct discharges to San Diego Bay include discharges of cooling seawater, fire protection system water, boiler and cogeneration feedwater, steam condensate water, saltbox water, integrity/hydrostatic testing water, and hosedown of drydocks and hulls.

5. a. Ship construction, modification, repair, and maintenance activities result or have the potential to result in discharges to San Diego Bay of wastes and pollutants which are likely to cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; cause or contribute to violation of an applicable water quality objective; and/or otherwise adversely affect the quality and/or beneficial uses of waters of the state and waters of the United States. Such discharges include:
  - i. Water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum.
  - ii. Hydroblast water - Water generated from hydroblasting is discharged to the sanitary sewer system. Hydroblasting is performed to remove layers of hull paint with water at pressures greater than 150 pounds per square inch.
  - iii. Tank cleaning water - Water from tank cleaning to remove sludge and/or dirt.
  - iv. Clarified water from oil/water separator - Most ship construction, repair, and maintenance facilities and operations have a system to collect oily water into an oil/water separator. The water is discharged to the sanitary sewer system, and the oil is either recycled or disposed of as hazardous waste.
  - v. Steamcleaning water - Water generated from steamcleaning equipment and vehicles at the facility as part of maintenance is collected in a sump and transferred to an oil/water separator. The water is discharged to the sanitary sewer system, and the oil is either recycled or disposed of as hazardous waste.

- vi. Demineralizer/reverse osmosis brine - The brine generated by demineralizer/reverse osmosis systems is discharged to the sanitary sewer system.
  - vii. Floating drydock sump water when the drydock is in use as a work area - Industrial process water, or storm water that has come in contact with pollutants, accumulating on the deck of a floating drydock is diverted to the sanitary sewer system.
  - viii. Oily bilge water.
  - ix. Contaminated ballast water.
  - x. The first flush of storm water from high risk areas.
- b. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of wastes and pollutants which pose less of a threat than those identified above. Such discharges include:
- i. Vessel washdown water - Fresh water and San Diego Bay water is used to wash surfaces of ship hulls, superstructures and masts at a low water pressure (less than 150 pounds per square inch). This water drains off the vessels and is discharged to San Diego Bay.
  - ii. Floating drydock submergence/emergence water - A floating drydock is used to lift a ship out of the water so work can be done on the exterior of the ship below the water line. A floating drydock is flooded to dock and launch a ship. The drydock's ballast tanks are filled with San Diego Bay water to lower (submerge) the drydock, the ship is docked (or launched) and the drydock is raised (emerge) by pumping out the ballast tanks. The flood waters on the drydock flow into San Diego Bay.
  - iii. Graving dock flood water - A graving dock is a large, enclosed, elongated area shoreward from the bulkhead which is used for ship repair or construction. A graving dock enables work to be done on the exterior of a ship below the water line. A caisson at the entrance to the graving dock along the bulkhead is moved in order to open or close the graving dock so that ships can be moved into and out of the graving dock and so flood water in the

- graving dock can be pumped out. Flood water is pumped back to San Diego Bay.
- iv. Graving dock sump pump test water - During test of graving dock sump pumps, the water is pumped to San Diego Bay.
  - v. Shipbuilding ways flood water - A shipbuilding ways is an inclined structure used for construction of ships. A sliding platform is used to launch ships. A caisson at the bayward end of the ways is moved in order to open or close the ways to the bay. The gate is opened to allow the shipbuilding ways to be flooded before a ship is launched. After launching, the caisson is closed and the flood waters are pumped back to San Diego Bay.
  - vi. Floating drydock sump water when the drydock is not in use as a work area - Water accumulating on the deck of a floating drydock that is runoff associated with industrial activity, and runoff when the drydock is not in use as a work area and the sump has been purged, is discharged to San Diego Bay.
  - vii. Pipe and tank hydrostatic test water - Pressure tests are required to validate the integrity of systems, such as pumps, tanks, piping, and hoses. Pressure tests are performed by filling the systems being tested with either water from San Diego Bay, freshwater, or water with chemicals added, and applying pressure in a closed loop system. After completion of the test, the water is either pumped back to San Diego Bay, or collected and disposed of properly.
  - viii. Graving dock gate and wall leakage - Since the graving dock floor is located below the San Diego Bay water surface at a depth sufficient to allow a vessel to be floated into the dock area when the gate is open, gate and wall leakage is continuously removed by pumping the water to San Diego Bay.
  - ix. Shipbuilding ways gate and wall leakage - Gate and wall leakage at shipbuilding ways is pumped back to San Diego Bay.
  - x. Miscellaneous, low volume, water - A variety of low volume, chemically unchanged water is discharged to San Diego Bay. This category includes water from drinking fountains, distilling unit cooling water, emergency showers, portable air conditioning condensate, and fire hose testing.

- xi. Storm water runoff other than the first flush of storm water runoff from high risk areas - Except where otherwise diverted to the sanitary sewer system, storm water flows off the site to San Diego Bay, either directly, or indirectly through storm drains which discharge to San Diego Bay.
  
- c. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the discharge to San Diego Bay of water which representatives of operators of ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants, other than heat, and to which no wastes or pollutants, other than heat, are ordinarily added by such activities. Such discharges include:
  - i. Saltbox water - For generator load tests, a container, often called a salt box, is filled with water from San Diego Bay. An electrode is placed in the water to act as the resistive load to the generator. During the test, the water can reach boiling temperatures, so it is continually replenished. After the test, the excess water is cooled to the ambient temperature of San Diego Bay at the point of discharge when it is discharged to San Diego Bay.
  - ii. Steam condensate - Steam is generated in boilers at ship construction, repair, and maintenance facilities and supplied to ships. As steam is conveyed through the pipes from the boiler to the ship, fresh water condensate forms within the pipes. This condensate is collected in condensation traps in the steam pipes and is periodically discharged from the traps to San Diego Bay.
  - iii. Compressor and condenser noncontact cooling water - Fresh water and San Diego Bay water is used to cool portable and stationary machinery and equipment used in ship construction and repair. This water is circulated once through the machinery heat exchanger and then discharged to San Diego Bay.

Periodic monitoring of such discharges is necessary to verify that wastes or pollutants, other than heat, from ship construction, modification, repair, and maintenance activities are not present.

- d. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the release to San Diego Bay of water taken from San Diego Bay which representatives of operators of

ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants and to which no wastes or pollutants are ordinarily added by such activities. Such discharges include:

- i. Fire protection water - Fire protection systems pump water from San Diego Bay through a series of pipes to vessels moored at berths and piers. Fire protection water is discharged back to San Diego Bay after a single pass through the system. No chemicals are added to the fire protection system water.
- ii. Floating drydock ballast tank water - A floating drydock has ballast tanks which can be filled with and emptied of water so that it can be lowered and raised to dock and launch ships. The ballast tank water is taken in from and discharged to San Diego Bay.
- iii. Graving dock caisson ballast water - A graving dock caisson holds water. The caisson is moved by emptying water from the gate so that it floats. The caisson is filled with San Diego Bay water and water emptied from the caisson is discharged to San Diego Bay.
- iv. Graving dock hydrostatic relief - Since the graving dock floor is located below the San Diego Bay water surface at a depth sufficient to allow a vessel to be floated into the dock area when the gate is open, hydrostatic pressure is continuously relieved by pumping the groundwater to San Diego Bay.

Periodic monitoring of such releases is necessary to verify that wastes or pollutants from ship construction, modification, repair, and maintenance activities are not present.

- e. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of the following wastes and pollutants which also pose less of a threat than the discharges identified in 5.a above:
  - i. Ship launch grease / wax.
  - ii. Keel block sand.
  - iii. Marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations.

**Procedures for Final Decision**

In accordance with 40 CFR 124.10 the Regional Board must issue a public notice that a tentative NPDES permit has been prepared and that the tentative permit will be brought before the Regional Board at a public hearing. The public notice must be issued at least 30 days prior to the public hearing. The public notice for preparation of a tentative permit and the public notice for a public hearing may be given at the same time and the two notices may be combined.

Persons wishing to comment upon or object to the proposed determinations should submit their comments in writing by August 20, 5:00 p.m., 1997 to the California Regional Water Quality Control Board, San Diego Region, 9771 Clairemont Mesa Blvd., Suite A, San Diego, CA 92124-1331.

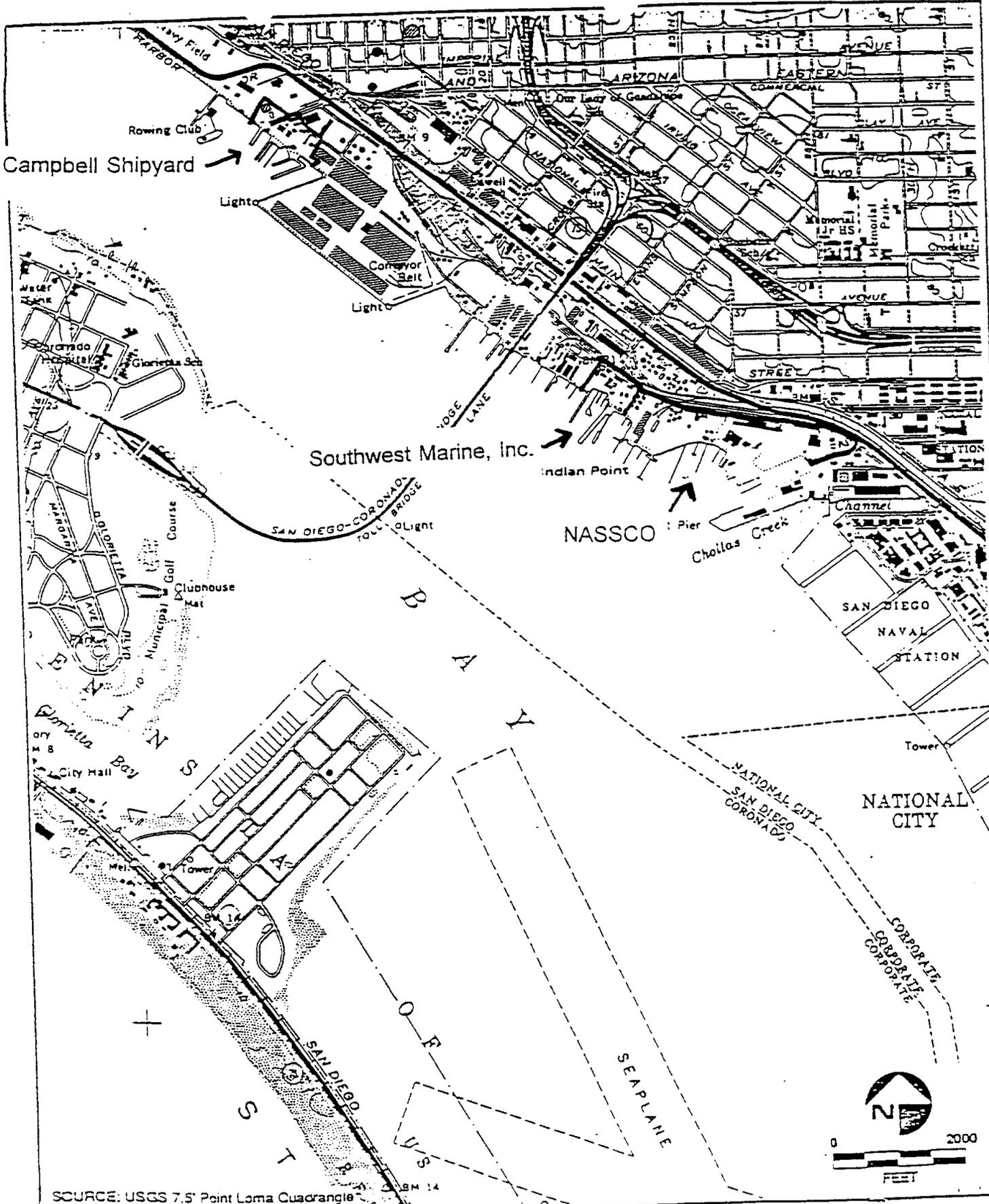
All comments or objections received at the above address of the Regional Board by the appropriate date will be retained and considered in the formulation of the final determinations regarding the draft permit. A public hearing will be held on August 13, 1997. Oral and written statements may be presented at the public hearing, and all comments and objections will be considered by the Regional Board.

For further information regarding the NPDES renewal application, tentative NPDES permit or public hearing, contact Ms. Susan Pease in writing at the above address or by telephone at (619) 637-5596. Copies of the application, tentative waste discharge requirements and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday (excluding holidays).

After the close of the public hearing the Regional Board may adopt a final permit. The final permit will become effective ten (10) days after the notice of the final permit adoption, unless a later date is specified.

Regional Board adoption of a final permit may be petitioned for review to the State Board. Petitions for review to the State Water Resources Control Board must be filed in writing within thirty (30) days following the Regional Board's adoption of the final permit.

Petitions for review of Regional Board action must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812-0100.



Location Map

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
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**FACT SHEET**

**FOR**

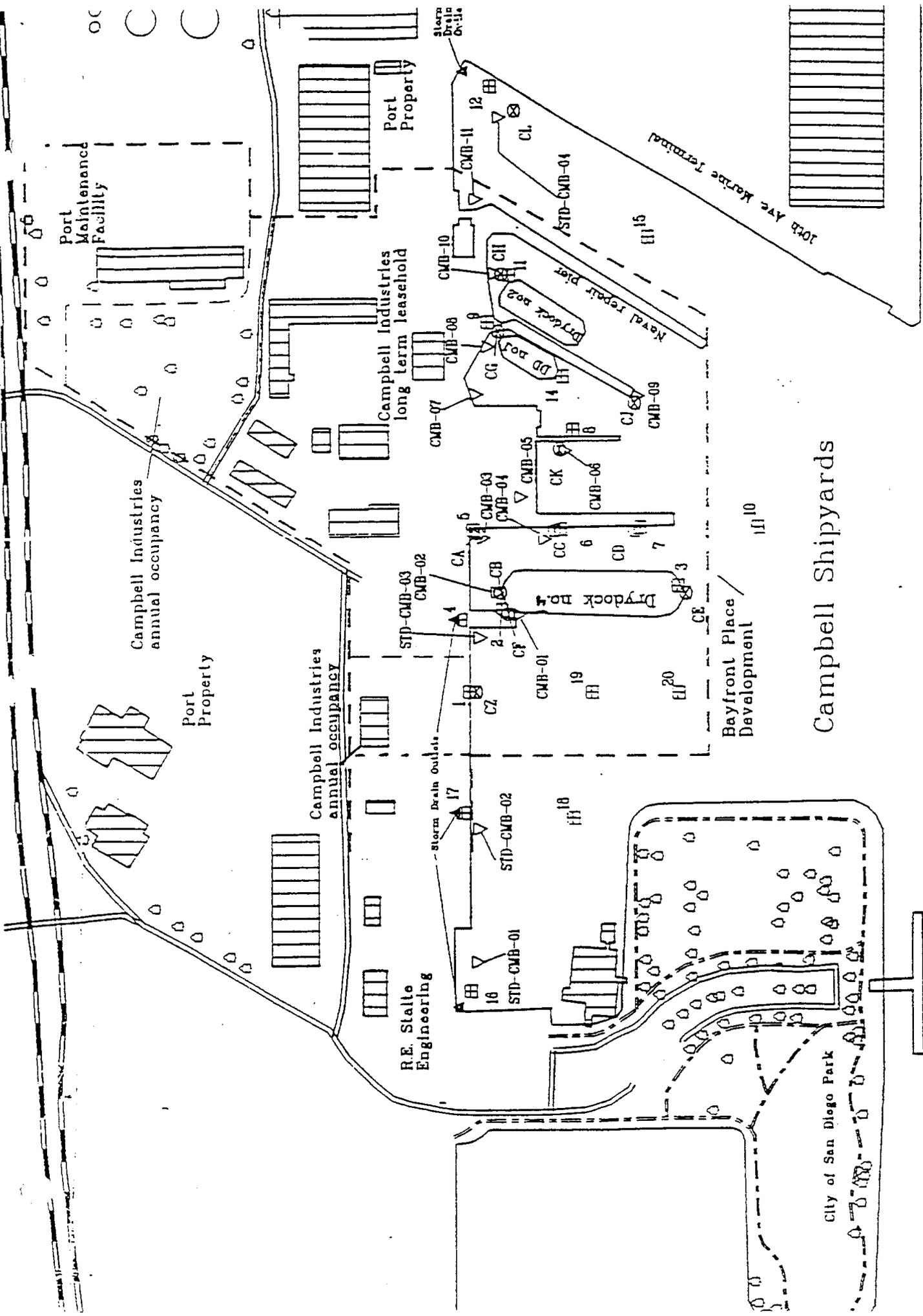
**CAMPBELL INDUSTRIES  
SAN DIEGO COUNTY**

1. On October 22, 1979, this Regional Board adopted Order No. 79-65, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107646, Waste Discharge Requirements for Campbell Industries. Order No. 79-65 regulated the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States.
2. On April 22, 1985, this Regional Board adopted Order No. 85-01, NPDES permit No. CA0107646, Waste Discharge Requirements for Campbell Industries, which superseded Order No. 79-65. Order No. 85-01 regulates the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States. Order No. 85-01 contains an expiration date of April 22, 1990.
3. On October 23, 1989, this Regional Board adopted Addendum No. 1 to Order No. 85-01. This addendum modified Monitoring and Reporting Program (MRP) No. 85-01 to include sediment monitoring requirements, and add the San Diego Unified Port District as a secondarily liable responsible party.
4. On October 19, 1989 Campbell Industries submitted an application for the renewal of Order No. 85-01, dated October 18, 1989 and an NPDES Best Management Practices Plan.
5. On May 17, 1990, the State Board adopted Order No. WQ 90-3 which addresses the Port District's petition regarding the naming of the Port District as a responsible party in the six boatyard and shipyard facilities. Order No. WQ 90-3 remanded the addenda for the six boatyard and shipyard permits to the Regional Board to clarify that the Port District is not primarily responsible for day-to-day operations of the facilities or for monitoring requirements and that the Regional

Board will provide the Port District with the opportunity to attain tenant compliance prior to Regional Board enforcement against the Port District.

6. On March 5, 1991, this Regional Board adopted TCO No. 1 to MRP No. 85-01. This TCO, and others issued at the same time, revised the MRP for Campbell Industries and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location guidelines, reference station guidelines, and requirements for notification of drydock flooding.
7. On March 11, 1991, this Regional Board adopted Addendum No. 2 to Order No. 85-01. This addendum replaces the language in Addendum No.1 to Order No. 85-01 naming the Port District as a responsible party with language written to conform with State Board Order No. WQ 90-3.
8. On September 13, 1991, this Regional Board adopted TCO No. 2 to MRP No. 85-01. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
9. On June 3, 1992, this Regional Board adopted TCO No. 3 to MRP No. 85-01. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
10. Campbell Industries is located on the eastern waterfront of central San Diego Bay, at 501 East Harbor Drive in the City of San Diego, on 21.66 acres. The San Diego Unified Port District is the lessor to Campbell Industries. Vessels to be repaired at Campbell Industries are removed from San Diego Bay by one of three floating drydocks or one of three marine railways. Currently, railways number one and two are not being used. Floating Drydock No. 1 measures 140' x 30' x 12' and is slightly inclined to direct water flow to a sump. Floating Drydock No. 2 measures 200' x 48' x 20'. Floating Drydock No. 4 measures 389' x 55' x 26'. The facility includes five repair piers (Piers 0, 1, 3, 4 and 5), and miscellaneous yard buildings for production, utility, personnel, and administration.
11. The following discharges occur at Campbell Industries:
  - a. Discharged to San Diego Bay:
    - i. Noncontact fire protection system water

- ii. Steam condensate water
  - iii. Saltbox discharges
  - iv. Pipe and tank hydrostatic test water
  - v. Condenser and compressor noncontact cooling water
  - vi. Washdown of vessels
  - vii. Stormwater runoff not associated with first flush of storm water runoff from high risk areas
  - viii. Miscellaneous, low volume water
  - ix. Floating drydock submergence/emergence water
  - x. Floating drydock ballast tank water
  - xi. Marine fouling organisms from non-painted surfaces
- b. Not discharged to San Diego Bay:
- i. Sewage from ships
  - ii. Steamcleaning water
  - iii. Ship bilge/ballast water
  - iv. Hydroblast water
  - v. Floating drydock sump water from industrial process water or stormwater that has contacted pollutants
  - vi. First flush stormwater from high risk areas



Campbell Shipyards

City of San Diego Park

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
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**FOR**

**NATIONAL STEEL AND SHIPBUILDING COMPANY  
SAN DIEGO COUNTY**

1. On October 22, 1979, this Regional Board adopted Order No. 79-63, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107671, Waste Discharge Requirements for National Steel and Shipbuilding Company Order No. 79-63 established waste discharge requirements for an intermittent discharge of cooling water and boiler blowdown from National Steel and Shipbuilding Company (NASSCO), a ship construction, conversion, maintenance and repair facility, to San Diego Bay, a navigable water of the United States.
2. On June 10, 1985, this Regional Board adopted Order No. 85-05, NPDES permit No. CA0107671, Waste Discharge Requirements for National Steel and Shipbuilding Company, which superseded Order No. 79-63. Order No. 85-05 regulates the potential intermittent discharge of pollutants from this ship construction, conversion, maintenance, and repair facility to San Diego Bay, a navigable water of the United States. Order No. 85-05 contains an expiration date of June 10, 1990.
3. On October 23, 1989, this Regional Board adopted Addendum No. 1 to Order No. 85-05. This addendum modified Monitoring and Reporting Program (MRP) No. 85-05 to include sediment monitoring requirements, and add the San Diego Unified Port District as a secondarily liable responsible party.
4. On December 13, 1989, NASSCO submitted an application for the renewal of Order No. 85-05, dated December 13, 1989, and an updated NPDES Best Management Practices Plan.
5. On May 17, 1990, the State Board adopted Order No. WQ 90-3 which addresses the Port District's petition regarding the naming of the Port District as a responsible party in the six boatyard and shipyard facilities. Order No. WQ 90-3

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

remanded the addenda for the six boatyard and shipyard permits to the Regional Board to clarify that the Port District is not primarily responsible for day-to-day operations of the facilities or for monitoring requirements and that the Regional Board will provide the Port District with the opportunity to attain tenant compliance prior to Regional Board enforcement against the Port District.

6. On March 5, 1991, this Regional Board adopted TCO No. 1 to MRP No. 85-05. This TCO, and others issued at the same time, revised the MRP for NASSCO and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location guidelines, reference station guidelines, and requirements for notification of drydock flooding.
7. On March 11, 1991, this Regional Board adopted Addendum No. 2 to Order No. 85-05. This addendum replaces the language in Addendum No. 1 to Order No. 85-05 naming the Port District as a responsible party with language written to conform with State Board Order No. WQ 90-3.
8. On September 13, 1991, this Regional Board adopted TCO No. 2 to MRP No. 85-05. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
9. On October 17, 1991, NASSCO submitted an amended application for the renewal of Order No. 85-05, dated September 27, 1991. The amended application provides current information regarding NASSCO's facility, and supersedes the December 13, 1989 application for renewal.
10. On June 3, 1992, this Regional Board adopted TCO No. 3 to MRP No. 85-05. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
11. The NASSCO facility covers approximately 127 acres of tidelands on the eastern waterfront of central San Diego Bay, at 28th and Harbor Drive in the City of San Diego. The San Diego Unified Port District is the lessor to NASSCO. The land portion of the lease covers approximately 80 acres. Improvements of the land area include approximately 1.6 million square feet (about 37 acres) of office, shop and warehouse space, and 392,800 square feet (about 9 acres) of concrete platens for steel fabrication, a graving dock, and two shipbuilding ways. Improvements of the 47 acres of water area include a floating drydock. Additionally 12 berths exist on piers or land to accommodate the berthing of ships.

## NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET

- a. Graving Dock - This facility is isolated from San Diego Bay by a gate which is removed after the dock is flooded to allow launching of the ship or other structure. Non-contact hydrostatic relief water is collected in a sump and discharged to San Diego Bay. Gate leakage is isolated in a sump and discharged to San Diego Bay. When construction, conversion, maintenance, repair or production is ongoing, the "first flush"<sup>1</sup> (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. Industrial process wastewater is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Waste generated at the graving dock include spent abrasive, paint, rust, petroleum products, marine growth and general refuse.
- b. Shipbuilding Ways - The inclined ways are utilized for construction of ships and other structures. The ways are isolated from San Diego Bay by a gate which is removed after the ways are flooded to allow for the launch of ships or other structures. Non-contact hydrostatic relief water is isolated and discharged to San Diego Bay. Gate leakage and wall leakage are isolated in a sump and pumped into a holding tank for disposal or treatment and is not discharged to San Diego Bay. When construction or production is ongoing, the "first flush" (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. Industrial process water is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Wastes generated at the ways include spent abrasive, paint, petroleum products and general refuse.
- c. Floating Drydock - This facility is used to repair ships or other structures. Ship launching and recovery is accomplished by sinking and floating the entire structure by means of integral ballast tanks. When construction, conversion, maintenance, repair or production is ongoing, the "first flush" (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. When the drydock is not in use as a work area and the sump has been purged, storm water is discharged to San Diego Bay. Industrial process water is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Waste generated during ship repair include spent abrasive, paint, rust, petroleum products, marine growth and general refuse.
- d. Piers and other facilities - Berths exist to moor and support berthed vessels that are undergoing repair operations. A variety of other shore facilities exist to support and complement the construction, conversion, maintenance and repair of ships. Wastes and hazardous materials staged and transported across piers include spent and virgin abrasive, paint, petroleum products, sanitary waste and general refuse.

## NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET

12. The following discharges at National Steel and Shipbuilding Company are described in the October 17, 1991 permit renewal application, and subsequent letters dated September 25, 1996, and August 6, 1997. Fire protection system discharges (FP 1-5) are continuous and noncontact. Graving dock gate leakage discharge (GL 1) is continuous and non-contact. Hydrostatic testing and deballasting of new vessels (M 3) are noncontact discharges and occur only in the final phase of new construction. Average outfall flow data is based on an average 24-hour (0.5 inch) flow from a 2-year storm. Current Stormwater Diversion Systems in place at NASSCO (SWDS 1-5) collect the "first flush" (0.1 inch) of storm water runoff and is discharged to the San Diego Metropolitan Sewer System.

## Outfalls:

- a. Outfall SW-1 - Storm water runoff: average flow 5,000 gallons per hour (GPH).
- b. Outfall SW-2 - Storm water runoff: average flow 9,467 GPH.
- c. Outfall SW-3 - Storm water runoff: average flow 11,926 GPH.
- d. Outfall SW-5 - Storm water runoff: average flow 5,891 GPH.
- e. Outfall SW-6 - Storm water runoff: average flow 42 GPH.
- f. Outfall SW-7 - Storm water runoff: average flow 1,557 GPH.
- g. Outfall SW-8 - Storm water runoff: average flow 1,005 GPH when Control Valve is open.
- h. Outfall SW-9 - Storm water runoff: average flow 160,000 GPH. This does not include off-site flow from 28th Street and Harbor Drive that enters Outfall SW-9.

## Fire Protection Systems:

- i. FP-1 - Berth II fire protection system discharge - 250 gallons per minute (GPM).
- j. FP-2 - Berth V standby fire protection system - 250 GPM.
- k. FP-3 - Berth X fire protection system - 500 GPM.

## NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET

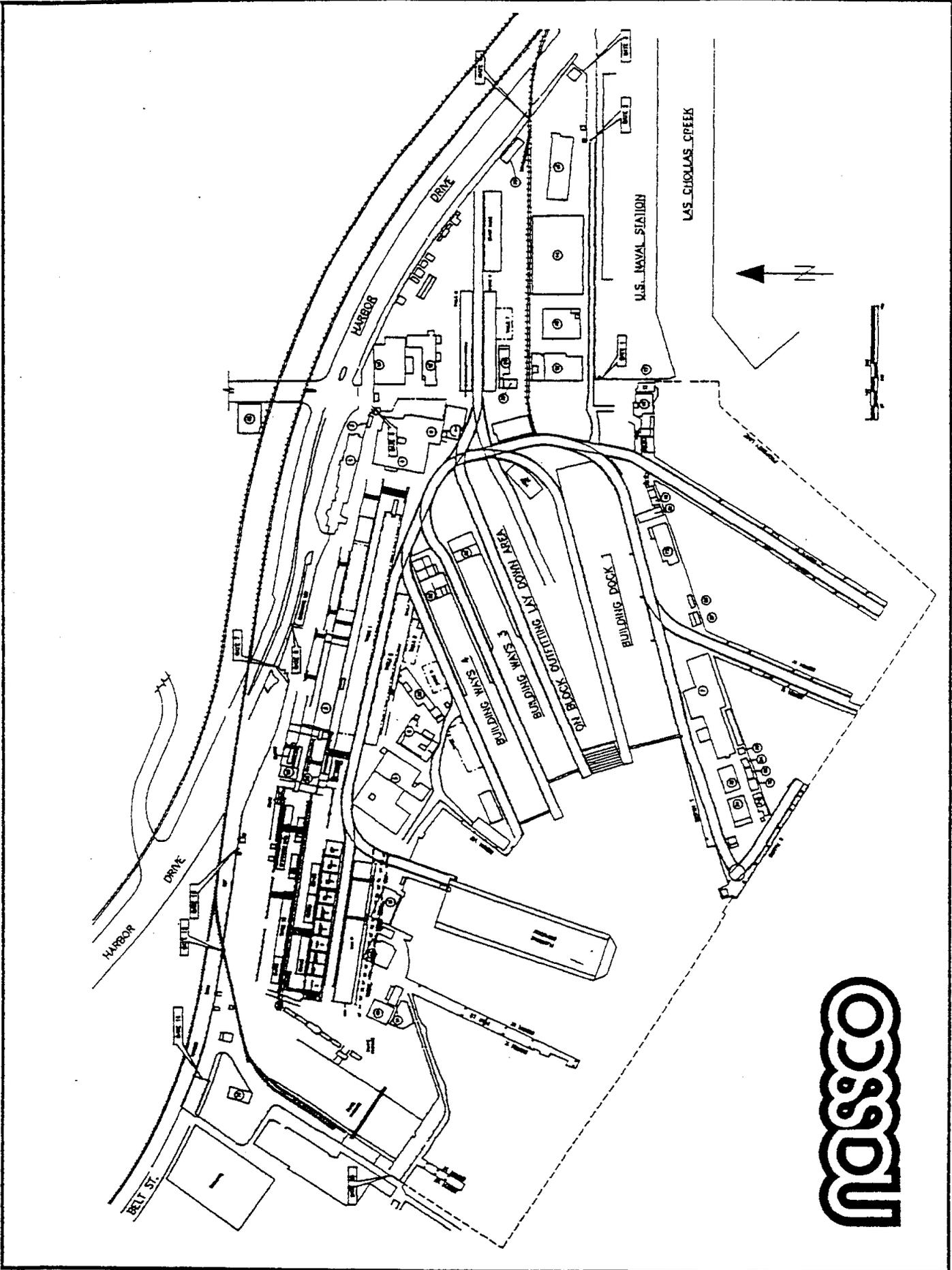
- l. FP-4 - Ways 3 fire protection system - 450 GPM.
- m. FP-5 - Floating drydock standby fire protection system - 2,340 GPM.

## Miscellaneous Discharges:

- n. GL-1 - Graving dock gate leakage - 250 GPH.
- o. M-1 - Floating drydock deballast - 82,080 GPM.
- p. M-2 - Graving dock floodwater - 18,000 GPM.
- q. M-3 - Hydrostatic testing and deballasting of new vessels - 300,000 gallons per day (GPD).
- r. M-4 - U.S. Naval Vessels at dock or pierside - variable amounts of discharge of non-contact cooling water.
- s. M-5 - Ways 3 floodwater - 5,810 GPM.
- t. M-6 - Ways 4 floodwater - 5,810 GPM.
- u. M-7 - Graving Dock hydrostatic relief (under slab dewatering) - 6,175 GPH.
- v. M-8 - Ways 3 hydrostatic relief - 9,000 GPH.
- w. M-9 - Ways 3 hydrostatic relief - 9,000 GPH.

## Storm Water Diversion Systems (SWDS):

- x. SWDS-1 - Floating Drydock - 6,545 gallons "first flush" to the San Diego Metropolitan Sewer System under the Metropolitan Industrial Waste Program (MIWP) and NASSCO's Industrial Users Discharge (IUD) Permit No. 11-0051.
- y. SWDS-2 - Ways 4 - 8,976 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.
- z. SWDS-3 - Ways 3 - 11,345 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.



**masco**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

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**FACT SHEET**

**FOR**

**SOUTHWEST MARINE, INC.  
SAN DIEGO COUNTY**

1. On November 26, 1979, this Regional Board adopted Order No. 79-74, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107697, Waste Discharge Requirements for Southwest Marine, Inc. Order No. 79-74 regulated the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States.
2. On April 18, 1983, this Regional Board adopted Order No. 83-11, NPDES permit No. CA0107696, Waste Discharge Requirements for Southwest Marine, Inc., which superseded Order No. 79-74. Order No. 83-11 regulates the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States. Order No. 83-11 contains an expiration date of April 18, 1988.
3. On July 12, 1988, Southwest Marine Inc. submitted an application for the renewal of Order No. 83-11, dated April 7, 1988, and an NPDES Best Management Practices Plan.
4. On March 26, 1990, this Regional Board adopted Technical Change Order (TCO) No. 1 to Monitoring and Reporting Program (MRP) No. 83-11. This TCO rescinded and replaced MRP No. 83-11. This TCO included semiannual sediment monitoring requirements.
5. On March 5, 1991, this Regional Board adopted TCO No. 2 to MRP No. 83-11. This TCO, and others issued at the same time, revised the MRP for Southwest Marine, Inc. and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location

guidelines, reference station guidelines, and requirements for notification of drydock flooding.

6. On September 13, 1991, this Regional Board adopted TCO No. 3 to MRP No. 83-11. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
7. On June 3, 1992, this Regional Board adopted TCO No. 4 to MRP No. 83-11. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
8. Southwest Marine Inc. is located on the eastern waterfront of central San Diego Bay, on about 7 acres of land and about 15 acres of water, at the foot of Sampson Street, along Belt Street. The San Diego Unified Port District is the lessor to Southwest Marine, Inc. Improvements to the land portion of the lease include production shops, warehouse, and administrative offices. Existing facilities allow the repair and overhaul of vessels 700 feet in length.

Vessels to be repaired at Southwest Marine Inc. are removed from San Diego Bay by one of two floating drydocks; the Pride of San Diego (POSD) - 22,000 tons displacement and the Armed Forces Landing Dock (AFDL) - 4,000 tons displacement; or one of two marine railways. The drydocks are used to conduct repair and maintenance activity which cannot normally be conducted while the vessel is waterborne. These activities generally include exterior hull repair, preservation (abrasive blasting and/or hydroblasting and painting), and repair/replacement of valves and fittings below the waterline. Ship launching and recovery is accomplished by sinking and floating the drydock by means of integral ballast tanks which take in and discharge seawater. Wastes generated during ship repair include spent abrasive, paint, rust, petroleum products, marine growth, and general refuse. Both drydocks are contained to prevent stormwater and wash water from entering San Diego Bay. All industrial waste (including most storm water) is recovered to holding tanks for subsequent disposal to the Metropolitan Sewerage System. Only during periods of non-use shall stormwater be discharge to San Diego Bay from the drydocks.

Marine Railways - There are two marine railways located between piers 1 and 2. These railways are used to dryberth vessels for repair. Activities conducted on dryberthed vessels are similar to those conducted on the drydocks, but of a much smaller scale.

Piers and Wharfs - The facility includes a 40 foot by 637 foot repair pier (Pier 1), a 30 foot by 257 foot service pier (Pier 2), one 66 foot by 700 foot repair pier (Pier 3) serviced by a marine crane rail system, one 30 foot by 475 foot pier (Pier 4), a 30 foot by 350 foot berthing pier (Pier 5), and miscellaneous yard buildings for production, utility, personnel, and administration. The piers are used to support berthed vessels that are undergoing maintenance and repair operations. Wastes staged and transported across piers include spent abrasive, paint, petroleum products, sanitary waste and general refuse. There is an Anchor Chain Barge adjacent to Pier 2 where anchors and chains are abrasive blasted and painted.

On shore facilities include a painting and abrasive blasting area located at the foot of pier number 3, and a paint booth located on the southeast section of the facility. On the northern end of the facility is an area used for steamcleaning/pressure washing of vehicles and equipment. This operation includes a sump where effluents are collected and drained to a three-stage clarifier which is connected to the Metropolitan Sewerage System. The middle area of the shipyard is the gantry tracks area where ship parts are painted and moved.

9. The following discharges at Southwest Marine, Inc. are described in the April 7, 1988 permit application and subsequent documentation and amendments. Most discharges are intermittent and volumes given are during periods of actual discharge.

Stormwater outfalls: Southwest Marine maintains a stormwater diversion system which eliminates the first 0.25 inches of stormwater to San Diego Bay. The following outfalls will only be discharged when the facility has realized rainfall greater than 0.25 inches. A rain gauge is installed to identify and record this condition.

- a. Outfall SW-1, located at the quay wall by the transportation area.
- b. Outfall SW-2, located at the northeast head of Pier 1.
- c. Outfall SW-3, located at the southeast foot of Pier # 2.
- d. Surface runoff to a storm drain at Southwest Marine Inc. is provided for by use of the City of San Diego's existing 54-inch diameter concrete storm drain line, which angles diagonally across Southwest Marine from the Sampson Street entrance to an outfall south of the base of Pier 3. This storm drain outfall is designated as Outfall SW-4.

- e. Outfall SW-5, adjacent to the Abrasive Blasting Building and Hazardous Waste Storage Area.
- f. Outfall SW-6, located southwest of Outfall SW-5.
- g. Outfall SW-7 located at the southeast head of Pier 4.
- h. Outfall SW-8 located at the northeast head of Ways 2.

Fire protection systems:

- a. Fire pumps at pier 1 - 250 gpm
- b. Fire pumps at pier 3 - 250 gpm
- c. Fire pumps on POSD drydock - 250 gpm
- d. Fire pumps on AFDL drydock - 250 gpm
- e. Fire hose testing at pier 5 - 100 gpd
- f. Portable fire pumps installed on vessels during transit to and from the shipyard - 750 gpm each
- g. Freshwater fire protection system testing - 500 gpm

Noncontact cooling saltwater systems:

- a. Heat exchanger for water cooled air compressor (building 13) - 300 gpm
- b. Cooling water from diesel generators and fire pumps on POSD drydock - 500 gpm
- c. Cooling water from diesel generators and fire pumps on AFDL drydock - 250 gpm

Floating drydock ballast water (POSD) per maximum lift - 9,000,000 gallons

Floating drydock ballast water (AFDL) per maximum lift - 4,488,000 gallons

- 10. The following discharges occur at Southwest Marine, Inc.:
  - a. Discharged to San Diego Bay:

- i. Fire protection system water
  - ii. Steam condensate water
  - iii. Pipe and tank hydrostatic test water
  - iv. Condenser and compressor noncontact cooling water
  - v. Machinery noncontact cooling water
  - vi. Stormwater runoff in excess of 0.25 inch diversion
  - vii. Miscellaneous, low volume water
  - viii. Floating drydock submergence/emergence water
  - ix. Floating drydock ballast tank water
  - x. Marine fouling organisms from non-painted surfaces.
  - xi. Floating drydock sump water when the drydock is not in use as a work area and the sump has been purged
- b. Not discharged to San Diego Bay:
- i. Clarified water from 3-stage clarifier
  - ii. Sewage from ships
  - iii. Steamcleaning water
  - iv. Ship bilge/ballast water
  - v. Hydroblast water
  - vi. First flush stormwater from high risk areas
  - vii. Floating drydock sump water from industrial process water or storm water that has contacted pollutants

October 15, 1997

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
GENERAL NPDES PERMIT NO. CAG039001**

**WASTE DISCHARGE REQUIREMENTS**

**FOR**

**DISCHARGES  
FROM  
SHIP CONSTRUCTION, MODIFICATION, REPAIR, AND  
MAINTENANCE  
FACILITIES AND ACTIVITIES  
LOCATED IN  
THE SAN DIEGO REGION  
(TTWQ/CPLX 1A)**

TABLE OF CONTENTS

Findings	3
A. Prohibitions	11
B. Discharge Specifications	12
C. Receiving Water Limits	16
D. Special Provision	17
E. Provisions	17
F. Reporting Requirements	19
G. Notifications	21
Attachment A: Best Management Practices Program Requirements	A-1
Attachment B: Basin Plan Water Quality Objectives Applicable to San Diego Bay	B-1
Attachment C: Standard Provisions	C-1
Attachment D: Sections of 40 CFR Incorporated by Reference	D-1

Attachment E: Definitions and Explanatory Notes

E-1

**Monitoring and Reporting Program No. 97-36**

A. Monitoring Provisions

M-1

B. Effluent Monitoring

M-6

C. Compliance Certification

M-21

D. Spill / Illicit Discharge Log

M-22

E. Chemical Utilization Audit

M-23

F. Waste Hauling Log

M-23

G. Receiving Water and Sediment Chemistry Monitoring

M-23

H. Sediment Monitoring Station Locations

M-35

I. Endnotes

M-42

Monitoring and Reporting Program Attachment A: Chemical Utilization Audit Forms

MA-1

The California Regional Water Quality Control Board, San Diego Region, (hereinafter SDRWQCB), finds that:

1. **Ship construction, modification, repair, and maintenance activities** in the San Diego region result or have the potential to result in **discharges of wastes and pollutants** which could cause or threaten to cause **pollution, contamination, or nuisance**; adversely impact human health or the environment; cause or contribute to violation of an applicable water quality objective; and/or otherwise adversely affect the quality and/or beneficial uses of **waters of the state and waters of the United States**, particularly San Diego Bay, an enclosed bay within the San Diego region. Such activities include abrasive blasting, hydroblasting, grinding, painting, tank cleaning, removal of bilge and ballast water, and removal of antifouling paint. A variety of wastes and pollutants are generated or are present at sites where ship construction, modification, repair, and maintenance activities are conducted, including but not limited to paint chips, abrasive grit, solvents, materials of petroleum origin, and heat. These wastes and pollutants are discharged or have the potential to be discharged by a variety of pathways, including but not limited to **storm water**, tidal action, wind, overspray, spills, and leaks.
2. a. Ship construction, modification, repair, and maintenance activities result or have the potential to result in discharges to San Diego Bay of wastes and pollutants which are likely to cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; cause or contribute to violation of an applicable water quality objective; and/or otherwise adversely affect the quality and/or beneficial uses of waters of the state and waters of the United States. Such discharges include:
  - i. water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
  - ii. hydroblast water;
  - iii. tank cleaning water from tank cleaning to remove sludge and/or dirt;
  - iv. clarified water from oil/water separation;
  - v. steamcleaning water;
  - vi. demineralizer/ reverse osmosis brine;
  - vii. floating drydock sump water when the drydock is in use as a work area or when the drydock is not in use as a work area but before the sump has been purged following such use;
  - viii. oily bilge water;
  - ix. contaminated ballast water; and
  - x. the **first flush of storm water runoff** from high risk areas.
- b. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of

wastes and pollutants which pose less of a threat than those identified in Finding 2.a above. Such discharges include:

- i. vessel washdown water;
- ii. floating drydock submergence/emergence water;
- iii. graving dock flood water;
- iv. graving dock sump pump test water;
- v. shipbuilding ways flood water;
- vi. floating drydock sump water when the drydock is not in use as a work area after the sump has been purged following such use;
- vii. pipe and tank hydrostatic test water;
- viii. graving dock gate and wall leakage water;
- ix. shipbuilding ways gate and wall leakage and hydrostatic relief water;
- x. miscellaneous low-volume water; and
- xi. storm water runoff other than the first flush of storm water runoff from high risk areas.

- c. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the discharge to San Diego Bay of water which representatives of operators of ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants, other than heat, and to which no wastes or pollutants, other than heat, are ordinarily added by such activities. Such discharges include:
  - i. saltbox water;
  - ii. steam condensate; and
  - iii. compressor and condenser non-contact cooling water.Periodic monitoring of such discharges is necessary to verify that wastes or pollutants, other than heat, from ship construction, modification, repair, and maintenance activities are not present.
- d. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the release to San Diego Bay of water taken from San Diego Bay which representatives of operators of ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants and to which no wastes or pollutants are ordinarily added by such activities. Such water releases include:
  - i. fire protection water;
  - ii. floating drydock ballast tank water;
  - iii. graving dock caisson ballast water; and
  - iv. graving dock hydrostatic relief water.Periodic monitoring of such releases is necessary to verify that wastes or pollutants from ship construction, modification, repair, and maintenance activities are not present.

- e. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of the following wastes and pollutants which also pose less of a threat than the discharges identified in Finding 2.a above:
  - i. ship launch grease / wax;
  - ii. keel block sand; and
  - iii. marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations.
3. This Order applies to those discharges associated with ship construction, modification, repair, and maintenance activities over which operators of **ship construction, modification, repair, and maintenance facilities** can reasonably be expected to have control. This Order does not apply to discharges from vessels which occur at such facilities but which are independent of ship construction, modification, repair, and maintenance activities. At such facilities, ship construction, modification, repair, and maintenance activities are undertaken by the facility operators and by others (e.g. contractors and vessel owners, operators, and crew). For purposes of this Order, an operator of a ship construction, modification, repair, and maintenance facility is responsible for all discharges associated with ship construction, modification, repair, and maintenance activities at its facility, except those caused by vessel owners, operators, and crew. However, an operator of a ship construction, modification, repair, and maintenance facility may also be responsible for the consequences (e.g. cleanup) of all discharges within and from its site, including those discharges which are not subject to **National Pollutant Discharge Elimination System (NPDES)** requirements, pursuant to 40 CFR 122.3.
4. In the San Diego Region, the San Diego Unified Port District (SDUPD) is the trustee of all **sites** currently known to the SDRWQCB where ship construction, modification, repair, and maintenance facilities are operated by commercial entities. SDUPD is ultimately responsible for the consequences (e.g. cleanup) of all discharges associated with ship construction, modification, repair, and maintenance activities at sites for which it is the trustee. SDUPD may also be responsible for the consequences (e.g. cleanup) of all discharges within and from such sites, including those discharges which are not subject to NPDES requirements, pursuant to 40 CFR 122.3. SDUPD may be responsible for the failure of its tenants to comply with this Order. (Also see Finding 6.)
5. This Order applies to discharges from all ship construction, modification, repair, and maintenance facilities, other than those of United States federal government, which the Executive Officer determines to have a threat to water quality (TTWQ) / complexity (CPLX) rating of 1A, as defined In Title 23, Section 2200, California Code of Regulations (CCR). Table 1 lists all such facilities currently known to the SDRWQCB. TTWQ is based on the nature of

the facility and its operations, and the quality and/or sensitivity of the receiving water body. CPLX is a measure of the complexity of regulating a facility.

TABLE 1

FACILITY OPERATOR	FACILITY ADDRESS / LOCATION
National Steel and Shipbuilding Company (NASSCO)	28th & Harbor Dr. San Diego, CA 92113
Southwest Marine	Foot of Sampson St. San Diego, CA 92113
Campbell Industries	501 East Harbor Dr. San Diego, CA 92112

6. For purposes of this Order, the term "discharger" means:
- a. A **person**, other than the United States federal government, who owns and/or operates a site where ship construction, modification, repair, and/or maintenance activities are conducted and where the Executive Officer has determined the discharges from that site to have a TTWQ/CPLX rating of 1A; or
  - b. A person (e.g. a commercial entity engaged in ship construction, modification, repair, and/or maintenance activities), other than the United States federal government, who is a lessee of a site where ship construction, modification, repair, and/or maintenance activities are conducted and where the Executive Officer has determined the discharges from that site to have a TTWQ/CPLX rating of 1A; or
  - c. A person (e.g. the San Diego Unified Port District), other than the United States federal government, who is a lessor of a site where ship construction, modification, repair, and/or maintenance activities are conducted and where the Executive Officer has determined the discharges from that site to have a TTWQ/CPLX rating of 1A. [Note: such lessors are not primarily responsible for day-to-day operations at ship construction, modification, repair, and/or maintenance facilities or for compliance with the requirements of this Order (including monitoring and reporting requirements). In order to obtain the assistance of such lessors in obtaining compliance of their lessees with this Order, the SDRWQCB will notify such lessors of any violations of this Order by their lessees. The SDRWQCB will not take enforcement action against

such lessors for violations of this Order by their lessees unless there is a continued failure to comply by a lessee after the lessor has been given notice of the violations and an opportunity to obtain compliance of the lessee.]

7. Ship construction, modification, repair, and maintenance activities at the facilities listed in Finding 5 involve the same or substantially similar types of operations, discharge the same types of wastes, require the same effluent limitations, require the same or similar monitoring and are more appropriately regulated under a general NPDES permit rather than under individual NPDES permits.
8. The nature of ship construction, modification, repair and maintenance facilities and activities (e.g. the fact that such facilities are located on or immediately adjacent to San Diego Bay and that many such activities are conducted outdoors) is such that there are a number of pathways by which pollutants and wastes from such facilities and activities could be discharged to waters of the United States. **Storm water discharges associated with industrial activity** at ship construction, modification, repair, and maintenance sites constitute one potentially significant pathway by which pollutants and wastes could be discharged to waters of the United States. Such discharges to San Diego Bay have been found to contain **toxic pollutants**, particularly copper and zinc.
9. The SDRWQCB Water Quality Control Plan, San Diego Basin (9) (Basin Plan) designates the following beneficial uses of San Diego Bay:
  - a. Industrial supply,
  - b. Navigation,
  - c. Contact water recreation,
  - d. Noncontact water recreation,
  - e. Commercial and sportfishing,
  - f. Preservation of biological habitats of special significance,
  - g. Estuarine habitat,
  - h. Wildlife habitat,
  - i. Rare, threatened, or endangered species,
  - j. Marine habitat,
  - k. Migration of aquatic organisms, and
  - l. Shellfish harvesting.
10. The State Water Resources Control Board Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Enclosed Bays and Estuary Policy) contains the following principle for management of water quality in enclosed bays and estuaries, which include San Diego Bay:

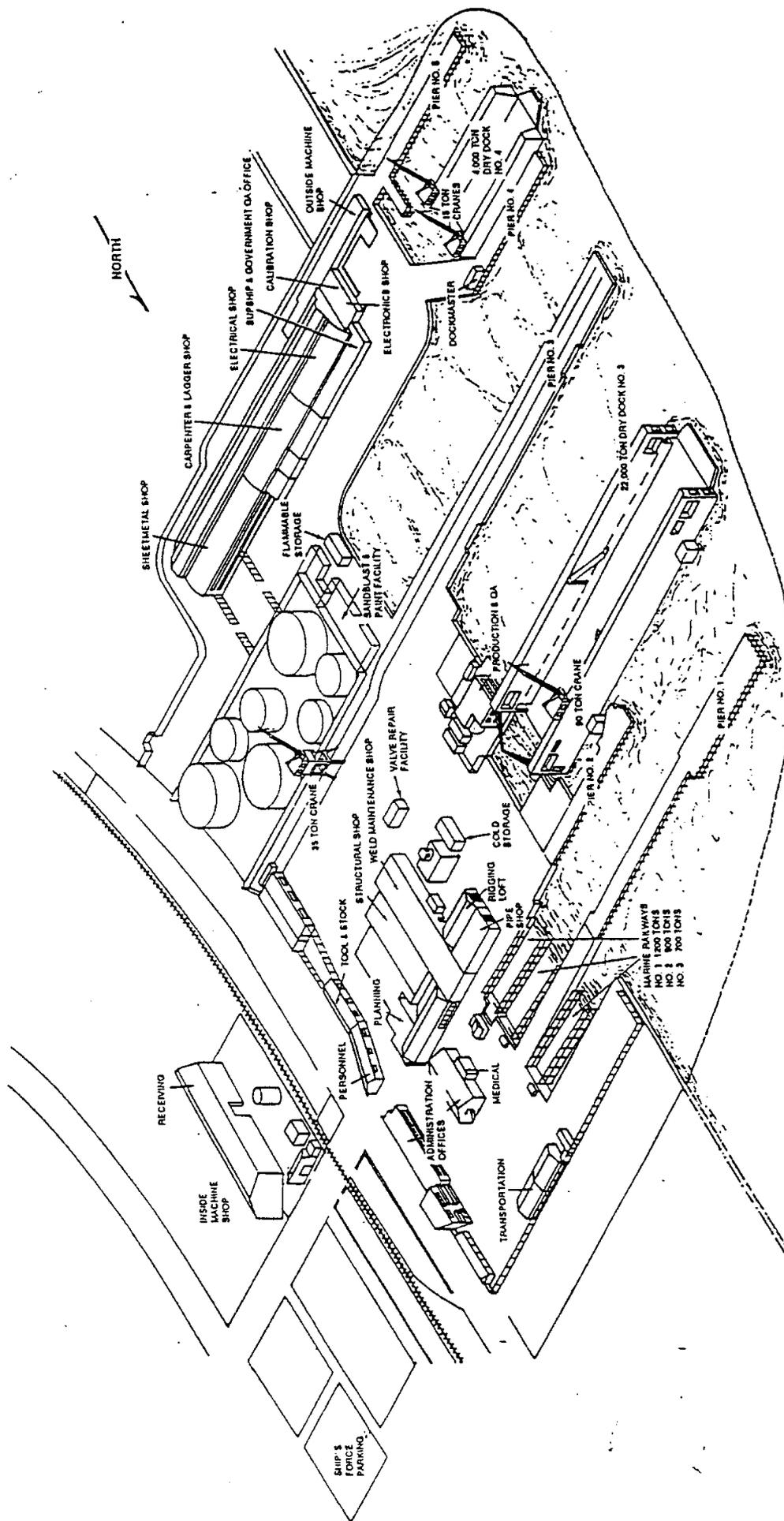
The discharge of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries shall be phased out at the earliest practicable date. Exceptions to this provision may be granted by a Regional Board only when the Regional Board finds that the wastewater in question would consistently be treated and discharged in such a manner that it would enhance the quality of receiving waters above that which would occur in the absence of the discharge. For the purpose of this policy, treated ballast waters and innocuous nonmunicipal wastewater such as clear brines, washwater, and pool drains are not necessarily considered industrial process water, and may be allowed by Regional Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

The Enclosed Bays and Estuaries Policy also contains the following discharge prohibition:

New discharges of municipal wastewaters and industrial process waters (exclusive of cooling water discharges) to enclosed bays and estuaries, other than the San Francisco Bay-Delta system, which are not consistently treated and discharged in a manner that would enhance the quality of receiving waters above that which would occur in the absence of the discharge, shall be prohibited.

11. The term "industrial process water" is used but not defined in the Enclosed Bays and Estuary Policy. Attachment E defines and identifies **industrial process water** for purposes of this Order. Industrial process water discharges from ship construction, modification, repair, and maintenance facilities and activities would not enhance the quality of receiving waters.
12. The Clean Water Act (CWA) authorizes inclusion of **Best Management Practices (BMP)** requirements in NPDES permits under certain conditions. The nature of ship construction, modification, repair, and maintenance facilities and activities and the pollutants and wastes associated with such facilities and activities (as described in Findings 1, 2, and 8) is such that implementation of BMPs is appropriate and necessary. Implementation of a BMP Program which emphasizes preventive measures is an effective way to address the potential for the discharge of pollutants and wastes from these sites.
13. The SDRWQCB, in establishing the requirements contained herein, considered factors including, but not limited to the following:
  - a. The beneficial uses to be protected and the water quality objectives required to meet these beneficial uses;
  - b. Past, present and probable future beneficial uses of water;

- c. Environmental characteristics of the receiving water under consideration, including the quality of those receiving waters;
  - d. Water quality conditions that could reasonably be achieved through the coordinated control of all factors which affect water quality in the area;
  - e. Economic considerations;
  - f. The need for developing housing within the region;
  - g. The need to prevent nuisance;
  - h. The need to develop and use recycled water; and
  - i. Other waste discharges.
- [California Water Code (CWC) § 13263 & 13241]
14. The waste discharge requirements contained in this Order implement the federal NPDES regulations for permitting discharges of pollutants from point sources to waters of the United States and constitute an NPDES permit. The requirements contained in this Order are based on applicable water quality control plans (including the Basin Plan) and state and federal regulations (including NPDES regulations in 40 CFR), guidelines, standards, policies (including the Enclosed Bays and Estuaries Policy), and discharge requirements. The requirements contained in this Order are in conformance with the goals of the Clean Water Act (CWA) and Porter-Cologne Water Quality Control Act. This Order is consistent with the provisions of 40 CFR 131.12 (Antidegradation Policy) and SWRCB Resolution No. 68-16 (Statement of Policy with Respect to Maintaining High Quality of Water in California). Compliance with conditions of this permit will protect and maintain beneficial uses of San Diego Bay.
  15. The issuance of a general NPDES permit for ship construction, modification, repair, and maintenance facilities and activities is exempt from the requirements for the preparation of environmental documents under the provisions of the California Environmental Quality Act (Public Resources Code, Division 13, Chapter 3, Section 21000, et seq.) in accordance with CWC § 13389.
  16. Discharge criteria established pursuant to Sections 301, 302, 304, 307, 308, and 403 of the CWA, as amended, are applicable to ship construction, modification, repair, and maintenance facilities and activities.
  17. This Order does not preempt or supersede the authority of municipalities, flood control agencies, or other local agencies to further prohibit, restrict, or control discharges to sanitary sewer systems, storm drain systems, or other water courses subject to their jurisdiction.
  18. The SDRWQCB has notified interested parties of its intent to issue general waste discharge requirements for ship construction, modification, repair, and



Southwest Marine, Inc.

maintenance facilities and activities and has provided them with an opportunity to submit their written views and recommendations. [CWC § 13378 & 13384]

19. The SDRWQCB, in a public meeting, heard and considered all comments pertaining to general waste discharge requirements for discharges from ship construction, modification, repair, and maintenance facilities and activities with a TTWQ/CPLX rating of 1A. [CWC § 13378 & 13384]

**IT IS HEREBY ORDERED** that, in order to meet the provisions contained in Division 7 of the California Water Code and regulations adopted thereunder and the provisions of the Clean Water Act, as amended, and regulations and guidelines adopted thereunder, each discharger shall comply with the following at each of its sites to which this general permit applies:

**A. PROHIBITIONS**

1. Each discharger shall comply with all requirements of the Basin Plan Waste Discharge Prohibitions, which are hereby included in this Order by reference.
2. The discharge of sewage (except as noted in the Basin Plan Waste Discharge Prohibitions) to San Diego Bay is prohibited.
3. The discharge of industrial process water (other than cooling water), as defined and identified in this Order, is prohibited. [Enclosed Bays and Estuaries Policy (EBEP)]
4. The discharge of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to San Diego Bay is prohibited. [EBEP]
5. The discharge of rubbish, refuse, debris, materials of petroleum origin (other than ship launch grease / wax), waste zinc plates, abrasives, primer, paint, paint chips, solvents, and **marine fouling organisms**, and the deposition of such wastes at any place where they could eventually be discharged is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations (see Prohibition 11). (Rubbish and refuse include any cans, bottles, paper, plastic, vegetable matter, or dead animals or dead fish deposited or caused to be deposited by man.) [EBEP]
6. The discharge of materials of petroleum origin (other than ship launch grease / wax) in sufficient quantities to be visible is prohibited. [EBEP]
7. The discharge or by-passing of untreated waste to San Diego Bay is prohibited. (This prohibition does not apply to cooling water streams which comply with the requirements of this Order for elevated temperature waste discharges and which do not contain pollutants or waste other than heat.) [EBEP]
8. Discharges of wastes and pollutants identified in Finding 2.a.i - 2.a.ix of this Order are prohibited. Discharges of wastes and pollutants not specifically identified in Finding 2.b - 2.e of this Order are prohibited.

9. Discharge of the first flush of storm water runoff from high risk areas (Finding 2.a.x) is prohibited, except as provided for in Discharge Specification B.11.
10. The discharge of polychlorinated biphenyl compounds, such as those used for transformer fluid, is prohibited.
11. The discharge of wastes and pollutants from underwater operations, (such as underwater paint and/or coating removal and underwater hull cleaning (e.g. "scamping")), is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations.

## B. DISCHARGE SPECIFICATIONS

1. Discharges shall not contain a **hazardous substance** equal to or in excess of a reportable quantity listed in 40 CFR 117 and/or 40 CFR 302.
2. Each discharger shall reduce or prevent the discharge of pollutants through implementation of Best Available Technology [BAT, CWA § 301 (b)(2)(A)] for toxic and **non-conventional pollutants** and Best Conventional Technology [BCT, CWA § 301 (b)(2)(E)] for **conventional pollutants**. Development and implementation of a BMP Program that complies with the requirements in Section E (Provisions) and Attachment A of this permit and that achieves BAT/BCT constitutes compliance with this requirement.
3. Waste discharged shall be discharged in a manner so as to achieve the most rapid **initial dilution** practicable to minimize concentrations of substances not removed by source control or treatment. [EBEP]
4. Waste management systems (e.g. wastewater treatment systems and waste storage facilities) shall be designed, constructed, operated, and maintained so as to prevent the discharge of pollutants and maintain indigenous marine life and a healthy and diverse marine community.
5. Waste discharged shall be essentially free of:
  - a. Material (other than ship launch grease / wax) that is floatable or will become floatable upon discharge.
  - b. Settleable material or substances that may form sediments which will **degrade** benthic communities or other aquatic life.
  - c. Substances which will accumulate to toxic levels in marine waters, sediments, or biota.
  - d. Materials that result in aesthetically undesirable discoloration of receiving waters.

- e. Substances that **significantly** decrease the **natural light** to benthic communities and other marine life.
6. In a 96-hour static or continuous flow bioassay (toxicity) test, undiluted discharges to San Diego Bay, other than discharges of storm water and discharges which consist of water taken from San Diego Bay, shall not produce less than 90 percent survival, 50 percent of the time, and not less than 70 percent survival, 10 percent of the time, using a standard test species and protocol approved by the Executive Officer. The percent survival in undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not be less than these levels, except where the percent survival in San Diego Bay water at the intake location is less than these levels. Where the percent survival in San Diego Bay water at the intake location is less than these levels, the percent survival in undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not be less than the percent survival in San Diego Bay water at the intake location. (In the absence of test results demonstrating otherwise, it will be assumed that the percent survival in San Diego Bay water at the intake location is not less than these levels.) [EBEP]
7. Undiluted discharges to San Diego Bay, other than discharges of storm water and discharges which consist of water taken from San Diego Bay, shall not exceed a daily maximum chronic toxicity of 1 Toxic Unit Chronic (TUc), as determined using a standard test species and protocol approved by the Executive Officer. The daily maximum chronic toxicity of undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not exceed 1 TUc, except where the daily maximum chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc. Where the daily maximum chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc, the daily maximum chronic toxicity of undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not exceed the daily maximum chronic toxicity of San Diego Bay water at the intake location. (In the absence of test results demonstrating otherwise, it will be assumed that the daily maximum chronic toxicity of San Diego Bay water at the intake location does not exceed 1 TUc.)
8. Effective July 1, 1999, in a 96-hour static or continuous flow bioassay (toxicity) test, undiluted storm water runoff associated with industrial activity which is discharged to San Diego Bay shall not produce less than 90 percent survival, 50 percent of the time, and not less than 70 percent survival, 10 percent of the time, using a standard test species and protocol approved by the Executive Officer. Until July 1, 1999, this level of acute toxicity shall be a performance goal. [EBEP]

9. Effective July 1, 1999, undiluted storm water runoff associated with industrial activity which is discharged to San Diego Bay shall not exceed a daily maximum chronic toxicity of 1 Toxic Unit Chronic (TUc), as determined using a standard test species and protocol approved by the Executive Officer. Until July 1, 1999, this level of chronic toxicity shall be a performance goal.
10. The following effluent limitations apply to all discharges listed in Finding 2.b, 2.c & 2.d except storm water:

Constituent/ Property	Units	Monthly Average (30 day)	Weekly Average (7 day)	Maximum at any time
oil & grease	mg/l	25	40	75
settleable solids	ml/l	1.0	1.5	3.0
turbidity	NTU	75	100	225
pH	pH units	Within limits of 6.0 - 9.0 at all times.		
temperature	not more than 20° F greater than natural temperature of receiving waters			

11. a. At each site listed in Finding 5, one of the following shall be completed no later than eighteen (18) months after the date of adoption of this Order.
- i. The discharge of the first flush of storm water runoff from high risk areas shall be terminated; or
  - ii. An alternative which achieves a reduction in the discharge of pollutants to San Diego Bay equivalent to that resulting from compliance with Discharge Specification 11.a.i. shall be **implemented**. A description of this alternative, which demonstrates to the satisfaction of the Executive Officer that this alternative will be equivalent to compliance with Discharge Specification 11.a.i., shall be submitted to the Executive Officer no later than six (6) months after the date of adoption of this Order.
- b. At each **existing ship construction, modification, repair, and maintenance site (existing site)** not listed in Finding 5, one of the following shall be completed no later than twelve (12) months after the date of the **Notice of Applicability** for the site issued by the Executive Officer:
- i. The discharge of the first flush of storm water runoff from high risk areas shall be terminated; or
  - ii. An alternative which achieves a reduction in the discharge of pollutants to San Diego Bay equivalent to that resulting from compliance with Discharge Specification 11.b.i. shall be implemented. A description of this alternative, which demonstrates to the satisfaction of the Executive Officer that this alternative will be equivalent to compliance with Discharge Specification 11.b.i., shall be submitted to the Executive Officer no later than four (4) months after the date of the Notice of Applicability for the site issued by the Executive Officer.
12. Discharged ship launch grease / wax shall be recovered immediately following ship launch.

**C. RECEIVING WATER LIMITATIONS**

Discharges shall not cause or contribute to violation of the following receiving water limitations:

1. There shall be no adverse impact on human health or the environment.
2. There shall be no impairment of any beneficial use or violations of the applicable water quality objectives of the Basin Plan (Attachment B) or any applicable state water quality control plan or policy.
3. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.
4. Natural light shall not be significantly reduced as the result of the discharge of waste.
5. The rate of deposition of inert solids and the characteristics of inert solids in sediments shall not be changed such that benthic communities are degraded.
6. The dissolved sulfide concentration of waters in and near sediments shall not be significantly increased above that present under natural conditions.
7. The concentration of substances in marine sediments shall not be increased to levels which would degrade indigenous biota.
8. The concentration of organic materials in sediment shall not be increased to levels which would degrade marine life.
9. Substances shall not be present in the water column, sediments, or biota at concentrations that adversely affect beneficial uses or which will bioaccumulate to levels which are harmful to aquatic organisms, wildlife, or human health.
10. The daily maximum chronic toxicity of waters of the United States shall not exceed 1 Toxic Unit Chronic (TUC), as determined using a standard test species and protocol approved by the Executive Officer.

**D. SPECIAL CONDITION**

Discharges from emergency firefighting activities are not prohibited by this permit and are not subject to the requirements herein.

**E. PROVISIONS**

1. Each discharger shall have, maintain in an up-to-date condition, and completely implement an adequate BMP Program which achieves BAT/BCT. The BMP Program shall be developed and implemented in accordance with Attachment A, which is a part of this Order. Implementation of the BMP Program shall prevent, or minimize the potential for, the release of pollutants to waters of the state and waters of the United States. Each discharger shall amend its BMP Program whenever:
  - a. There is a change in facility design, construction, materials, operation, or maintenance which materially affects the potential for discharge of pollutants into waters of the state or waters of the United States. (In these situations, the amended BMP Program shall be implemented concurrent with the changes specified above.)
  - b. Changes to the BMP program are necessary to prevent a violation of this Order. (In these situations, the amended BMP Program shall be implemented in time to prevent such violations.);
  - c. Changes to the BMP program are necessary to correct a violation of this Order. (In these situations, the amended BMP Program shall be implemented to correct such violations as soon as possible.); or
  - d. Directed to do so by the Executive Officer. (In these situations, the amended BMP Program shall be implemented in accordance with time frames specified by the Executive Officer.)
2. Where the Executive Officer determines that a discharger's BMP Program is not up-to-date or adequate, the discharger shall amend its BMP Program accordingly, in accordance with time frames specified by the Executive Officer. Where the Executive Officer determines that a discharger is not adequately implementing its BMP Program, the discharger shall immediately modify implementation of its BMP Program accordingly.
3. Each discharger shall submit the BMP Program required by this Order to the Executive Officer. Submittal and implementation shall be in accordance with the following schedule:
  - a. For sites listed in Finding 5: submit and implement no later than three (3) months after adoption of this Order.

- b. For existing sites not listed in Finding 5: submit and implement no later than two (2) months after the date of the Notice of Applicability for the site issued by the Executive Officer.
- c. For **new ship construction, modification, repair, and maintenance sites (new sites)**: submit at least 180 days before initiating ship construction, modification, repair, or maintenance activities at the site; implement upon initiation of such activities.

The Executive Officer may review and/or provide comments on the BMP Program or amendments thereto at any time. However, implementation shall not be delayed pending Executive Officer review or comments.

4. Until implementation of the BMP Program required by this Order, each discharger with an existing site shall continue to implement its existing BMP Program (developed pursuant to its individual NPDES permit superseded by this Order) and its existing Storm Water Pollution Prevention Plan (developed pursuant to the SWRCB General NPDES permit for Discharges of Storm Water Associated with Industrial Activity Excluding Construction Activities).
5. Each discharger shall submit a copy of each amendment to the BMP Program for its site to the Executive Officer no later than the implementation date of the amendment.
6. A copy of this Order and the BMP Program Manual for the site shall be kept at a readily accessible location at each Discharger's site and shall be available to on-site personnel at all times.
7. Measures (such as construction of berms) necessary to prevent **storm water runoff associated with industrial activity** from commingling with other storm water runoff shall be implemented in accordance with the following schedule:
  - a. At sites listed in Finding 5: no later than six (6) months after the date of adoption of this Order.
  - b. At existing sites not listed in Finding 5: no later than six (6) months after the date of the Notice of Applicability for the site issued by the Executive Officer.
  - c. At new sites : before initiating ship construction, modification, repair, or maintenance activities.
8. Each discharger shall comply with lawful requirements of municipalities, counties, drainage districts, and other local agencies regarding discharges entering storm drain systems or other watercourses under their jurisdiction,

including applicable requirements in municipal storm water management programs developed to comply with NPDES permits issued by the SDRWQCB to local agencies.

9. Each discharger shall comply with all requirements of the Standard Provisions (Attachment C), which are part of this Order.
10. This permit applies to each site listed in Finding 5 immediately upon the effective date of this permit. This permit applies to existing sites not listed in Finding 5 and to new sites immediately upon issuance of a Notice of Applicability for the site by the Executive Officer.
11. Implementation of a BMP Program does not, in and of itself, constitute compliance with the receiving water limitations or other requirements of this Order. If discharges cause or contribute to any impairment of a beneficial use or any violation of the receiving water limitations of this Order, the discharger shall conduct an investigation to determine the source(s) of pollutants causing or contributing to such impairment or violation, and the persistence thereof. Based on the findings of the completed investigation, the discharger shall submit to the Executive Officer a technical report that presents the results of this investigation, evaluates whether its BMP Program will prevent future beneficial use impairment and receiving water limitation violation, and includes a description of and schedule for implementation of any necessary modifications to its BMP Program. The discharger shall complete and submit the technical report within 60 days after the impairment or violation is identified, unless a different time frame is specified by the Executive Officer. The discharger shall document the status and effectiveness of such modifications to the BMP Program in its annual report (see Monitoring and Reporting Program).

#### **F. REPORTING REQUIREMENTS**

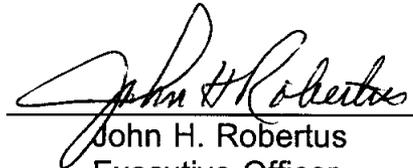
1. Within six months after the date of adoption of this Order, each discharger with an existing site listed in Finding 5 shall submit to the Executive Officer a technical report which:
  - a. completely describes its site, facilities, activities, and discharges;
  - b. contains all the information which would be included in a complete NPDES permit application; and
  - c. includes any other information requested by the Executive Officer.
2. Within 60 days after the date of the Notice of Applicability for the site issued by Executive Officer, each discharger with an existing site not listed in Finding 5 shall submit to the Executive Officer a technical report which:
  - a. completely describes its site, facilities, activities, and discharges;

- b. contains all the information which would be included in a complete NPDES permit application; and
  - c. includes any other information requested by the Executive Officer.
3. At least 180 days before initiating ship construction, modification, repair, or maintenance activities at the site, each discharger with a new site or with plans for a new site shall submit to the Executive Officer a technical report which:
  - a. completely describes its site, facilities, activities, and discharges;
  - b. contains all the information which would be included in a complete NPDES permit application; and
  - c. includes any other information requested by the Executive Officer.
4. Annually, with each annual report (see Monitoring and Reporting Program), each discharger shall submit to the Executive Officer a technical report which:
  - a. contains an update of the information provided in the technical report submitted in accordance with Reporting Requirement F.1, F.2, or F.3 above; and
  - b. includes any other information requested by the Executive Officer.
5. No sooner than 240 days and no later than 180 days before the date of expiration of this Order, each discharger shall submit to the Executive Officer a technical report which:
  - a. completely describes its site, facilities, activities, and discharges;
  - b. contains all the information which would be included in a complete NPDES permit application; and
  - c. includes any other information requested by the Executive Officer.
6. Within fourteen (14) days of completion of all measures necessary to comply with Prohibition A.9 and Discharge Specification B.11 at its site, each discharger shall submit written notification to the Executive Officer that such measures have been completed. The notification shall include certification by a Professional Engineer registered in the State of California that such measures are adequate to comply with Prohibition A.9 and Discharge Specification B.11.
7. Within fourteen (14) days of completion of all measures necessary to comply with Provision E.7 at its site, each discharger shall submit written notification to the Executive Officer that such measures have been completed. The notification shall include certification by a Professional Engineer registered in the State of California that such measures are adequate to comply with Provision E.7.

**G. NOTIFICATIONS**

1. This permit will continue in force and effect until superseded by a new permit or rescinded.
2. Requirements in Order Nos. 83-11, 85-01, and 85-05 are superseded by the requirements in this Order when this Order becomes effective.
3. Facilities to which this Order applies must be covered by this Order. This Order includes requirements for storm water discharges associated with industrial activity at ship construction, modification, repair, and maintenance sites. Therefore, facilities to which this Order applies do not also need to be covered by the statewide general industrial storm water permit adopted by the SWRCB (currently Order No. 97-03-DWQ, NPDES General Permit No. CAS000001).
4. This Order does not include requirements for storm water discharges associated with construction activity. Therefore, facilities to which this Order applies also need to be covered by the statewide general construction storm water permit adopted by the SWRCB (currently Order No. 92-08 DWQ, NPDES General Permit No. CAS000002) for discharges to which that Order applies.
5. This Order does not apply to discharges of radioactive materials regulated under the Atomic Energy Act of 1954, as amended (42 U.S.C. 2011 *et seq.*).

I, John H. Robertus, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region on October 15, 1997.

  
John H. Robertus  
Executive Officer

**ATTACHMENT A  
BEST MANAGEMENT PRACTICES PROGRAM REQUIREMENTS**

1. Objectives

The Best Management Practices Program has two primary objectives:

- a. To identify and evaluate sources of wastes and pollutants associated with ship construction, modification, repair, and maintenance facilities and activities which may affect the quality of waters of the state and/or waters of the United States; and
- b. To identify and implement site-specific Best Management Practices to reduce or prevent the discharge of wastes and pollutants to waters of the state and waters of the United States.

2. Best Management Practices Program Manual

Each Discharger's Best Management Practices (BMP) Program shall be set forth in a written BMP Program Manual that contains descriptions of on-site activities, pollutant sources, and pollutants; descriptions of BMPs used at the site; drawings; maps; and copies of and/or references to parts of other relevant programs. The BMP Program Manual shall be revised whenever appropriate and shall be readily available for review by facility employees, other on-site personnel, and SDRWQCB inspectors.

The BMP Program Manual is considered a report that shall be available to the public from the SDRWQCB under Section 308(b) of the Clean Water Act.

3. Planning and Organization

- a. Pollution Prevention and Control Personnel

The BMP Program Manual shall identify the positions and individuals responsible for development, implementation, and revision of the BMP Program and for conducting all monitoring required by this Order. The BMP Program Manual shall clearly identify the responsibilities, duties, and activities of all pollution prevention and control personnel.

- b. Related Regulatory Requirements

The BMP Program Manual shall contain or incorporate by reference the appropriate elements of programs implemented at the site in connection with other regulatory requirements. Each Discharger shall review all local, State, and Federal requirements that impact, complement, are

related to, or are consistent with the requirements of this Order. The BMP Program Manual shall identify any existing on-site programs that include water pollution prevention or control measures or that relate to the requirements of this Order. For example, each Discharger whose site is subject to Federal Spill Prevention Control and Countermeasures requirements should already have implemented a program to control spills of certain hazardous materials. Similarly, each Discharger whose site is subject to air quality related permits and regulations may already have evaluated activities that generate dust or particulates.

4. Site Map

The BMP Program Manual shall include a site map which includes notes, legends, and other data as appropriate to ensure that the site map is clear and understandable. The site map shall be on an 8-1/2 x 11 inch or larger sheet. If necessary, the required information may be shown on multiple site maps.

The following information shall be included on the site map:

- a. The site boundaries; the boundaries of all drainage areas on the site ; portions of the site impacted by run-on from surrounding areas; direction of flow and outlet point of each drainage area; on-site and nearby waters of the United States; areas of soil erosion; and municipal and on-site storm drain inlets into which runoff from the site may flow.
- b. The location of the site runoff collection and conveyance system and associated points of discharge, direction of flow, and any structural control measures that affect site runoff and run-on. Examples of structural control measures are storm drain inlets, catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.
- c. The boundaries of all impervious areas of the site, including paved areas, buildings, covered storage areas, or other roofed structures.
- d. Locations where materials are directly exposed to precipitation and the locations where significant spills or leaks identified in accordance with Section 6.a.(4) below have occurred.
- e. Areas of industrial activity. This shall include the locations of all storage areas and storage tanks, shipping and receiving areas, fueling areas, vehicle and equipment storage/maintenance areas, material handling and processing areas, waste treatment, storage, and disposal areas, dust or particulate generating areas, cleaning and rinsing areas, and

other areas of industrial activity which are potential pollutant sources.

5. List of Significant Materials

The BMP Program Manual shall include a list of significant materials handled and stored at the site. For each material on the list, the locations where the material is stored, received, shipped, and handled, as well as the typical quantities and frequencies, shall be described. Materials shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

6. Description of Potential Pollutant Sources

a. The BMP Program Manual shall include a narrative description of the industrial activities at the site, as identified in accordance with Section 4.e above, associated potential pollutant sources, and pollutants that could be discharged. At a minimum, the following items related to industrial activities at the site shall be addressed:

(1) Industrial Processes

Each industrial process; the type, characteristics, and quantity of significant materials used in or resulting from the process; and a description of the manufacturing, cleaning, rinsing, recycling, disposal, or other activities related to the process shall be described. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(2) Material Handling and Storage Areas

Each handling and storage area; the type, characteristics, and quantity of significant materials handled or stored; shipping, receiving, and loading procedures; and spill and leak prevention and response procedures shall be described. Where applicable, areas protected by containment structures and the corresponding containment capacity shall be described.

(3) Dust and Particulate Generating Activities

All activities that generate dust or particulates and their discharge locations, the characteristics of dust and particulate pollutants, the approximate quantity of dust and particulate pollutants generated, and the primary locations where dust and

particulate pollutants would settle shall be identified.

(4) Significant Spills and Leaks

Materials that have spilled or leaked in **significant quantities** since April 17, 1994, including toxic chemicals (listed in 40 CFR 302) that have been discharged, as reported on U.S. Environmental Protection Agency (USEPA) Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR 110, 117, and 302) shall be described.

The description shall include the type, characteristics, and approximate quantity of the materials spilled or leaked, the cleanup or remedial actions that have occurred or are planned, the approximate remaining quantity of materials that could be discharged, and the preventive measures taken to ensure spills and leaks do not recur. This list shall be updated continuously during the term of this Order.

(5) Discharges

Each Discharger shall investigate its site to identify all discharges and their sources. As part of this investigation, all drains (inlets and outlets) shall be evaluated to identify whether they connect to an on-site or municipal storm drain system or otherwise empty into waters of the United States.

All discharges shall be described. This shall include the source, quantity, frequency, and characteristics of the discharges and associated drainage area.

The BMP Program Manual shall include BMPs to prevent, or minimize the potential for, contact of water discharged from the site with significant materials and equipment.

(6) Soil Erosion

The site locations where soil erosion could occur shall be identified.

- b. The BMP Program Manual shall include a summary of all areas of industrial activities, potential pollutant sources, and pollutants that could be discharged. This information shall be summarized in a form similar to Table A. The last column of Table A, "Best Management Practices,"

shall be completed in accordance with Section 8 below.

**TABLE A**

**EXAMPLE**

**ASSESSMENT OF POTENTIAL POLLUTION SOURCES AND  
CORRESPONDING BEST MANAGEMENT PRACTICES**

**SUMMARY**

Area	Activity	Pollutant Source	Pollutant	Best Management Practices
Vehicle & Equipment Fueling	Fueling	Spills and leaks during delivery	fuel oil	<ul style="list-style-type: none"> <li>- Use spill and overflow protection</li> <li>- Minimize run-on of storm water into the fueling area</li> </ul>
		Spills caused by topping off fuel tanks	fuel oil	<ul style="list-style-type: none"> <li>- Cover fueling area</li> <li>- Use dry cleanup methods rather than hosing down area</li> </ul>
		Hosing or washing down fuel area	fuel oil	<ul style="list-style-type: none"> <li>- Implement proper spill prevention control program</li> <li>- Implement adequate preventive maintenance program to prevent tank and line leaks</li> </ul>
		Leaking storage tanks	fuel oil	<ul style="list-style-type: none"> <li>- Inspect fueling areas regularly to detect problems before they occur</li> </ul>
		Rainfall running off fueling area, and rainfall running onto and off fueling area	fuel oil	<ul style="list-style-type: none"> <li>- Train employees on proper fueling, cleanup, and spill response techniques.</li> </ul>

7. Assessment of Potential Pollutant Sources

- a. The BMP Program Manual shall include a narrative assessment of all industrial activities and potential pollutant sources as described in accordance with Section 6 above to determine:
- (1) Which areas of the site and activities at the site are likely sources of pollutants, and
  - (2) Which pollutants are likely to be discharged. When performing this assessment, each Discharger shall consider and evaluate various factors, including current BMPs; quantities of significant materials handled, produced, stored, or disposed of; location of potential pollutant sources; form of pollutants; likelihood of exposure of pollutants to wind and site runoff; history of spills and leaks; run-on from off-site sources; and other factors as appropriate for each potential pollutant source and each pollutant.
- b. The BMP Program Manual shall identify the areas of and activities at the site that are likely sources of pollutants and the corresponding pollutants that are likely to be discharged.

Each Discharger shall develop and implement BMPs as appropriate and necessary to prevent, or minimize the potential for, the discharge of pollutants associated with each potential pollutant source. The BMPs shall be described in accordance with Section 8 below.

8. Best Management Practices

- a. The BMP Program Manual shall include a narrative description of the BMPs to be implemented at the site for each pollutant and its potential source(s) identified in accordance with Sections 6 and 7 above. The BMPs shall be developed and implemented to prevent, or minimize the potential for, the discharge of pollutants. Each pollutant and its potential source(s) may require one or more BMPs. Some BMPs may be appropriate for multiple pollutants and/or multiple potential sources, while other BMPs may be appropriate for only a single pollutant and/or only a single potential source.

The description of the BMPs shall identify the BMPs as (1) existing BMPs, (2) existing BMPs to be revised and implemented, or (3) new BMPs to be implemented. The description shall also include a discussion of the effectiveness of each BMP to prevent, or minimize the potential for, the discharge of pollutants. The BMP Program Manual

shall include a summary of all BMPs implemented for each potential pollutant source. This information shall be summarized in a form similar to Table A.

- b. Each Discharger shall give highest priority to development and implementation of "Preventive BMPs," i.e. measures to reduce or eliminate the generation of pollutants and waste, such as waste minimization and **Pollution Prevention (P2)**.

In addition, each Discharger shall develop and implement "Control BMPs," i.e. measures to control or manage pollutants and waste after they are generated and before they come into contact with water, including measures to prevent leaks, spills, and other releases.

Each discharger shall also develop and implement "Treatment BMPs," i.e. measures to remove pollutants and waste from water released to San Diego Bay.

As a contingency, each Discharger shall also develop and, as necessary, implement "Response BMPs," i.e. measures to respond to leaks, spills, and other releases with containment, control, and cleanup to prevent, or minimize the potential for, the discharge of pollutants and to minimize the adverse effects of such discharges.

- c. The BMP Program shall include BMPs which adequately address the following:

- (1) Control of large solid materials
- (2) Abrasive blasting
- (3) Oil, grease, and fuel transfers
- (4) Paint and solvent use
- (5) Dust and overspray
- (6) Over water activities
- (7) Storm drain inlet protection
- (8) Hose, piping, and fitting use and maintenance
- (9) Segregation of water not containing pollutants from pollutants and from water containing pollutants
- (10) Segregation of water from debris
- (11) Hydroblasting
- (12) Material (including waste) storage
- (13) Sewage (black water) disposal
- (14) Gray water disposal
- (15) Oily bilge and ballast water disposal

- (16) Floating dry dock, graving dock, shipbuilding ways, and marine railway cleanup
- (17) Sally port protection
- (18) Discharges resulting from wind, tidal action, and site runoff (including rainfall runoff and other miscellaneous water flows)
- (19) Leaks and spills
- (20) Waste (including sludge) disposal
- (21) Recovery of ship launch grease / wax
- (22) Other activities with potential to result in discharges of wastes or pollutants to waters of the United States.

d. The BMP Program Manual shall include non-structural and structural BMPs as appropriate.

(1) Non-structural BMPs include but are not limited to:

(a) Good Housekeeping

This consists of practical procedures to maintain a clean and orderly site, to separate water from pollutants, and to separate pollutants from water.

(b) Preventive Maintenance

This includes the regular inspection and maintenance, including testing, of structural controls (catch basins, oil/water separators, etc.) as well as other site equipment and systems.

(c) Material Handling and Storage

This includes procedures to minimize the potential for spills and leaks and to minimize exposure of significant materials to water.

(d) Spill and Leak Response

This includes containment, control, and cleanup procedures.

(e) On-site Personnel Training

This includes training of all on-site personnel whose actions or lack thereof could result in the discharge of

pollutants. Such personnel include employees of each Discharger as well as other on-site personnel, such as personnel associated with subcontractors, customers (e.g. US Navy), and others. This also includes training of personnel who are responsible for (1) implementing the BMP Program, (2) conducting inspections, sampling, and visual observations, and (3) managing the site drainage system. Training should address topics such as good housekeeping, material handling and storage, spill response, and actions necessary to implement all BMPs identified in the BMP Program Manual. The BMP Program Manual shall identify periodic dates for such training. Records shall be maintained of all training sessions held.

(f) Waste Handling / Recycling

This includes procedures and processes to handle, store, recycle, and dispose of waste materials.

(g) Recordkeeping and Internal Reporting

This includes procedures to ensure that all records of inspections, spills, maintenance activities, corrective actions, visual observations, etc., are developed, retained, and provided, as necessary, to the appropriate personnel.

(h) Erosion Control and Site Stabilization

This includes all sediment and erosion control activities. This may include the planting and maintenance of vegetation, diversion of run-on and runoff, placement of sandbags, silt screens, or other sediment and erosion control devices, etc.

(i) Inspections

This includes, in addition to the preventive maintenance inspections identified above, an inspection schedule of all potential pollutant sources. Tracking and follow-up procedures shall be implemented to ensure adequate corrective actions are taken and adequate BMPs are developed and implemented.

## (j) Quality Assurance

This includes procedures to ensure that the BMP Program is adequate and that all elements of the BMP Program and Monitoring and Reporting Program are completely implemented.

## 2. Structural BMPs include but are not limited to:

## (a) Overhead Coverage

This includes structures that provide coverage over or enclosure of materials, work areas, and potential pollutant sources .

## (b) Retention Ponds

This includes basins, ponds, surface impoundments, bermed areas, etc., that prevent pollutants from being discharged from the site.

## (c) Control Devices

This includes berms or other devices that channel or route water away from potential pollutant sources.

## (d) Secondary Containment Structures

This includes structures around storage tanks and other areas for the purpose of containing leaks and spills.

## (e) Treatment

This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., that remove pollutants from water before they are discharged.

9. Annual Comprehensive Site Compliance Evaluation

Each Discharger shall conduct at least one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1-June 30). Evaluations shall be conducted not less than 8 or more than 16 months apart. The BMP Program shall be revised, as appropriate, and the revisions implemented within 90 days of the evaluation. Evaluations shall include the following:

- a. A review of all visual observation records, inspection records, and sampling and analysis results.
- b. A visual inspection of all potential pollutant sources for evidence of, or the potential for, the discharge of pollutants.
- c. A review and evaluation of all BMPs (both structural and non-structural) to determine whether the BMPs are adequate, properly implemented and maintained or whether additional BMPs are needed. A visual inspection of equipment needed to implement the BMP Program, such as spill response equipment, shall be included.
- d. An evaluation report that includes, (i) identification of personnel performing the evaluation, (ii) the date(s) of the evaluation, (iii) necessary BMP Program revisions, (iv) schedule for implementing BMP Program revisions, (v) any incidents of non-compliance and the corrective actions taken, and (vi) a certification that the Discharger is in compliance with this Order. If the above certification cannot be provided, the evaluation report shall include an explanation of why the Discharger is not in compliance with this Order. The evaluation report shall be submitted as part of the annual report (see Monitoring and Reporting Program), retained for at least five years, and signed and certified in accordance with the requirements of this Order.

**ATTACHMENT B  
BASIN PLAN WATER QUALITY OBJECTIVES  
APPLICABLE TO SAN DIEGO BAY**

1. Bacterial Characteristics:
  - a. The fecal coliform concentration shall not exceed a log mean of 200/100 ml based on a minimum of not less than five samples for any 30 day period. During any 30 day period, not more than 10 percent of the samples shall exceed 400/100 ml. However, if the discharge is in the vicinity where shellfish may be harvested for human consumption, the limits are 70 MPN/100 ml and 230/100 ml respectively.
  - b. In San Diego Bay where bay waters are used for whole fish handling, the density of Escherichia Coli (E. Coli) shall not exceed 7/ml in more than 20 percent of any 20 daily consecutive samples of bay water.
  - c. In waters designated for contact recreation, the enterococci limit is 35 colonies/ml for steady state measurement; and ranges from 104 to 500 colonies/ml maximum at any time measurement.
  
2. Physical Characteristics
  - a. Waters shall be free of coloration that causes nuisance or adversely affects beneficial uses.
  - b. The natural color of fish, shellfish or other resources shall not be impaired.
  - c. Waters shall not contain floating material, including solids, liquids, foams, and scum, in concentrations that cause nuisance or adversely affect beneficial uses.
  - d. Waters shall not contain oils, greases, waxes or other materials in concentrations which result in a visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or otherwise adversely affect beneficial uses.
  - e. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.

- f. Waters shall not contain taste or odor-producing substances in concentrations that impart undesirable tastes or odors to fish flesh or other edible products of aquatic origin, or which cause a nuisance or adversely affect beneficial uses.
- g. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. The transparency of San Diego Bay waters, insofar as it may be influenced by any controllable factor, either directly or through induced conditions, shall not be less than 8 feet in more than 20 percent of the readings in any zone, as measured by a standard Secchi disk. Wherever the water is less than 10 feet deep, the Secchi disk reading shall not be less than 80 percent of the depth in more than 20 percent of the readings in any zone.
- h. The natural receiving water temperature shall not be altered unless it can be demonstrated to the satisfaction of the Regional Board that such alteration in temperature does not adversely affect beneficial uses.

3. Chemical Characteristics

- a. Waters shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.
- b. The discharge of wastes shall not cause concentrations of un-ionized ammonia ( $\text{NH}_3$ ) to exceed 0.025 mg/l (as N).
- c. The annual mean dissolved oxygen concentration shall not be less than 7 milligrams per liter (mg/l) more than 10 percent of the time.
- d. The pH shall not be depressed below 7.0 nor raised above 9.0. Changes in normal ambient pH levels shall not exceed 0.2 units from that which occurs naturally.
- e. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentrations that adversely affect beneficial uses. Pesticides shall not be present at levels which will bioaccumulate in aquatic organisms to levels which are harmful to human health, wildlife, or aquatic organisms.

- f. Waters shall not contain taste or odor-producing substances at concentrations which cause a nuisance or adversely affect beneficial uses.
- g. The natural taste and odor of fish, shellfish or other water resources used for human consumption shall not be impaired.
- h. Waters shall not contain toxic pollutants in excess of the numerical objectives applicable to California specified in 40 CFR 131.36 (§131.16 revised at 57 FR 60848, December 22, 1992).

4. Radioactivity

Radionuclides shall not be present in concentrations that are deleterious to human, plant, animal, or aquatic life nor that result in the accumulation of radionuclides in the food web to an extent that presents a hazard to human, plant, animal, or aquatic life.

5. Biological Characteristics

- a. Waters shall be maintained free of toxic substances in concentrations that are toxic to, or that produce detrimental physiological responses in human, plant, animal, or aquatic life. Compliance with this objective will be determined by use of indicator organisms, analysis of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Board.
- b. The survival of aquatic life in waters subjected to a waste discharge, or other controllable water quality factors, shall not be less than that for the same water body in areas unaffected by the waste discharge or, when necessary, for other control water that is consistent with the requirements specified in USEPA, State Water Resources Control Board, or other protocol authorized by the Regional Board. As a minimum, compliance with this objective shall be evaluated with a 96-hour acute bioassay.

**ATTACHMENT C  
STANDARD PROVISIONS**

1. The following sections of 40 CFR are attached hereto and incorporated into this permit by reference:
  - (a) 122.5 *Effect of a permit* (Attachment D)
  - (b) 122.21 *Application for a permit* (Attachment D)
  - (c) 122.22 *Signatories to permit applications and reports* (Attachment D)
  - (d) 122.41 *Conditions applicable to all permits* (Attachment D)
  - (e) 122.61 *Transfer of permits* (Attachment D) [Also see Standard Provision 5]
  - (f) 122.62 *Modification or revocation of permits* (Attachment D) [Also see Standard Provisions 2 and 3]
  - (g) 122.63 *Minor modifications of permits* (Attachment D)
  - (h) 122.64 *Termination of permits* (Attachment D) [Also see Standard Provision 3]
2. *Review and revision of permit:* Upon application by any affected person, or on its own motion, the Regional Board may review and revise this permit. [CWC § 13263(e); also see Standard Provision 1.(f)]
3. *Termination or modification of permit:* This permit may be terminated or modified for cause, including, but not limited to, all of the following:
  - (a) Violation of any condition contained in this permit.
  - (b) Obtaining this permit by misrepresentation, or failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the permitted discharge. [CWC § 13381; also see Standard Provisions 1.(d) [40 CFR 122.41(f)], 1.(f) and 1. (h)]
4. *Material change:* Not less than 180 days prior to any material change in the character, location, volume, or amount of waste discharged, the

discharger shall submit a technical report describing such changes. Such changes include but are not limited to the following:

- (a) Addition of a major industrial waste discharge to a discharge of essentially domestic sewage, or the addition of a new process or product by an industrial facility resulting in a change in the character of the waste.
  - (b) Significant change in disposal method, e.g., change from land disposal to a direct discharge to water, or change in the method of treatment which would significantly alter the characteristics of the waste.
  - (c) Significant change in the disposal area, e.g., moving the discharge to another drainage area, to a different water body, or to a disposal area significantly removed from the original area potentially causing different water quality or nuisance problems.
  - (d) Increase in flow beyond that specified in the waste discharge requirements.
  - (e) Increase in area or depth to be used for solid waste disposal beyond that specified in the waste discharge requirements. [CWC § 13372, 13376, 13264, 23 CCR 2210]
  - (f) Any substantial change in the amount or characteristics of pollutants used, handled, stored, or generated.
  - (g) Any new discharge of pollutants or new potential pollutant source.
  - (h) Other circumstances which could result in a material change in the character, amount, or location of discharges. [CWC § 13372, 13264, 23 CCR 2210]
5. *Transfers*: When this permit is transferred to a new owner or operator, such requirements as may be necessary under the California Water Code may be incorporated into this permit. (Also see Standard Provision 1.(d) [40 CFR 122.41(l)(3)] and Standard Provision 1.(e).)
  6. *Conditions not stayed*: The filing of a request by the discharger for modification, revocation and reissuance, or termination of this Order, or a notification of planned change in or anticipated noncompliance with this Order does not stay any condition of this Order.

7. *Monitoring and Reporting Program:* The discharger shall conduct monitoring and submit reports in accordance with Monitoring and Reporting Program (MRP) No. 97-36. Monitoring results shall be reported at the intervals specified in MRP No. 97-36. [CWC § 13267 & 13383, 23 CCR 2230, 40 CFR 122.43(a), 122.44(l)(4), 122.48]
8. *Availability:* A copy of this Order shall be kept at a readily accessible location at the discharger's site and shall be available to on-site personnel at all times.
9. *Duty to minimize or correct adverse impacts:* The discharger shall take all reasonable steps to minimize or correct any adverse impact on the environment resulting from noncompliance with this Order, including such accelerated or additional monitoring as may be necessary to determine the nature and impact of the noncompliance.
10. *Responsibilities, liabilities, legal action, penalties:*  
The Porter-Cologne Water Quality Control Act provides for civil and criminal penalties comparable to, and in some cases greater than, those provided for under the Clean Water Act. [CWC § 13385, 13387]

Nothing in this Order shall be construed to protect the discharger from its liabilities under federal, state, or local laws.

Except as provided for in 40 CFR 122.41(m) and (n), nothing in this Order shall be construed to relieve the discharger from civil or criminal penalties for noncompliance.

Nothing in this Order shall be construed to preclude the institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties to which the discharger is or may be subject to under Section 311 of the CWA.

Nothing in this Order shall be construed to preclude institution of any legal action or relieve the discharger from any responsibilities, liabilities, or penalties established pursuant to any applicable state law or regulation under authority preserved by Section 510 of the CWA.

11. *Noncompliance:* Any noncompliance with this permit constitutes violation of the California Water Code and is grounds for denial of an application for permit modification. (Also see Standard Provision 1.(d) [40 CFR 122.41(a)])
12. *Discharge is a privilege:* No discharge of waste into waters of the state, whether or not the discharge is made pursuant to waste discharge

requirements, shall create a vested right to continue the discharge. All discharges of waste into waters of the state are privileges, not rights.  
[CWC § 13263(g)]

13. *Permittee:* For the purposes of this permit, the term "permittee" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "discharger" used elsewhere in this permit.
14. *Director:* For the purposes of this permit, the term "Director" used in parts of 40 CFR incorporated into this permit by reference and/or applicable to this permit shall have the same meaning as the term "SDRWQCB" used elsewhere in this permit, except that in 40 CFR 122.41(h) & (i), "Director" shall mean "SDRWQCB, SWRCB, and USEPA."
15. *Effective date:* This Order shall become effective ten days after the date of its adoption provided the USEPA Regional Administrator has no objection. If the Regional Administrator objects to its issuance, this Order shall not become effective until such objection is withdrawn.
16. *Expiration:* This permit expires on October 15, 2002. [40 CFR 122.43, 122.44(h), 122.46]
17. *Continuation of expired permit:* After this permit expires, the terms and conditions of this permit are automatically continued pending issuance of a new permit if all requirements of the federal NPDES regulations on the continuation of expired permits are complied with. [40 CFR 122.6, 23 CCR 2235.4]
18. *Applications:* Any application submitted by the discharger for reissuance or modification of this permit shall satisfy all applicable requirements specified in federal regulations as well as any additional requirements for submittal of a Report of Waste Discharge specified in the California Water Code and the California Code of Regulations.
19. *Confidentiality:* Except as provided for in 40 CFR 122.7, no information or documents submitted in accordance with or in application for this permit will be considered confidential, and all such information and documents shall be available for review by the public at the offices of the SDRWQCB.
20. *Severability:* The provisions of this order are severable, and if any provision of this order, or the application of any provisions of this order to any circumstance, is held invalid, the application of such provision to

other circumstances, and the remainder of this order shall not be affected thereby.

21. *Discharge Monitoring Quality Assurance (DMQA) Program:* The discharger shall conduct appropriate analyses on any sample provided by EPA as part of the DMQA program. The results of such analyses shall be submitted to EPA's DMQA manager. [SWRCB/USEPA 106 MOA]
22. *Pollution, Contamination, Nuisance:* The handling, transport, treatment, or disposal of waste or the discharge of waste to waters of the state in a manner which causes or threatens to cause a condition of pollution, contamination, or nuisance, as those terms are defined in CWC § 13050, is prohibited.
23. *Additional Reporting Requirements:* [40 CFR 122.42(a)]
  - a. In addition to the reporting requirements under Standard Provision 1.(d) [40 CFR 122.41(l)], all existing manufacturing, commercial, mining, and silvicultural dischargers must notify the SDRWQCB as soon as they know or have reason to believe:
    - (1) That any activity has occurred or will occur which would result in the discharge, on a routine or frequent basis, of any toxic pollutant which is not limited in the permit, if that discharge will exceed the highest of the following "notification levels:"
      - (a) One hundred micrograms per liter (100  $\mu\text{g/l}$ );
      - (b) Two hundred micrograms per liter (200  $\mu\text{g/l}$ ) for acrolein and acrylonitrile; five hundred micrograms per liter (500  $\mu\text{g/l}$ ) for 2, 4-dinitrophenol and for 2-methyl-4, 6-dinitrophenol; and one milligram per liter (1 mg/l) for antimony;
      - (c) Five (5) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7); or
      - (d) The level established by the SDRWQCB in accordance with 40 CFR 122.44(f).
    - (2) That any activity has occurred or will occur which would result in any discharge, on a non-routine or infrequent basis, of a toxic pollutant which is not limited in the permit, if that

discharge will exceed the highest of the following "notification levels:"

- (a) Five hundred micrograms per liter (500  $\mu\text{g/l}$ )
- (b) One milligram per liter (1 mg/l) for antimony;
- (c) Ten (10) times the maximum concentration value reported for that pollutant in the permit application in accordance with 40 CFR 122.21(g)(7).
- (d) The level established by the SDRWQCB in accordance with 40 CFR 122.44(f).

24. *Report Submittal:* Reports and other documents required under this Order to shall be submitted to:

Surface Water Unit  
California Regional Water Quality Control Board  
San Diego Region  
9771 Clairemont Mesa Boulevard, Suite A  
San Diego, California 92124-1324  
Phone - (619) 467-2952  
Fax - (619) 571-6972

**ATTACHMENT D  
SECTIONS OF 40 CFR INCORPORATED BY REFERENCE**

**40 CFR 122.5 Effect of a permit.**

40 CFR 122.5(a)

(a) Applicable to State programs, see §123.25.

40 CFR 122.5(a)(1)

(1) Except for any toxic effluent standards and prohibitions imposed under section 307 of the CWA and standards for sewage sludge use or disposal" under §405(d) of the CWA, compliance with a permit during its term constitutes compliance, for purposes of enforcement, with sections 301, 302, 306, 307, 318, 403, and 405(a)-(b) of CWA. However, a permit may be modified, revoked and reissued, or terminated during its term for cause as set forth in §§122.62 and 122.64.

40 CFR 122.5(a)(2)

(2) Compliance with a permit condition which implements a particular "standard for sewage sludge use or disposal" shall be an affirmative defense in any enforcement action brought for a violation of that "standard for sewage sludge use or disposal" pursuant to sections 405(e) and 309 of the CWA.

40 CFR 122.5(b)

(b) Applicable to State programs, See §123.25. The issuance of a permit does not convey any property rights of any sort, or any exclusive privilege.

40 CFR 122.5(c)

(c) The issuance of a permit does not authorize any injury to persons or property or invasion of other private rights, or any infringement of State or local law or regulations.

**40 CFR 122.21 Application for a permit (applicable to State programs, see §123.25).**

40 CFR 122.21(a)

(a) Duty to apply. Any person who discharges or proposes to discharge pollutants or who owns or operates a "sludge- only facility" and who does not have an effective permit, except persons covered by general permits under §122.28, excluded under §122.3, or a user of a privately owned treatment works unless the Director requires otherwise under §122.44(m), shall submit a complete application (which shall include a BMP program if necessary under 40 CFR 125.102) to the Director in accordance with this section and part 124.

40 CFR 122.21(b)

(b) Who applies? When a facility or activity is owned by one person but is operated by another person, it is the operator's duty to obtain a permit.

40 CFR 122.21(c)

(c) Time to apply.

40 CFR 122.21(c)(1)

(1) Any person proposing a new discharge, shall submit an application at least 180 days before the date on which the discharge is to commence, unless permission

for a later date has been granted by the Director. Facilities proposing a new discharge of storm water associated with industrial activity shall submit an application 180 days before that facility commences industrial activity which may result in a discharge of storm water associated with that industrial activity. Facilities described under §122.26(b)(14)(x) shall submit applications at least 90 days before the date on which construction is to commence. Different submittal dates may be required under the terms of applicable general permits. Persons proposing a new discharge are encouraged to submit their applications well in advance of the 90 or 180 day requirements to avoid delay. See also paragraph (k) of this section and §122.26(c)(1)(i)(G) and (c)(1)(ii). New discharges composed entirely of storm water, other than those dischargers identified by §122.26(a)(1), shall apply for and obtain a permit according to the application requirements in §122.26(g).

[§122.21(c)(1) amended at 60 FR 17957, April 7, 1995; 60 FR 40235, Aug. 7, 1995]  
40 CFR 122.21(c)(2)

(2) Permits under section 405(f) of CWA.

40 CFR 122.21(c)(2)(i)

(i) Any existing "treatment works treating domestic sewage" required to have, or requesting site-specific pollutant limits as provided in 40 CFR part 503, must submit the permit application information required by paragraph (d)(3)(ii) of this section within 180 days after publication of a standard applicable to its sewage sludge use or disposal practice(s). After this 180 day period, "treatment works treating domestic sewage" may only apply for site-specific pollutant limits for good cause and such requests must be made within 180 days of becoming aware that good cause exists.

[New §122.21(c)(2)(i) added at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(ii)

(ii) Any "treatment works treating domestic sewage" with a currently effective NPDES permit, not addressed under paragraph (c)(2)(i) of this section, must submit the application information required by paragraph (d)(3)(ii) of this section at the time of its next NPDES permit renewal application. Such information must be submitted in accordance with paragraph (d) of this section.

[Former §122.21(c)(2)(i) revised and redesignated as new (ii) at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(iii)

(iii) Any other existing "treatment works treating domestic sewage" not addressed under paragraphs (c)(2)(i) or (ii) of this section must submit the information listed in paragraphs (c)(2)(iii)(A)-(E) of this section, to the Director within 1 year after publication of a standard applicable to its sewage sludge use or disposal practice(s). The Director shall determine when such "treatment works treating domestic sewage" must apply for a permit.

40 CFR 122.21(c)(2)(iii)(A)

(A) Name, mailing address and location of the "treatment works treating domestic sewage;"

40 CFR 122.21(c)(2)(iii)(B)

(B) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public or other entity;

40 CFR 122.21(c)(2)(iii)(C)

(C) A description of the sewage sludge use or disposal practices (including, where applicable, the location of any sites where sewage sludge is transferred for treatment, use, or disposal, as well as the name of the applicator or other contractor who applies the sewage sludge to land, if different from the "treatment works treating domestic sewage," and the name of any distributors if the sewage sludge is sold or given away in a bag or similar enclosure for application to the land, if different from the "treatment works treating domestic sewage");

40 CFR 122.21(c)(2)(iii)(D)

(D) Annual amount of sewage sludge generated, treated, used or disposed (dry weight basis); and

40 CFR 122.21(c)(2)(iii)(E)

(E) The most recent data the "treatment works treating domestic sewage" may have on the quality of the sewage sludge.

[Former §122.21(c)(2)(ii) revised and redesignated as new (iii) at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(iv)

(iv) Notwithstanding paragraphs (c)(2)(i), (ii), or (iii) of this section, the Director may require permit applications from any "treatment works treating domestic sewage" at any time if the Director determines that a permit is necessary to protect public health and the environment from any potential adverse effects that may occur from toxic pollutants in sewage sludge.

[New §122.21(c)(2)(iv) added at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(c)(2)(v)

(v) Any "treatment works treating domestic sewage" that commences operations after promulgation of an applicable "standard for sewage sludge use or disposal" shall submit an application to the Director at least 180 days prior to the date proposed for commencing operations.

[Former §122.21(c)(2)(iii) redesignated as new (v) at 58 FR 9413, Feb. 19, 1993]

40 CFR 122.21(d)

(d) Duty to reapply.

40 CFR 122.21(d)(1)

(1) Any POTW with a currently effective permit shall submit a new application at least 180 days before the expiration date of the existing permit, unless permission for a later date has been granted by the Director. (The Director shall not grant permission for applications to be submitted later than the expiration date of the existing permit.)

40 CFR 122.21(d)(2)

(2) All other permittees with currently effective permits shall submit a new application 180 days before the existing permit expires, except that:

40 CFR 122.21(d)(2)(i)

(i) The Regional Administrator may grant permission to submit an application

later than the deadline for submission otherwise applicable, but no later than the permit expiration date; and

40 CFR 122.21(d)(3)

(3) (i) All applicants for EPA-issued permits, other than POTWs, new sources, and "sludge-only facilities," must complete Forms 1 and either 2b or 2c of the consolidated permit application forms to apply under §122.21 and paragraphs (f), (g), and (h) of this section.

40 CFR 122.21(d)(3)(ii)

(ii) In addition to any other applicable requirements in this part, all POTWs and other "treatment works treating domestic sewage," including "sludge-only facilities," must submit with their applications the information listed at 40 CFR 501.15(a)(2) within the time frames established in paragraph (c)(2) of this section.

40 CFR 122.21(e)

(e) Completeness. The Director shall not issue a permit before receiving a complete application for a permit except for NPDES general permits. An application for a permit is complete when the Director receives an application form and any supplemental information which are completed to his or her satisfaction. The completeness of any application for a permit shall be judged independently of the status of any other permit application or permit for the same facility or activity. For EPA administered NPDES programs, an application which is reviewed under §124.3 is complete when the Director receives either a complete application or the information listed in a notice of deficiency.

40 CFR 122.21(f)

(f) Information requirements. All applicants for NPDES permits shall provide the following information to the Director, using the application form provided by the Director (additional information required of applicants is set forth in paragraphs (g) through (k) of this section).

40 CFR 122.21(f)(1)

(1) The activities conducted by the applicant which require it to obtain an NPDES permit.

40 CFR 122.21(f)(2)

(2) Name, mailing address, and location of the facility for which the application is submitted.

40 CFR 122.21(f)(3)

(3) Up to four SIC codes which best reflect the principal products or services provided by the facility.

40 CFR 122.21(f)(4)

(4) The operator's name, address, telephone number, ownership status, and status as Federal, State, private, public, or other entity.

40 CFR 122.21(f)(5)

(5) Whether the facility is located on Indian lands.

40 CFR 122.21(f)(6)

(6) A listing of all permits or construction approvals received or applied for under any of the following programs:

40 CFR 122.21(f)(6)(i)

(i) Hazardous Waste Management program under RCRA.

40 CFR 122.21(f)(6)(ii)

(ii) UIC program under SDWA.

40 CFR 122.21(f)(6)(iii)

(iii) NPDES program under CWA.

40 CFR 122.21(f)(6)(iv)

(iv) Prevention of Significant Deterioration (PSD) program under the Clean Air Act.

40 CFR 122.21(f)(6)(v)

(v) Nonattainment program under the Clean Air Act.

40 CFR 122.21(f)(6)(vi)

(vi) National Emission Standards for Hazardous Pollutants (NESHAPS) preconstruction approval under the Clean Air Act.

40 CFR 122.21(f)(6)(vii)

(vii) Ocean dumping permits under the Marine Protection Research and Sanctuaries Act.

40 CFR 122.21(f)(6)(viii)

(viii) Dredge or fill permits under section 404 of CWA.

40 CFR 122.21(f)(6)(ix)

(ix) Other relevant environmental permits, including State permits.

40 CFR 122.21(f)(7)

(7) A topographic map (or other map if a topographic map is unavailable) extending one mile beyond the property boundaries of the source, depicting the facility and each of its intake and discharge structures; each of its hazardous waste treatment, storage, or disposal facilities; each well where fluids from the facility are injected underground; and those wells, springs, other surface water bodies, and drinking water wells listed in public records or otherwise known to the applicant in the map area.

40 CFR 122.21(f)(8)

(8) A brief description of the nature of the business.

40 CFR 122.21(g)

(g) Application requirements for existing manufacturing, commercial, mining, and silvicultural dischargers. Existing manufacturing, commercial mining, and silvicultural dischargers applying for NPDES permits, except for those facilities subject to the requirements of §122.21(h), shall provide the following information to the Director, using application forms provided by the Director.

40 CFR 122.21(g)(1)

(1) Outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

40 CFR 122.21(g)(2)

(2) Line drawing. A line drawing of the water flow through the facility with a water balance, showing operations contributing wastewater to the effluent and treatment units. Similar processes, operations, or production areas may be indicated

as a single unit, labeled to correspond to the more detailed identification under paragraph (g)(3) of this section. The water balance must show approximate average flows at intake and discharge points and between units, including treatment units. If a water balance cannot be determined (for example, for certain mining activities), the applicant may provide instead a pictorial description of the nature and amount of any sources of water and any collection and treatment measures.

40 CFR 122.21(g)(3)

(3) Average flows and treatment. A narrative identification of each type of process, operation, or production area which contributes wastewater to the effluent for each outfall, including process wastewater, cooling water, and stormwater runoff; the average flow which each process contributes; and a description of the treatment the wastewater receives, including the ultimate disposal of any solid or fluid wastes other than by discharge. Processes, operations, or production areas may be described in general terms (for example, "dye-making reactor", "distillation tower"). For a privately owned treatment works, this information shall include the identity of each user of the treatment works. The average flow of point sources composed of storm water may be estimated. The basis for the rainfall event and the method of estimation must be indicated.

40 CFR 122.21(g)(4)

(4) Intermittent flows. If any of the discharges described in paragraph (g)(3) of this section are intermittent or seasonal, a description of the frequency, duration and flow rate of each discharge occurrence (except for stormwater runoff, spillage or leaks).

40 CFR 122.21(g)(5)

(5) Maximum production. If an effluent guideline promulgated under section 304 of CWA applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's actual production reported in the units used in the applicable effluent guideline. The reported measure must reflect the actual production of the facility as required by §122.45(b)(2) .

40 CFR 122.21(g)(6)

(6) Improvements. If the applicant is subject to any present requirements or compliance schedules for construction, upgrading or operation of waste treatment equipment, an identification of the abatement requirement, a description of the abatement project, and a listing of the required and projected final compliance dates.

40 CFR 122.21(g)(7)

(7) Effluent characteristics. Information on the discharge of pollutants specified in this paragraph (except information on storm water discharges which is to be provided as specified in §122.26). When "quantitative data" for a pollutant are required, the applicant must collect a sample of effluent and analyze it for the pollutant in accordance with analytical methods approved under 40 CFR part 136. When no analytical method is approved the applicant may use any suitable method but must provide a description of the method. When an applicant has two or more outfalls with substantially identical effluents, the Director may allow the applicant to test only one outfall and report that the quantitative data also apply to the

substantially identical outfalls. The requirements in paragraphs (g)(7)(iii) and (iv) of this section that an applicant must provide quantitative data for certain pollutants known or believed to be present do not apply to pollutants present in a discharge solely as the result of their presence in intake water; however, an applicant must report such pollutants as present. Grab samples must be used for pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform and fecal streptococcus. For all other pollutants, 24-hour composite samples must be used. However, a minimum of one grab sample may be taken for effluents from holding ponds or other impoundments with a retention period greater than 24 hours. In addition, for discharges other than storm water discharges, the Director may waive composite sampling for any outfall for which the applicant demonstrates that the use of an automatic sampler is infeasible and that the minimum of four (4) grab samples will be a representative sample of the effluent being discharged. For storm water discharges, all samples shall be collected from the discharge resulting from a storm event that is greater than 0.1 inch and at least 72 hours from the previously measurable (greater than 0.1 inch rainfall) storm event. Where feasible, the variance in the duration of the event and the total rainfall of the event should not exceed 50 percent from the average or median rainfall event in that area. For all applicants, a flow-weighted composite shall be taken for either the entire discharge or for the first three hours of the discharge. The flow-weighted composite sample for a storm water discharge may be taken with a continuous sampler or as a combination of a minimum of three sample aliquots taken in each hour of discharge for the entire discharge or for the first three hours of the discharge, with each aliquot being separated by a minimum period of fifteen minutes (applicants submitting permit applications for storm water discharges under §122.26(d) may collect flow weighted composite samples using different protocols with respect to the time duration between the collection of sample aliquots, subject to the approval of the Director). However, a minimum of one grab sample may be taken for storm water discharges from holding ponds or other impoundments with a retention period greater than 24 hours. For a flow-weighted composite sample, only one analysis of the composite of aliquots is required. For storm water discharge samples taken from discharges associated with industrial activities, quantitative data must be reported for the grab sample taken during the first thirty minutes (or as soon thereafter as practicable) of the discharge for all pollutants specified in §122.26(c)(1). For all storm water permit applicants taking flow-weighted composites, quantitative data must be reported for all pollutants specified in §122.26 except pH, temperature, cyanide, total phenols, residual chlorine, oil and grease, fecal coliform, and fecal streptococcus. The Director may allow or establish appropriate site-specific sampling procedures or requirements, including sampling locations, the season in which the sampling takes place, the minimum duration between the previous measurable storm event and the storm event sampled, the minimum or maximum level of precipitation required for an appropriate storm event, the form of precipitation sampled (snow melt or rain fall), protocols for collecting samples under 40 CFR part 136, and additional time for submitting data on a case-by-case basis. An applicant is expected to "know or have reason to believe" that

a pollutant is present in an effluent based on an evaluation of the expected use, production, or storage of the pollutant, or on any previous analyses for the pollutant. (For example, any pesticide manufactured by a facility may be expected to be present in contaminated storm water runoff from the facility.)

40 CFR 122.21(g)(7)(i)

(i) (A) Every applicant must report quantitative data for every outfall for the following pollutants:

Biochemical Oxygen Demand (BOD5)

Chemical Oxygen Demand

Total Organic Carbon

Total Suspended Solids

Ammonia (as N)

Temperature (both winter and summer)

pH

40 CFR 122.21(g)(7)(i)(B)

(B) The Director may waive the reporting requirements for individual point sources or for a particular industry category for one or more of the pollutants listed in paragraph (g)(7)(i)(A) of this section if the applicant has demonstrated that such a waiver is appropriate because information adequate to support issuance of a permit can be obtained with less stringent requirements.

40 CFR 122.21(g)(7)(ii)

(ii) Each applicant with processes in one or more primary industry category (see appendix A to part 122) contributing to a discharge must report quantitative data for the following pollutants in each outfall containing process wastewater:

40 CFR 122.21(g)(7)(ii)(A)

(A) The organic toxic pollutants in the fractions designated in table I of appendix D of this part for the applicant's industrial category or categories unless the applicant qualifies as a small business under paragraph (g)(8) of this section. Table II of appendix D of this part lists the organic toxic pollutants in each fraction. The fractions result from the sample preparation required by the analytical procedure which uses gas chromatography/mass spectrometry. A determination that an applicant falls within a particular industrial category for the purposes of selecting fractions for testing is not conclusive as to the applicant's inclusion in that category for any other purposes. [See Notes 2, 3, and 4 of this section.]

40 CFR 122.21(g)(7)(ii)(B)

(B) The pollutants listed in table III of appendix D of this part (the toxic metals, cyanide, and total phenols).

40 CFR 122.21(g)(7)(iii)

(iii) (A) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in table IV of appendix D (certain conventional and nonconventional pollutants) is discharged from each outfall. If an applicable effluent limitations guideline either directly limits the pollutant or, by its express terms, indirectly limits the pollutant through limitations on an indicator, the applicant must

report quantitative data. For every pollutant discharged which is not so limited in an effluent limitations guideline, the applicant must either report quantitative data or briefly describe the reasons the pollutant is expected to be discharged.

40 CFR 122.21(g)(7)(iii)(B)

(B) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants listed in table II or table III of appendix D (the toxic pollutants and total phenols) for which quantitative data are not otherwise required under paragraph (g)(7)(ii) of this section, is discharged from each outfall. For every pollutant expected to be discharged in concentrations of 10 ppb or greater the applicant must report quantitative data. For acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, where any of these four pollutants are expected to be discharged in concentrations of 100 ppb or greater the applicant must report quantitative data. For every pollutant expected to be discharged in concentrations less than 10 ppb, or in the case of acrolein, acrylonitrile, 2,4 dinitrophenol, and 2-methyl-4,6 dinitrophenol, in concentrations less than 100 ppb, the applicant must either submit quantitative data or briefly describe the reasons the pollutant is expected to be discharged. An applicant qualifying as a small business under paragraph (g)(8) of this section is not required to analyze for pollutants listed in table II of appendix D (the organic toxic pollutants).

40 CFR 122.21(g)(7)(iv)

(iv) Each applicant must indicate whether it knows or has reason to believe that any of the pollutants in table V of appendix D of this part (certain hazardous substances and asbestos) are discharged from each outfall. For every pollutant expected to be discharged, the applicant must briefly describe the reasons the pollutant is expected to be discharged, and report any quantitative data it has for any pollutant.

40 CFR 122.21(g)(7)(v)

(v) Each applicant must report qualitative data, generated using a screening procedure not calibrated with analytical standards, for 2,3,7,8-tetrachlorodibenzo-p-dioxin (TCDD) if it:

40 CFR 122.21(g)(7)(v)(A)

(A) Uses or manufactures 2,4,5- trichlorophenoxy acetic acid (2,4,5,-T); 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5,-TP); 2-(2,4,5-trichlorophenoxy) ethyl, 2,2-dichloropropionate (Erbon); O,O-dimethyl O-(2,4,5-trichlorophenyl) phosphorothioate (Ronnel); 2,4,5- trichlorophenol (TCP); or hexachlorophene (HCP); or

40 CFR 122.21(g)(7)(v)(B)

(B) Knows or has reason to believe that TCDD is or may be present in an effluent.

40 CFR 122.21(g)(8)

(8) Small business exemption. An applicant which qualifies as a small business under one of the following criteria is exempt from the requirements in paragraph (g)(7)(ii)(A) or (g)(7)(iii)(A) of this section to submit quantitative data for the pollutants listed in table II of appendix D of this part (the organic toxic pollutants):

40 CFR 122.21(g)(8)(i)

(i) For coal mines, a probable total annual production of less than 100,000 tons per year.

40 CFR 122.21(g)(8)(ii)

(ii) For all other applicants, gross total annual sales averaging less than \$100,000 per year (in second quarter 1980 dollars).

40 CFR 122.21(g)(9)

(9) Used or manufactured toxics. A listing of any toxic pollutant which the applicant currently uses or manufactures as an intermediate or final product or byproduct. The Director may waive or modify this requirement for any applicant if the applicant demonstrates that it would be unduly burdensome to identify each toxic pollutant and the Director has adequate information to issue the permit.

40 CFR 122.21(g)(10)

(10) [Reserved]

40 CFR 122.21(g)(11)

(11) Biological toxicity tests. An identification of any biological toxicity tests which the applicant knows or has reason to believe have been made within the last 3 years on any of the applicant's discharges or on a receiving water in relation to a discharge.

40 CFR 122.21(g)(12)

(12) Contract analyses. If a contract laboratory or consulting firm performed any of the analyses required by paragraph (g)(7) of this section, the identity of each laboratory or firm and the analyses performed.

40 CFR 122.21(g)(13)

(13) Additional information. In addition to the information reported on the application form, applicants shall provide to the Director, at his or her request, such other information as the Director may reasonably require to assess the discharges of the facility and to determine whether to issue an NPDES permit. The additional information may include additional quantitative data and bioassays to assess the relative toxicity of discharges to aquatic life and requirements to determine the cause of the toxicity.

40 CFR 122.21(h)

(h) Application requirements for manufacturing, commercial, mining and silvicultural facilities which discharge only non-process wastewater. Except for stormwater discharges, all manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits which discharge only non-process wastewater not regulated by an effluent limitations guideline or new source performance standard shall provide the following information to the Director, using application forms provided by the Director:

40 CFR 122.21(h)(1)

(1) Outfall location. Outfall number, latitude and longitude to the nearest 15 seconds, and the name of the receiving water.

40 CFR 122.21(h)(2)

(2) Discharge date (for new dischargers). Date of expected commencement of

discharge.

40 CFR 122.21(h)(3)

(3) Type of waste. An identification of the general type of waste discharged, or expected to be discharged upon commencement of operations, including sanitary wastes, restaurant or cafeteria wastes, or noncontact cooling water. An identification of cooling water additives (if any) that are used or expected to be used upon commencement of operations, along with their composition if existing composition is available.

40 CFR 122.21(h)(4)

(4) Effluent characteristics.

40 CFR 122.21(h)(4)(i)

(i) Quantitative data for the pollutants or parameters listed below, unless testing is waived by the Director. The quantitative data may be data collected over the past 365 days, if they remain representative of current operations, and must include maximum daily value, average daily value, and number of measurements taken. The applicant must collect and analyze samples in accordance with 40 CFR part 136. Grab samples must be used for pH, temperature, oil and grease, total residual chlorine, and fecal coliform. For all other pollutants, 24-hour composite samples must be used. New dischargers must include estimates for the pollutants or parameters listed below instead of actual sampling data, along with the source of each estimate. All levels must be reported or estimated as concentration and as total mass, except for flow, pH, and temperature.

40 CFR 122.21(h)(4)(i)(A)

(A) Biochemical Oxygen Demand (BOD<sub>5</sub>).

40 CFR 122.21(h)(4)(i)(B)

(B) Total Suspended Solids (TSS).

40 CFR 122.21(h)(4)(i)(C)

(C) Fecal Coliform (if believed present or if sanitary waste is or will be discharged).

40 CFR 122.21(h)(4)(i)(D)

(D) Total Residual Chlorine (if chlorine is used).

40 CFR 122.21(h)(4)(i)(E)

(E) Oil and Grease.

40 CFR 122.21(h)(4)(i)(F)

(F) Chemical Oxygen Demand (COD) (if non-contact cooling water is or will be discharged).

40 CFR 122.21(h)(4)(i)(G)

(G) Total Organic Carbon (TOC) (if non-contact cooling water is or will be discharged).

40 CFR 122.21(h)(4)(i)(H)

(H) Ammonia (as N).

40 CFR 122.21(h)(4)(i)(I)

(I) Discharge Flow.

40 CFR 122.21(h)(4)(i)(J)

(J) pH.

40 CFR 122.21(h)(4)(i)(K)

(K) Temperature (Winter and Summer).

40 CFR 122.21(h)(4)(ii)

(ii) The Director may waive the testing and reporting requirements for any of the pollutants or flow listed in paragraph (h)(4)(i) of this section if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of a permit can be obtained through less stringent requirements.

40 CFR 122.21(h)(4)(iii)

(iii) If the applicant is a new discharger, he must complete and submit Item IV of Form 2e (see §122.21(h)(4)) by providing quantitative data in accordance with that section no later than two years after commencement of discharge. However, the applicant need not complete those portions of Item IV requiring tests which he has already performed and reported under the discharge monitoring requirements of his NPDES permit.

40 CFR 122.21(h)(4)(iv)

(iv) The requirements of parts i and iii of this section that an applicant must provide quantitative data or estimates of certain pollutants do not apply to pollutants present in a discharge solely as a result of their presence in intake water. However, an applicant must report such pollutants as present. Net credit may be provided for the presence of pollutants in intake water if the requirements of §122.45(g) are met.

40 CFR 122.21(h)(5)

(5) Flow. A description of the frequency of flow and duration of any seasonal or intermittent discharge (except for stormwater runoff, leaks, or spills).

40 CFR 122.21(h)(6)

(6) Treatment system. A brief description of any system used or to be used.

40 CFR 122.21(h)(7)

(7) Optional information. Any additional information the applicant wishes to be considered, such as influent data for the purpose of obtaining "net" credits pursuant to §122.45(g).

40 CFR 122.21(h)(8)

(8) Certification. Signature of certifying official under §122.22.

40 CFR 122.21(h)(8)(i)

(i) Application requirements for new and existing concentrated animal feeding operations and aquatic animal production facilities. New and existing concentrated animal feeding operations (defined in §122.23) and concentrated aquatic animal production facilities (defined in §122.24 ) shall provide the following information to the Director, using the application form provided by the Director:

40 CFR 122.21(h)(1)

(1) For concentrated animal feeding operations:

40 CFR 122.21(h)(1)(i)

(i) The type and number of animals in open confinement and housed under roof.

40 CFR 122.21(h)(1)(ii)

(ii) The number of acres used for confinement feeding.

40 CFR 122.21(h)(1)(iii)

(iii) The design basis for the runoff diversion and control system, if one exists, including the number of acres of contributing drainage, the storage capacity, and the design safety factor.

40 CFR 122.21(h)(2)

(2) For concentrated aquatic animal production facilities:

40 CFR 122.21(h)(2)(i)

(i) The maximum daily and average monthly flow from each outfall.

40 CFR 122.21(h)(2)(ii)

(ii) The number of ponds, raceways, and similar structures.

40 CFR 122.21(h)(2)(iii)

(iii) The name of the receiving water and the source of intake water.

40 CFR 122.21(h)(2)(iv)

(iv) For each species of aquatic animals, the total yearly and maximum harvestable weight.

40 CFR 122.21(h)(2)(v)

(v) The calendar month of maximum feeding and the total mass of food fed during that month.

40 CFR 122.21(j)

(j) Application requirements for new and existing POTWs.

40 CFR 122.21(j)(1)

(1) The following POTWs shall provide the results of valid whole effluent biological toxicity testing to the Director:

40 CFR 122.21(j)(1)(i)

(i) All POTWs with design influent flows equal to or greater than one million gallons per day;

40 CFR 122.21(j)(1)(ii)

(ii) All POTWs with approved pretreatment programs or POTWs required to develop a pretreatment program;

40 CFR 122.21(j)(2)

(2) In addition to the POTWs listed in paragraph (j)(1) of this section, the Director may require other POTWs to submit the results of toxicity tests with their permit applications, based on consideration of the following factors:

40 CFR 122.21(j)(2)(i)

(i) The variability of the pollutants or pollutant parameters in the POTW effluent (based on chemical-specific information, the type of treatment facility, and types of industrial contributors);

40 CFR 122.21(j)(2)(ii)

(ii) The dilution of the effluent in the receiving water (ratio of effluent flow to receiving stream flow);

40 CFR 122.21(j)(2)(iii)

(iii) Existing controls on point or nonpoint sources, including total maximum

daily load calculations for the waterbody segment and the relative contribution of the POTW;

40 CFR 122.21(j)(2)(iv)

(iv) Receiving stream characteristics, including possible or known water quality impairment, and whether the POTW discharges to a coastal water, one of the Great Lakes, or a water designated as an outstanding natural resource; or

40 CFR 122.21(j)(2)(v)

(v) Other considerations (including but not limited to the history of toxic impact and compliance problems at the POTW), which the Director determines could cause or contribute to adverse water quality impacts.

40 CFR 122.21(j)(3)

(3) For POTWs required under paragraph (j)(1) or (j)(2) of this section to conduct toxicity testing, POTWs shall use EPA's methods or other established protocols which are scientifically defensible and sufficiently sensitive to detect aquatic toxicity. Such testing must have been conducted since the last NPDES permit reissuance or permit modification under 40 CFR 122.62(a), whichever occurred later.

40 CFR 122.21(j)(4)

(4) All POTWs with approved pretreatment programs shall provide the following information to the Director: a written technical evaluation of the need to revise local limits under 40 CFR 403.5(c)(1).

40 CFR 122.21(k)

(k) Application requirements for new sources and new discharges. New manufacturing, commercial, mining and silvicultural dischargers applying for NPDES permits (except for new discharges of facilities subject to the requirements of paragraph (h) of this section or new discharges of storm water associated with industrial activity which are subject to the requirements of §122.26(c)(1) and this section (except as provided by §122.26(c)(1)(ii) ) shall provide the following information to the Director, using the application forms provided by the Director:

40 CFR 122.21(k)(1)

(1) Expected outfall location. The latitude and longitude to the nearest 15 seconds and the name of the receiving water.

40 CFR 122.21(k)(2)

(2) Discharge dates. The expected date of commencement of discharge.

40 CFR 122.21(k)(3)

(3) Flows, sources of pollution, and treatment technologies—

40 CFR 122.21(k)(3)(i)

(i) Expected treatment of wastewater. Description of the treatment that the wastewater will receive, along with all operations contributing wastewater to the effluent, average flow contributed by each operation, and the ultimate disposal of any solid or liquid wastes not discharged.

40 CFR 122.21(k)(3)(ii)

(ii) Line drawing. A line drawing of the water flow through the facility with a water balance as described in §122.21(g)(2) .

40 CFR 122.21(k)(3)(iii)

(iii) Intermittent flows. If any of the expected discharges will be intermittent or seasonal, a description of the frequency, duration and maximum daily flow rate of each discharge occurrence (except for stormwater runoff, spillage, or leaks).

40 CFR 122.21(k)(4)

(4) Production. If a new source performance standard promulgated under section 306 of CWA or an effluent limitation guideline applies to the applicant and is expressed in terms of production (or other measure of operation), a reasonable measure of the applicant's expected actual production reported in the units used in the applicable effluent guideline or new source performance standard as required by §122.45(b)(2) for each of the first three years. Alternative estimates may also be submitted if production is likely to vary.

40 CFR 122.21(k)(5)

(5) Effluent characteristics. The requirements in paragraphs (h)(4)(i), (ii), and (iii) of this section that an applicant must provide estimates of certain pollutants expected to be present do not apply to pollutants present in a discharge solely as a result of their presence in intake water; however, an applicant must report such pollutants as present. Net credits may be provided for the presence of pollutants in intake water if the requirements of §122.45(g) are met. All levels (except for discharge flow, temperature, and pH) must be estimated as concentration and as total mass.

40 CFR 122.21(k)(5)(i)

(i) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants or parameters. The Director may waive the reporting requirements for any of these pollutants and parameters if the applicant submits a request for such a waiver before or with his application which demonstrates that information adequate to support issuance of the permit can be obtained through less stringent reporting requirements.

40 CFR 122.21(k)(5)(i)(A)

(A) Biochemical Oxygen Demand (BOD).

40 CFR 122.21(k)(5)(i)(B)

(B) Chemical Oxygen Demand (COD).

40 CFR 122.21(k)(5)(i)(C)

(C) Total Organic Carbon (TOC).

40 CFR 122.21(k)(5)(i)(D)

(D) Total Suspended Solids (TSS).

40 CFR 122.21(k)(5)(i)(E)

(E) Flow.

40 CFR 122.21(k)(5)(i)(F)

(F) Ammonia (as N).

40 CFR 122.21(k)(5)(i)(G)

(G) Temperature (winter and summer).

40 CFR 122.21(k)(5)(i)(H)

(H) pH.

40 CFR 122.21(k)(5)(ii)

(ii) Each applicant must report estimated daily maximum, daily average, and source of information for each outfall for the following pollutants, if the applicant knows or has reason to believe they will be present or if they are limited by an effluent limitation guideline or new source performance standard either directly or indirectly through limitations on an indicator pollutant: all pollutants in table IV of appendix D of part 122 (certain conventional and nonconventional pollutants).  
40 CFR 122.21(k)(5)(iii)

(iii) Each applicant must report estimated daily maximum, daily average and source of information for the following pollutants if he knows or has reason to believe that they will be present in the discharges from any outfall:  
40 CFR 122.21(k)(5)(iii)(A)

(A) The pollutants listed in table III of appendix D (the toxic metals, in the discharge from any outfall: Total cyanide, and total phenols);  
40 CFR 122.21(k)(5)(iii)(B)

(B) The organic toxic pollutants in table II of appendix D (except bis (chloromethyl) ether, dichlorofluoro- methane and trichlorofluoro- methane). This requirement is waived for applicants with expected gross sales of less than \$100,000 per year for the next three years, and for coal mines with expected average production of less than 100,000 tons of coal per year.  
40 CFR 122.21(k)(5)(iv)

(iv) The applicant is required to report that 2,3,7,8 Tetrachlorodibenzo-P-Dioxin (TCDD) may be discharged if he uses or manufactures one of the following compounds, or if he knows or has reason to believe that TCDD will or may be present in an effluent:  
40 CFR 122.21(k)(5)(iv)(A)

(A) 2,4,5-trichlorophenoxy acetic acid (2,4,5-T) (CAS #93-76-5);  
40 CFR 122.21(k)(5)(iv)(B)  
(B) 2-(2,4,5-trichlorophenoxy) propanoic acid (Silvex, 2,4,5-TP) (CAS #93-72-1);  
40 CFR 122.21(k)(5)(iv)(C)

(C) 2-(2,4,5-trichlorophenoxy) ethyl 2,2-dichloropropionate (Erbon) (CAS #136-25-4);  
40 CFR 122.21(k)(5)(iv)(D)  
(D) 0,0-dimethyl 0-(2,4,5-trichlorophenyl) phosphorothioate (Ronnell) (CAS #299-84-3);  
40 CFR 122.21(k)(5)(iv)(E)

(E) 2,4,5-trichlorophenol (TCP) (CAS #95-95-4); or  
40 CFR 122.21(k)(5)(iv)(F)  
(F) Hexachlorophene (HCP) (CAS #70-30-4);  
40 CFR 122.21(k)(5)(v)

(v) Each applicant must report any pollutants listed in table V of appendix D (certain hazardous substances) if he believes they will be present in any outfall (no quantitative estimates are required unless they are already available).  
40 CFR 122.21(k)(5)(vi)

(vi) No later than two years after the commencement of discharge from the proposed facility, the applicant is required to complete and submit Items V and VI of NPDES application Form 2c (see §122.21(g)). However, the applicant need not complete those portions of Item V requiring tests which he has already performed and reported under the discharge monitoring requirements of his NPDES permit.  
40 CFR 122.21(k)(6)

(6) Engineering Report. Each applicant must report the existence of any technical evaluation concerning his wastewater treatment, along with the name and location of similar plants of which he has knowledge.  
40 CFR 122.21(k)(7)

(7) Other information. Any optional information the permittee wishes to have considered.  
40 CFR 122.21(k)(8)

(8) Certification. Signature of certifying official under §122.22.  
40 CFR 122.21(l)

(l) Special provisions for applications from new sources.  
40 CFR 122.21(l)(1)

(1) The owner or operator of any facility which may be a new source(as defined in §122.2) and which is located in a State without an approved NPDES program must comply with the provisions of this paragaraph.  
40 CFR 122.21(l)(2)

(2) (i) Before beginning any on-site construction as defined in §122.29, the owner or operator of any facility which may be a new source must submit information to the Regional Administrator so that he or she can determine if the facility is a new source. The Regional Administrator may request any additional information needed to determine whether the facility is a new source.  
40 CFR 122.21(l)(2)(ii)

(ii) The Regional Administrator shall make an initial determination whether the facility is a new source within 30 days of receiving all necessary information under paragraph (k)(2)(i) of this section.  
40 CFR 122.21(l)(3)

(3) The Regional Administrator shall issue a public notice in accordance with §124.10 of the new source determination under paragraph (k)(2) of this section. If the Regional Administrator has determined that the facility is a new source, the notice shall state that the applicant must comply with the environmental review requirements of 40 CFR 6.600 et seq.  
40 CFR 122.21(l)(4)

(4) Any interested person may challenge the Regional Administrator's initial new source determination by requesting an evidentiary hearing under subpart E of part 124 within 30 days of issuance of the public notice of the initial determination. If all parties to the evidentiary hearing on the determination agree, the Regional Administrator may defer the hearing until after a final permit decision is made, and consolidate the hearing on the determination with any hearing on the permit.  
40 CFR 122.21(m)

(m) Variance requests by non-POTWs. A discharger which is not a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory or regulatory provisions within the times specified in this paragraph:

40 CFR 122.21(m)(1)

(1) Fundamentally different factors.

40 CFR 122.21(m)(1)(i)

(i) A request for a variance based on the presence of "fundamentally different factors" from those on which the effluent limitations guideline was based shall be filed as follows:

40 CFR 122.21(m)(1)(i)(A)

(A) For a request from best practicable control technology currently available (BPT), by the close of the public comment period under §124.10.

40 CFR 122.21(m)(1)(i)(B)

(B) For a request from best available technology economically achievable (BAT) and/or best conventional pollutant control technology (BCT), by no later than:

40 CFR 122.21(m)(1)(i)(B)(1)

(1) July 3, 1989, for a request based on an effluent limitation guideline promulgated before February 4, 1987, to the extent July 3, 1989 is not later than that provided under previously promulgated regulations; or

40 CFR 122.21(m)(1)(i)(B)(2)

(2) 180 days after the date on which an effluent limitation guideline is published in the FEDERAL REGISTER for a request based on an effluent limitation guideline promulgated on or after February 4, 1987.

40 CFR 122.21(m)(1)(ii)

(ii) The request shall explain how the requirements of the applicable regulatory and/or statutory criteria have been met.

40 CFR 122.21(m)(2)

(2) Non-conventional pollutants. A request for a variance from the BAT requirements for CWA section 301(b)(2)(F) pollutants (commonly called "non-conventional" pollutants) pursuant to section 301 (c) of CWA because of the economic capability of the owner or operator, or pursuant to section 301(g) of the CWA (provided however that a §301(g) variance may only be requested for ammonia; chlorine; color; iron; total phenols (4AAP) (when determined by the Administrator to be a pollutant covered by section 301(b)(2)(F)) and any other pollutant which the Administrator lists under section 301(g)(4) of the CWA) must be made as follows:

40 CFR 122.21(m)(2)(i)

(i) For those requests for a variance from an effluent limitation based upon an effluent limitation guideline by:

40 CFR 122.21(m)(2)(i)(A)

(A) Submitting an initial request to the Regional Administrator, as well as to the State Director if applicable, stating the name of the discharger, the permit number, the outfall number(s), the applicable effluent guideline, and whether the discharger is requesting a section 301(c) or section 301(g) modification or both. This

request must have been filed not later than:

40 CFR 122.21(m)(2)(i)(A)(1)

(1) September 25, 1978, for a pollutant which is controlled by a BAT effluent limitation guideline promulgated before December 27, 1977; or

40 CFR 122.21(m)(2)(i)(A)(2)

(2) 270 days after promulgation of an applicable effluent limitation guideline for guidelines promulgated after December 27, 1977; and

40 CFR 122.21(m)(2)(i)(B)

(B) Submitting a completed request no later than the close of the public comment period under §124.10 demonstrating that the requirements of §124.13 and the applicable requirements of part 125 have been met. Notwithstanding this provision, the complete application for a request under section 301(g) shall be filed 180 days before EPA must make a decision (unless the Regional Division Director establishes a shorter or longer period).

40 CFR 122.21(m)(2)(ii)

(ii) For those requests for a variance from effluent limitations not based on effluent limitation guidelines, the request need only comply with paragraph (m)(2)(i)(B) of this section and need not be preceded by an initial request under paragraph (m)(2)(i)(A) of this section.

40 CFR 122.21(m)(3)

(3) [Reserved]

[§122.21(m)(3) removed and reserved at 60 FR 33931, June 29, 1995]

40 CFR 122.21(m)(4)

(4) [Reserved]

[§122.21(m)(4) removed and reserved at 60 FR 33931, June 29, 1995]

40 CFR 122.21(m)(5)

(5) Water quality related effluent limitations. A modification under section 302(b)(2) of requirements under section 302(a) for achieving water quality related effluent limitations may be requested no later than the close of the public comment period under §124.10 on the permit from which the modification is sought.

40 CFR 122.21(m)(6)

(6) Thermal discharges. A variance under CWA section 316(a) for the thermal component of any discharge must be filed with a timely application for a permit under this section, except that if thermal effluent limitations are established under CWA section 402(a)(1) or are based on water quality standards the request for a variance may be filed by the close of the public comment period under §124.10. A copy of the request as required under 40 CFR part 125, subpart H, shall be sent simultaneously to the appropriate State or interstate certifying agency as required under 40CFR part 125. (See §124.65 for special procedures for section 316(a) thermal variances.)

40 CFR 122.21(n)

(n) Variance requests by POTWs. A discharger which is a publicly owned treatment works (POTW) may request a variance from otherwise applicable effluent limitations under any of the following statutory provisions as specified in this paragraph:

## 40 CFR 122.21(n)(1)

(1) Discharges into marine waters. A request for a modification under CWA section 301(h) of requirements of CWA section 301(b)(1)(B) for discharges into marine waters must be filed in accordance with the requirements of 40 CFR part 125, subpart G.

## 40 CFR 122.21(n)(2)

(2) [Reserved]

[§122.21(n)(2) removed and reserved at 60 FR 33931, June 29, 1995]

## 40 CFR 122.21(n)(3)

(3) Water quality based effluent limitation. A modification under CWA section 302(b)(2) of the requirements under section 302(a) for achieving water quality based effluent limitations shall be requested no later than the close of the public comment period under §124.10 on the permit from which the modification is sought.

## 40 CFR 122.21(o)

(o) Expedited variance procedures and time extensions.

## 40 CFR 122.21(o)(1)

(1) Notwithstanding the time requirements in paragraphs (m) and (n) of this section, the Director may notify a permit applicant before a draft permit is issued under §124.6 that the draft permit will likely contain limitations which are eligible for variances. In the notice the Director may require the applicant as a condition of consideration of any potential variance request to submit a request explaining how the requirements of part 125 applicable to the variance have been met and may require its submission within a specified reasonable time after receipt of the notice. The notice may be sent before the permit application has been submitted. The draft or final permit may contain the alternative limitations which may become effective upon final grant of the variance.

## 40 CFR 122.21(o)(2)

(2) A discharger who cannot file a timely complete request required under paragraph (m)(2)(i)(B) or (m)(2)(ii) of this section may request an extension. The extension may be granted or denied at the discretion of the Director. Extensions shall be no more than 6 months in duration.

## 40 CFR 122.21(p)

(p) Recordkeeping. Except for information required by paragraph (d)(3)(ii) of this section, which shall be retained for a period of at least five years from the date the application is signed (or longer as required by 40 CFR part 503), applicants shall keep records of all data used to complete permit applications and any supplemental information submitted under this section for a period of at least 3 years from the date the application is signed.

[Note 1: At 46 FR 2046, Jan. 8, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(ii)(A) and the corresponding portions of Item V-C of the NPDES application Form 2c as they apply to coal mines. This revision continues that suspension.]<sup>1</sup>

[Note 2: At 46 FR 22585, April 20, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(ii)(A) and the corresponding portions of

Item V-C of the NPDES application Form 2c as they apply to:

- a. Testing and reporting for all four organic fractions in the Greige Mills Subcategory of the Textile Mills industry (subpart C—Low water use processing of 40 CFR part 410), and testing and reporting for the pesticide fraction in all other subcategories of this industrial category.
- b. Testing and reporting for the volatile, base/neutral and pesticide fractions in the Base and Precious Metals Subcategory of the Ore Mining and Dressing industry (subpart B of 40 CFR part 440), and testing and reporting for all four fractions in all other subcategories of this industrial category.
- c. Testing and reporting for all four GC/MS fractions in the Porcelain Enameling industry.

This revision continues that suspension.]<sup>1</sup>

[Note 3: At 46 FR 35090, July 1, 1981, the Environmental Protection Agency suspended until further notice §122.21(g)(7)(ii)(A) and the corresponding portions of Item V-C of the NPDES application Form 2c as they apply to:

- a. Testing and reporting for the pesticide fraction in the Tall Oil Rosin Subcategory (subpart D) and Rosin-Based Derivatives Subcategory (subpart F) of the Gum and Wood Chemicals industry (40 CFR part 454), and testing and reporting for the pesticide and base-neutral fractions in all other subcategories of this industrial category.
- b. Testing and reporting for the pesticide fraction in the Leather Tanning and Finishing, Paint and Ink Formulation, and Photographic Supplies industrial categories.
- c. Testing and reporting for the acid, base/neutral and pesticide fractions in the Petroleum Refining industrial category.
- d. Testing and reporting for the pesticide fraction in the Papergrade Sulfite subcategories (subparts J and U) of the Pulp and Paper industry (40 CFR part 430); testing and reporting for the base/neutral and pesticide fractions in the following subcategories: Deink (subpart Q), Dissolving Kraft (subpart F), and Paperboard from Waste Paper (subpart E); testing and reporting for the volatile, base/neutral and pesticide fractions in the following subcategories: BCT Bleached Kraft (subpart H), Semi-Chemical (subparts B and C), and Nonintegrated-Fine Papers (subpart R); and testing and reporting for the acid, base/neutral, and pesticide fractions in the following subcategories: Fine Bleached Kraft (subpart I), Dissolving Sulfite Pulp (subpart K), Groundwood-Fine Papers (subpart O), Market Bleached Kraft (subpart G), Tissue from Wastepaper (subpart T), and Nonintegrated-Tissue Papers (subpart S).
- e. Testing and reporting for the base/neutral fraction in the Once-Through Cooling Water, Fly Ash and Bottom Ash Transport Water process wastestreams of the Steam Electric Power Plant industrial category.

This revision continues that suspension.]<sup>1</sup>

[Editor's note: Forms 1, 2d, and 2e referenced in the following Appendix are published at the end of this regulation.]

1 Editorial Note: The words "This revision" refer to the document published at 48 FR 14153, April 1, 1983.

**40 CFR 122.22 Signatories to permit applications and reports (applicable to State programs, see §123.25).**

40 CFR 122.22(a)

(a) Applications. All permit applications shall be signed as follows:

40 CFR 122.22(a)(1)

(1) For a corporation: by a responsible corporate officer. For the purpose of this section, a responsible corporate officer means: (i) A president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy- or decision-making functions for the corporation, or (ii) the manager of one or more manufacturing, production, or operating facilities employing more than 250 persons or having gross annual sales or expenditures exceeding \$25 million (in second-quarter 1980 dollars), if authority to sign documents has been assigned or delegated to the manager in accordance with corporate procedures.

NOTE: EPA does not require specific assignments or delegations of authority to responsible corporate officers identified in §122.22(a)(1)(i). The Agency will presume that these responsible corporate officers have the requisite authority to sign permit applications unless the corporation has notified the Director to the contrary. Corporate procedures governing authority to sign permit applications may provide for assignment or delegation to applicable corporate positions under §122.22(a)(1)(ii) rather than to specific individuals.

40 CFR 122.22(a)(2)

(2) For a partnership or sole proprietorship: by a general partner or the proprietor, respectively; or

40 CFR 122.22(a)(3)

(3) For a municipality, State, Federal, or other public agency: By either a principal executive officer or ranking elected official. For purposes of this section, a principal executive officer of a Federal agency includes: (i) The chief executive officer of the agency, or (ii) a senior executive officer having responsibility for the overall operations of a principal geographic unit of the agency (e.g., Regional Administrators of EPA).

40 CFR 122.22(b)

(b) All reports required by permits, and other information requested by the Director shall be signed by a person described in paragraph (a) of this section, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

40 CFR 122.22(b)(1)

(1) The authorization is made in writing by a person described in paragraph (a) of this section;

40 CFR 122.22(b)(2)

(2) The authorization specifies either an individual or a position having

responsibility for the overall operation of the regulated facility or activity such as the position of plant manager, operator of a well or a well field, superintendent, position of equivalent responsibility, or an individual or position having overall responsibility for environmental matters for the company. (A duly authorized representative may thus be either a named individual or any individual occupying a named position.) and, 40 CFR 122.22(b)(3)

(3) The written authorization is submitted to the Director.

40 CFR 122.22(c)

(c) Changes to authorization. If an authorization under paragraph (b) of this section is no longer accurate because a different individual or position has responsibility for the overall operation of the facility, a new authorization satisfying the requirements of paragraph (b) of this section must be submitted to the Director prior to or together with any reports, information, or applications to be signed by an authorized representative.

40 CFR 122.22(d)

(d) Certification. Any person signing a document under paragraph (a) or (b) of this section shall make the following certification:

"I certify under penalty of law that this document and all attachments were prepared under my direction or supervision in accordance with a system designed to assure that qualified personnel properly gather and evaluate the information submitted. Based on my inquiry of the person or persons who manage the system, or those persons directly responsible for gathering the information, the information submitted is, to the best of my knowledge and belief, true, accurate, and complete. I am aware that there are significant penalties for submitting false information, including the possibility of fine and imprisonment for knowing violations. "

[Editor's note: The authority for §122.22 is the Clean Water Act (33 U.S.C. 1251 et seq.), Safe Drinking Water Act (42 U.S. C. 300f et seq. ), Clean Air Act (42 U.S.C. 7401 et seq.), and the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.) ]

#### **40 CFR 122.41 Conditions applicable to all permits.**

The following conditions apply to all NPDES permits. Additional conditions applicable to NPDES permits are in §122.42. All conditions applicable to NPDES permits shall be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to these regulations (or the corresponding approved State regulations) must be given in the permit.

40 CFR 122.41(a)

(a) Duty to comply. The permittee must comply with all conditions of this permit. Any permit noncompliance constitutes a violation of the Clean Water Act and is grounds for enforcement action; for permit termination, revocation and reissuance, or modification; or denial of a permit renewal application.

40 CFR 122.41(a)(1)

(1) The permittee shall comply with effluent standards or prohibitions established

under section 307(a) of the Clean Water Act toxic pollutants and with standards for sewage sludge use or disposal established under section 405(d) of the CWA within the time provided in the regulations that establish these standards or prohibitions or standards for sewage sludge use or disposal, even if the permit has not yet been modified to incorporate the requirement.

40 CFR 122.41(a)(2)

(2) The Clean Water Act provides that any person who violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any such sections in a permit issued under section 402, or any requirement imposed in a pretreatment program approved under sections 402(a)(3) or 402(b)(8) of the Act, is subject to a civil penalty not to exceed \$25,000 per day for each violation. The Clean Water Act provides that any person who negligently violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, or any requirement imposed in a pretreatment program approved under section 402(a)(3) or 402(b)(8) of the Act, is subject to criminal penalties of \$2,500 to \$25,000 per day of violation, or imprisonment of not more than 1 year, or both. In the case of a second or subsequent conviction for a negligent violation, a person shall be subject to criminal penalties of not more than \$50,000 per day of violation, or by imprisonment of not more than 2 years, or both. Any person who knowingly violates such sections, or such conditions or limitations is subject to criminal penalties of \$5,000 to \$50,000 per day of violation, or imprisonment for not more than 3 years, or both. In the case of a second or subsequent conviction for a knowing violation, a person shall be subject to criminal penalties of not more than \$100,000 per day of violation, or imprisonment of not more than 6 years, or both. Any person who knowingly violates section 301, 302, 306, 307, 308, 318 or 405 of the Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of the Act, and who knows at that time that he thereby places another person in imminent danger of death or serious bodily injury, shall, upon conviction, be subject to a fine of not more than \$250,000 or imprisonment of not more than 15 years, or both. In the case of a second or subsequent conviction for a knowing endangerment violation, a person shall be subject to a fine of not more than \$500,000 or by imprisonment of not more than 30 years, or both. An organization, as defined in section 309(c)(3)(B)(iii) of the CWA, shall, upon conviction of violating the imminent danger provision, be subject to a fine of not more than \$1,000,000 and can be fined up to \$2,000,000 for second or subsequent convictions.

40 CFR 122.41(a)(3)

(3) Any person may be assessed an administrative penalty by the Administrator for violating section 301, 302, 306, 307, 308, 318 or 405 of this Act, or any permit condition or limitation implementing any of such sections in a permit issued under section 402 of this Act. Administrative penalties for Class I violations are not to exceed \$10,000 per violation, with the maximum amount of any Class I penalty assessed not to exceed \$25,000. Penalties for Class II violations are not to exceed \$10,000 per day for each day during which the violation continues, with the maximum

amount of any Class II penalty not to exceed \$125,000.

40 CFR 122.41(b)

(b) Duty to reapply. If the permittee wishes to continue an activity regulated by this permit after the expiration date of this permit, the permittee must apply for and obtain a new permit.

40 CFR 122.41(c)

(c) Need to halt or reduce activity not a defense. It shall not be a defense for a permittee in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this permit.

40 CFR 122.41(d)

(d) Duty to mitigate. The permittee shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this permit which has a reasonable likelihood of adversely affecting human health or the environment.

40 CFR 122.41(e)

(e) Proper operation and maintenance. The permittee shall at all times properly operate and maintain all facilities and systems of treatment and control (and related appurtenances) which are installed or used by the permittee to achieve compliance with the conditions of this permit. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of back-up or auxiliary facilities or similar systems which are installed by a permittee only when the operation is necessary to achieve compliance with the conditions of the permit.

40 CFR 122.41(f)

(f) Permit actions. This permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the permittee for a permit modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any permit condition.

40 CFR 122.41(g)

(g) Property rights. This permit does not convey any property rights of any sort, or any exclusive privilege.

40 CFR 122.41(h)

(h) Duty to provide information. The permittee shall furnish to the Director, within a reasonable time, any information which the Director may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this permit or to determine compliance with this permit. The permittee shall also furnish to the Director upon request, copies of records required to be kept by this permit.

40 CFR 122.41(i)

(i) Inspection and entry. The permittee shall allow the Director, or an authorized representative (including an authorized contractor acting as a representative of the Administrator), upon presentation of credentials and other documents as may be required by law, to:

40 CFR 122.41(i)(1)

(1) Enter upon the permittee's premises where a regulated facility or activity is

located or conducted, or where records must be kept under the conditions of this permit;

40 CFR 122.41(i)(2)

(2) Have access to and copy, at reasonable times, any records that must be kept under the conditions of this permit;

40 CFR 122.41(i)(3)

(3) Inspect at reasonable times any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this permit; and

40 CFR 122.41(i)(4)

(4) Sample or monitor at reasonable times, for the purposes of assuring permit compliance or as otherwise authorized by the Clean Water Act, any substances or parameters at any location.

40 CFR 122.41(j)

(j) Monitoring and records.

40 CFR 122.41(j)(1)

(1) Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity.

40 CFR 122.41(j)(2)

(2) Except for records of monitoring information required by this permit related to the permittee's sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by 40 CFR part 503), the permittee shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by this permit, and records of all data used to complete the application for this permit, for a period of at least 3 years from the date of the sample, measurement, report or application. This period may be extended by request of the Director at any time.

40 CFR 122.41(j)(3)

(3) Records of monitoring information shall include:

40 CFR 122.41(j)(3)(i)

(i) The date, exact place, and time of sampling or measurements;

40 CFR 122.41(j)(3)(ii)

(ii) The individual(s) who performed the sampling or measurements;

40 CFR 122.41(j)(3)(iii)

(iii) The date(s) analyses were performed;

40 CFR 122.41(j)(3)(iv)

(iv) The individual(s) who performed the analyses;

40 CFR 122.41(j)(3)(v)

(v) The analytical techniques or methods used; and

40 CFR 122.41(j)(3)(vi)

(vi) The results of such analyses.

40 CFR 122.41(j)(4)

(4) Monitoring results must be conducted according to test procedures approved

under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, unless other test procedures have been specified in the permit.

40 CFR 122.41(j)(5)

(5) The Clean Water Act provides that any person who falsifies, tampers with, or knowingly renders inaccurate any monitoring device or method required to be maintained under this permit shall, upon conviction, be punished by a fine of not more than \$10,000, or by imprisonment for not more than 2 years, or both. If a conviction of a person is for a violation committed after a first conviction of such person under this paragraph, punishment is a fine of not more than \$20,000 per day of violation, or by imprisonment of not more than 4 years, or both.

40 CFR 122.41(k)

(k) Signatory requirement.

40 CFR 122.41(k)(1)

(1) All applications, reports, or information submitted to the Director shall be signed and certified. (See §122.22)

40 CFR 122.41(k)(2)

(2) The CWA provides that any person who knowingly makes any false statement, representation, or certification in any record or other document submitted or required to be maintained under this permit, including monitoring reports or reports of compliance or non-compliance shall, upon conviction, be punished by a fine of not more than \$10,000 per violation, or by imprisonment for not more than 6 months per violation, or by both.

40 CFR 122.41(l)

(l) Reporting requirements.

40 CFR 122.41(l)(1)

(1) Planned changes. The permittee shall give notice to the Director as soon as possible of any planned physical alterations or additions to the permitted facility.

Notice is required only when:

40 CFR 122.41(l)(1)(i)

(i) The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in §122.29(b); or

40 CFR 122.41(l)(1)(ii)

(ii) The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants which are subject neither to effluent limitations in the permit, nor to notification requirements under §122.42(a)(1).

40 CFR 122.41(l)(1)(iii)

(iii) The alteration or addition results in a significant change in the permittee's sludge use or disposal practices, and such alteration, addition, or change may justify the application of permit conditions that are different from or absent in the existing permit, including notification of additional use or disposal sites not reported during the permit application process or not reported pursuant to an approved land application plan;

40 CFR 122.41(l)(2)

(2) Anticipated noncompliance. The permittee shall give advance notice to the Director of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements.

40 CFR 122.41(l)(3)

(3) Transfers. This permit is not transferable to any person except after notice to the Director. The Director may require modification or revocation and reissuance of the permit to change the name of the permittee and incorporate such other requirements as may be necessary under the Clean Water Act. (See §122.61; in some cases, modification or revocation and reissuance is mandatory.)

40 CFR 122.41(l)(4)

(4) Monitoring reports. Monitoring results shall be reported at the intervals specified elsewhere in this permit.

40 CFR 122.41(l)(4)(i)

(i) Monitoring results must be reported on a Discharge Monitoring Report (DMR) or forms provided or specified by the Director for reporting results of monitoring of sludge use or disposal practices.

40 CFR 122.41(l)(4)(ii)

(ii) If the permittee monitors any pollutant more frequently than required by the permit using test procedures approved under 40 CFR part 136 or, in the case of sludge use or disposal, approved under 40 CFR part 136 unless otherwise specified in 40 CFR part 503, or as specified in the permit, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the DMR or sludge reporting form specified by the Director.

40 CFR 122.41(l)(4)(iii)

(iii) Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified by the Director in the permit.

40 CFR 122.41(l)(5)

(5) Compliance schedules. Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this permit shall be submitted no later than 14 days following each schedule date.

40 CFR 122.41(l)(6)

(6) Twenty-four hour reporting.

40 CFR 122.41(l)(6)(i)

(i) The permittee shall report any noncompliance which may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the permittee becomes aware of the circumstances. A written submission shall also be provided within 5 days of the time the permittee becomes aware of the circumstances. The written submission shall contain a description of the noncompliance and its cause; the period of noncompliance, including exact dates and times, and if the noncompliance has not been corrected, the anticipated time it is expected to continue; and steps taken or planned to reduce, eliminate, and prevent

reoccurrence of the noncompliance.

40 CFR 122.41(l)(6)(ii)

(ii) The following shall be included as information which must be reported within 24 hours under this paragraph.

40 CFR 122.41(l)(6)(ii)(A)

(A) Any unanticipated bypass which exceeds any effluent limitation in the permit. (See §122.41(g)).

40 CFR 122.41(l)(6)(ii)(B)

(B) Any upset which exceeds any effluent limitation in the permit.

40 CFR 122.41(l)(6)(ii)(C)

(C) Violation of a maximum daily discharge limitation for any of the pollutants listed by the Director in the permit to be reported within 24 hours. (See §122.44(g).)

40 CFR 122.41(l)(6)(iii)

(iii) The Director may waive the written report on a case-by-case basis for reports under paragraph (l)(6)(ii) of this section if the oral report has been received within 24 hours.

40 CFR 122.41(l)(7)

(7) Other noncompliance. The permittee shall report all instances of noncompliance not reported under paragraphs (l)(4), (5), and (6) of this section, at the time monitoring reports are submitted. The reports shall contain the information listed in paragraph (l)(6) of this section .

40 CFR 122.41(l)(8)

(8) Other information. Where the permittee becomes aware that it failed to submit any relevant facts in a permit application, or submitted incorrect information in a permit application or in any report to the Director, it shall promptly submit such facts or information.

40 CFR 122.41(m)

(m) Bypass

40 CFR 122.41(m)(1)

(1) Definitions.

40 CFR 122.41(m)(1)(ii)

(ii) "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility.

40 CFR 122.41(m)(1)(ii)

(ii) "Severe property damage" means substantial physical damage to property, damage to the treatment facilities which causes them to become inoperable, or substantial and permanent loss of natural resources which can reasonably be expected to occur in the absence of a bypass. Severe property damage does not mean economic loss caused by delays in production.

40 CFR 122.41(m)(2)

(2) Bypass not exceeding limitations. The permittee may allow any bypass to occur which does not cause effluent limitations to be exceeded, but only if it also is for essential maintenance to assure efficient operation. These bypasses are not

subject to the provisions of paragraphs (m)(3) and (m)(4) of this section .

40 CFR 122.41(m)(3)

(3) Notice

40 CFR 122.41(m)(3)(i)

(i) Anticipated bypass. If the permittee knows in advance of the need for a bypass, it shall submit prior notice, if possible at least ten days before the date of the bypass.

40 CFR 122.41(m)(3)(ii)

(ii) Unanticipated bypass. The permittee shall submit notice of an unanticipated bypass as required in paragraph (l)(6) of this section (24-hour notice).

40 CFR 122.41(m)(4)

(4) Prohibition of bypass.

40 CFR 122.41(m)(4)(i)

(i) Bypass is prohibited, and the Director may take enforcement action against a permittee for bypass, unless:

40 CFR 122.41(m)(4)(i)(A)

(A) Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage;

40 CFR 122.41(m)(4)(i)(B)

(B) There were no feasible alternatives to the bypass, such as the use of auxiliary treatment facilities, retention of untreated wastes, or maintenance during normal periods of equipment downtime. This condition is not satisfied if adequate back-up equipment should have been installed in the exercise of reasonable engineering judgment to prevent a bypass which occurred during normal periods of equipment downtime or preventive maintenance; and

40 CFR 122.41(m)(4)(i)(C)

(C) The permittee submitted notices as required under paragraph (m)(3) of this section.

40 CFR 122.41(m)(4)(ii)

(ii) The Director may approve an anticipated bypass, after considering its adverse effects, if the Director determines that it will meet the three conditions listed above in paragraph (m)(4)(i) of this section.

40 CFR 122.41(n)

(n) Upset

40 CFR 122.41(n)(1)

(1) Definition. "Upset" means an exceptional incident in which there is unintentional and temporary noncompliance with technology based permit effluent limitations because of factors beyond the reasonable control of the permittee. An upset does not include noncompliance to the extent caused by operational error, improperly designed treatment facilities, inadequate treatment facilities, lack of preventive maintenance, or careless or improper operation.

40 CFR 122.41(n)(2)

(2) Effect of an upset. An upset constitutes an affirmative defense to an action brought for noncompliance with such technology based permit effluent limitations if

the requirements of paragraph (n)(3) of this section are met. No determination made during administrative review of claims that noncompliance was caused by upset, and before an action for noncompliance, is final administrative action subject to judicial review.

40 CFR 122.41(n)(3)

(3) Conditions necessary for a demonstration of upset. A permittee who wishes to establish the affirmative defense of upset shall demonstrate, through properly signed, contemporaneous operating logs, or other relevant evidence that:

40 CFR 122.41(n)(3)(i)

(i) An upset occurred and that the permittee can identify the cause(s) of the upset;

40 CFR 122.41(n)(3)(ii)

(ii) The permitted facility was at the time being properly operated; and

40 CFR 122.41(n)(3)(iii)

(iii) The permittee submitted notice of the upset as required in paragraph (1)(6)(ii)(B) of this section (24 hour notice).

40 CFR 122.41(n)(3)(iv)

(iv) The permittee complied with any remedial measures required under paragraph (d) of this section.

40 CFR 122.41(n)(4)

(4) Burden of proof. In any enforcement proceeding the permittee seeking to establish the occurrence of an upset has the burden of proof.

Clean Water Act (33 U.S.C.1251 et seq.), Safe Drinking Water Act (42 U.S.C. 300f et seq.), Clean Air Act ( 42 U.S.C. 7401 et seq.), Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.)

[§122.41 amended at 58 FR 18015, April 7, 1993]

**40 CFR 122.61 Transfer of permits (applicable to State programs, see §123.25).**

40 CFR 122.61(a)

(a) Transfers by modification. Except as provided in paragraph (b) of this section, a permit may be transferred by the permittee to a new owner or operator only if the permit has been modified or revoked and reissued (under §122.62(b)(2)), or a minor modification made (under §122.63(d)), to identify the new permittee and incorporate such other requirements as may be necessary under CWA.

40 CFR 122.61(b)

(b) Automatic transfers. As an alternative to transfers under paragraph (a) of this section, any NPDES permit may be automatically transferred to a new permittee if:

40 CFR 122.61(b)(1)

(1) The current permittee notifies the Director at least 30 days in advance of the proposed transfer date in paragraph (b)(2) of this section;

40 CFR 122.61(b)(2)

(2) The notice includes a written agreement between the existing and new permittees containing a specific date for transfer of permit responsibility, coverage, and liability between them; and

## 40 CFR 122.61(b)(3)

(3) The Director does not notify the existing permittee and the proposed new permittee of his or her intent to modify or revoke and reissue the permit. A modification under this subparagraph may also be a minor modification under §122.63. If this notice is not received, the transfer is effective on the date specified in the agreement mentioned in paragraph (b)(2) of this section.

**40 CFR 122.62 Modification or revocation and reissuance of permits (applicable to State programs, see §123.25).**

When the Director receives any information (for example, inspects the facility, receives information submitted by the permittee as required in the permit (see §122.41), receives a request for modification or revocation and reissuance under §124.5, or conducts a review of the permit file) he or she may determine whether or not one or more of the causes listed in paragraphs (a) and (b) of this section for modification or revocation and reissuance or both exist. If cause exists, the Director may modify or revoke and reissue the permit accordingly, subject to the limitations of §124.5(c), and may request an updated application if necessary. When a permit is modified, only the conditions subject to modification are reopened. If a permit is revoked and reissued, the entire permit is reopened and subject to revision and the permit is reissued for a new term. See §124.5(c) (2). If cause does not exist under this section or §122.63, the Director shall not modify or revoke and reissue the permit. If a permit modification satisfies the criteria in §122.63 for minor modifications" the permit may be modified without a draft permit or public review. Otherwise, a draft permit must be prepared and other procedures in part 124 (or procedures of an approved State program) followed.

## 40 CFR 122.62(a)

(a) Causes for modification. The following are causes for modification but not revocation and reissuance of permits except when the permittee requests or agrees.

## 40 CFR 122.62(a)(1)

(1) Alterations. There are material and substantial alterations or additions to the permitted facility or activity (including a change or changes in the permittee's sludge use or disposal practice) which occurred after permit issuance which justify the application of permit conditions that are different or absent in the existing permit. NOTE: Certain reconstruction activities may cause the new source provisions of §122.29 to be applicable.

## 40 CFR 122.62(a)(2)

(2) Information. The Director has received new information. Permits may be modified during their terms for this cause only if the information was not available at the time of permit issuance (other than revised regulations, guidance, or test methods) and would have justified the application of different permit conditions at the time of issuance. For NPDES general permits (§122.28) this cause includes any information indicating that cumulative effects on the environment are unacceptable. For new source or new discharger NPDES permits (§§122.21, 122.29), this cause shall include any significant information derived from effluent testing required under

§122.21(k)(5)(vi) or §122.21(h)(4)(iii) after issuance of the permit.

40 CFR 122.62(a)(3)

(3) New regulations. The standards or regulations on which the permit was based have been changed by promulgation of amended standards or regulations or by judicial decision after the permit was issued. Permits may be modified during their terms for this cause only as follows:

40 CFR 122.62(a)(3)(i)

(i) For promulgation of amended standards or regulations, when:

40 CFR 122.62(a)(3)(i)(A)

(A) The permit condition requested to be modified was based on a promulgated effluent limitation guideline, EPA approved or promulgated water quality standards, or the Secondary Treatment Regulations under part 133; and

40 CFR 122.62(a)(3)(i)(B)

(B) EPA has revised, withdrawn, or modified that portion of the regulation or effluent limitation guideline on which the permit condition was based, or has approved a State action with regard to a water quality standard on which the permit condition was based; and

40 CFR 122.62(a)(3)(i)(C)

(C) A permittee requests modification in accordance with §124.5 within ninety (90) days after FEDERAL REGISTER notice of the action on which the request is based.

40 CFR 122.62(a)(3)(ii)

(ii) For judicial decisions, a court of competent jurisdiction has remanded and stayed EPA promulgated regulations or effluent limitation guidelines, if the remand and stay concern that portion of the regulations or guidelines on which the permit condition was based and a request is filed by the permittee in accordance with §124.5 within ninety (90) days of judicial remand.

40 CFR 122.62(a)(3)(iii)

(iii) For changes based upon modified State certifications of NPDES permits, see §124.55(b).

40 CFR 122.62(a)(4)

(4) Compliance schedules. The Director determines good cause exists for modification of a compliance schedule, such as an act of God, strike, flood, or materials shortage or other events over which the permittee has little or no control and for which there is no reasonably available remedy. However, in no case may an NPDES compliance schedule be modified to extend beyond an applicable CWA statutory deadline. See also §122.63(c) (minor modifications) and paragraph (a)(14) of this section (NPDES innovative technology).

40 CFR 122.62(a)(5)

(5) When the permittee has filed a request for a variance under CWA section 301(c), 301(g), 301(h), 301(i), 301(k), or 316(a) or for "fundamentally different factors" within the time specified in §122.21 or §125.27(a).

40 CFR 122.62(a)(6)

(6) 307(a) toxics. When required to incorporate an applicable 307(a) toxic

effluent standard or prohibition (see §122.44(b)).

40 CFR 122.62(a)(7)

(7) Reopener. When required by the "reopener" conditions in a permit, which are established in the permit under §122.44(b) (for CWA toxic effluent limitations and standards for sewage sludge use or disposal, see also §122.44(c)) or 40 CFR 403.10(e) (pretreatment program).

40 CFR 122.62(a)(8)

(8) (i) Net limits. Upon request of a permittee who qualifies for effluent limitations on a net basis under §122.45(h).

40 CFR 122.62(a)(8)(ii)

(ii) When a discharger is no longer eligible for net limitations, as provided in §122.45(h)(1)(ii)(B).

40 CFR 122.62(a)(9)

(9) Pretreatment. As necessary under 40 CFR 403.8(e) (compliance schedule for development of pretreatment program).

40 CFR 122.62(a)(10)

(10) Failure to notify. Upon failure of an approved State to notify, as required by section 402(b)(3), another State whose waters may be affected by a discharge from the approved State.

40 CFR 122.62(a)(11)

(11) Non-limited pollutants. When the level of discharge of any pollutant which is not limited in the permit exceeds the level which can be achieved by the technology-based treatment requirements appropriate to the permittee under §125.3(c).

40 CFR 122.62(a)(12)

(12) Notification levels. To establish a "notification level" as provided in §122.44(f).

40 CFR 122.62(a)(13)

(13) Compliance schedules. To modify a schedule of compliance to reflect the time lost during construction of an innovative or alternative facility, in the case of a POTW which has received a grant under section 202(a)(3) of CWA for 100% of the costs to modify or replace facilities constructed with a grant for innovative and alternative wastewater technology under section 202(a)(2). In no case shall the compliance schedule be modified to extend beyond an applicable CWA statutory deadline for compliance.

40 CFR 122.62(a)(14)

(14) [Reserved]

[§122.62(a)(14) removed and reserved at 60 FR 33931, June 29, 1995]

40 CFR 122.62(a)(15)

(15) To correct technical mistakes, such as errors in calculation, or mistaken interpretations of law made in determining permit conditions.

40 CFR 122.62(a)(16)

(16) When the discharger has installed the treatment technology considered by the permit writer in setting effluent limitations imposed under section 402(a)(1) of the

CWA and has properly operated and maintained the facilities but nevertheless has been unable to achieve those effluent limitations. In this case, the limitations in the modified permit may reflect the level of pollutant control actually achieved (but shall not be less stringent than required by a subsequently promulgated effluent limitations guideline).

40 CFR 122.62(a)(17)

(17) [Reserved]

[§122.62(a)(17) removed and reserved at 60 FR 33931, June 29, 1995]

40 CFR 122.62(a)(18)

(18) Land application plans . When required by a permit condition to incorporate a land application plan for beneficial reuse of sewage sludge, to revise an existing land application plan, or to add a land application plan.

40 CFR 122.62(b)

(b) Causes for modification or revocation and reissuance. The following are causes to modify or, alternatively, revoke and reissue a permit:

40 CFR 122.62(b)(1)

(1) Cause exists for termination under §122.64, and the Director determines that modification or revocation and reissuance is appropriate.

40 CFR 122.62(b)(2)

(2) The Director has received notification (as required in the permit, see §122.41(l)(3)) of a proposed transfer of the permit. A permit also may be modified to reflect a transfer after the effective date of an automatic transfer (§122.61(b)) but will not be revoked and reissued after the effective date of the transfer except upon the request of the new permittee.

[Editor's note: The authority for §122.62 is the Clean Water Act (33 U.S.C. 1251 et seq.), the Safe Drinking Water Act (42 U.S.C. 300f et seq.), the Clean Air Act (42 U.S.C. 7401 et seq.), and the Resource Conservation and Recovery Act (42 U.S.C. 6901 et seq.)]

**40 CFR 122.63 Minor modifications of permits.**

Upon the consent of the permittee, the Director may modify a permit to make the corrections or allowances for changes in the permitted activity listed in this section, without following the procedures of part 124. Any permit modification not processed as a minor modification under this section must be made for cause and with part 124 draft permit and public notice as required in §122.62. Minor modifications may only:

40 CFR 122.63(a)

(a) Correct typographical errors;

40 CFR 122.63(b)

(b) Require more frequent monitoring or reporting by the permittee;

40 CFR 122.63(c)

(c) Change an interim compliance date in a schedule of compliance, provided the new date is not more than 120 days after the date specified in the existing permit and does not interfere with attainment of the final compliance date requirement; or

40 CFR 122.63(d)

(d) Allow for a change in ownership or operational control of a facility where the Director determines that no other change in the permit is necessary, provided that a written agreement containing a specific date for transfer of permit responsibility, coverage, and liability between the current and new permittees has been submitted to the Director.

40 CFR 122.63(e)

(e) (1) Change the construction schedule for a discharger which is a new source. No such change shall affect a discharger's obligation to have all pollution control equipment installed and in operation prior to discharge under §122.29.

40 CFR 122.63(e)(2)

(2) Delete a point source outfall when the discharge from that outfall is terminated and does not result in discharge of pollutants from other outfalls except in accordance with permit limits.

40 CFR 122.63(f)

(f) [Reserved]

[§122.63(f) removed and reserved at 60 FR 33931, June 29, 1995]

40 CFR 122.63(g)

(g) Incorporate conditions of a POTW pretreatment program that has been approved in accordance with the procedures in 40 CFR 403.11 (or a modification thereto that has been approved in accordance with the procedures in 40 CFR 403.18) as enforceable conditions of the POTW's permits.

**40 CFR 122.64 Termination of permits (applicable to State programs, see §123.25).**

40 CFR 122.64(a)

(a) The following are causes for terminating a permit during its term, or for denying a permit renewal application:

40 CFR 122.64(a)(1)

(1) Noncompliance by the permittee with any condition of the permit;

40 CFR 122.64(a)(2)

(2) The permittee's failure in the application or during the permit issuance process to disclose fully all relevant facts, or the permittee's misrepresentation of any relevant facts at any time;

40 CFR 122.64(a)(3)

(3) A determination that the permitted activity endangers human health or the environment and can only be regulated to acceptable levels by permit modification or termination; or

40 CFR 122.64(a)(4)

(4) A change in any condition that requires either a temporary or permanent reduction or elimination of any discharge or sludge use or disposal practice controlled by the permit (for example, plant closure or termination of discharge by connection to a POTW).

40 CFR 122.64(b)

(b) The Director shall follow the applicable procedures in part 124 or State

**Order No. 97-36**

**D-37**

**October 15, 1997**

procedures in terminating any NPDES permit under this section.

**ATTACHMENT E**  
**DEFINITIONS AND EXPLANATORY NOTES**

**Best management practices (BMPs)** means schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. BMPs also include treatment requirements, operating procedures, and practices to control plant site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. (40 CFR 122.2)

**Contamination** means an impairment of the quality of the waters of the state by waste to a degree which creates a hazard to the public health through poisoning or through the spread of disease. Contamination includes any equivalent effect resulting from the disposal of waste, whether or not waters of the state are affected. (CWC § 13050(k))

**Conventional pollutants** means pollutants designated pursuant to Clean Water Act § 304(a)(4). (40 CFR 401.16)

**Degradation** shall be determined by comparison of the waste field and reference site(s) for characteristics of species diversity, population density, contamination, growth anomalies, debility, or supplanting of normal species by undesirable plant and animal species. Degradation occurs if there are significant differences in any of three major biotic groups, namely, demersal fish, benthic invertebrates, or attached algae. Other groups may be evaluated where benthic species are not affected, or are not the only ones affected.

**Discharge and discharge of pollutant** are defined in 40 CFR 122.2.

**Existing ship construction, modification, repair, and maintenance site (existing site)** means a site where ship construction, modification, repair, and/or maintenance facilities are located or where ship construction, modification, repair, and/or maintenance activities are conducted as of the date of adoption of this Order.

**Facility or activity** means any NPDES point source or any other facility or activity (including land or appurtenances thereto) that is subject to regulation under the NPDES program. (40 CFR 122.2)

**First flush of storm water runoff** is the storm water runoff which occurs between the time a **storm event** begins and when a minimum of 0.25 inch of precipitation has been collected in a rain gauge or equivalent measurement device at a location on the site which is representative of precipitation at the site. A **storm event** is a period of rainfall which is preceded by at least 48 hours without rainfall.

**Hazardous substance** is defined in 40 CFR 122.2.

**High risk areas** are areas where wastes or pollutants from ship construction, modification, repair, and maintenance activities (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleansers, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances of water quality significance) are subject to exposure to precipitation, runoff, and/or runoff.

**Implementation** of a practice, program, procedure, or other measures means that all aspects of the practice, program, procedure, or other measures are fully in effect and operational, i.e. completed (in contrast to being planned for completion at some time in the future). This recognizes that some BMPs may be specific to certain activities and, hence, may be in active use only when those activities occur.

**Industrial process water** means water which is a byproduct or integral part of an industrial process. It does not include discharges caused by wind, tidal action, rainfall runoff, or other miscellaneous water flows in the work area. For purposes of this Order, the following are industrial process water:

- a. water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
- b. hydroblast water;
- c. tank cleaning water from tank cleaning to remove sludge and/or dirt;
- d. clarified water from oil/water separation;
- e. steamcleaning water;
- f. demineralizer / reverse osmosis brine;
- g. floating drydock sump water when the drydock is in use as a work area or when the drydock is not in use as a work area but before the sump has been purged following such use;
- h. oily bilge water; and
- i. contaminated ballast water.

A mixture of industrial process water with other water which is not industrial process water shall be considered industrial process water.

**Initial dilution** is the process which results in the rapid and irreversible turbulent mixing of wastewater with receiving water around the point of discharge.

**Marine fouling organisms** are barnacles, mussels, algae, bryozoans, hydroids, tube worms, tunicates, and other associated organisms, such as shipworms and gribbles, which attach to and grow on underwater surfaces in marine waters.

**National Pollutant Discharge Elimination System (NPDES)** is defined in 40 CFR 122.2.

**Natural light** reduction may be determined by measurement of light transmissivity, total irradiance, or both, as specified by the Executive Officer.

**New ship construction, modification, repair, and maintenance site (new site)** means a site where ship construction, modification, repair, and/or maintenance facilities are not located and where ship construction, modification, repair, and/or maintenance activities are not conducted until after the date of adoption of this Order.

**Non-conventional pollutants** means Clean Water Act § 301(b)(2)(F) pollutants. (40 CFR 122.21(m)(2))

**Notice of Applicability** is a written notice from the Executive Officer to a discharger that this Order applies to a site not identified in Finding 5 of this Order.

**Nuisance** is defined in CWC § 13050(m).

**Person** is defined in 40 CFR 122.2 and CWC § 13050(c).

**Pollutant** is defined in 40 CFR 122.2.

**Pollution** means an alteration of the quality of the waters of the state by waste to a degree which unreasonably affects either of the following:

- a. The waters for beneficial uses.
- b. Facilities which serve these beneficial uses.

Pollution may include contamination. (CWC § 13050(l))

**Pollution Prevention (P2)** means practices and processes which reduce or eliminate the generation of pollutants, in contrast to source control, pollution control, treatment, or disposal.

**Ship construction, modification, repair, and maintenance facilities** means a site where ship construction, modification, repair, and/or maintenance facilities are located and/or where **ship construction, modification, repair, and/or maintenance activities** are conducted. This Order applies to **ship construction, modification, repair, and maintenance facilities and activities**, whether or not the discharger is in Standard Industrial Classification (SIC) category 3731 (Ship Building and Repairing).

**Significant difference** is defined as a statistically significant difference in the means of two distributions of sampling results at the 95 percent confidence level.

**Significant materials** include, but are not limited to: raw materials; fuels; materials such as solvents, detergents, and plastic pellets; finished materials such as metallic products; raw materials used in food processing or production; hazardous substances designated under Section 101 (14) of Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); any chemical the facility is required to report pursuant to Section 313 of Title III of Superfund Amendments and Reauthorization Act (SARA); fertilizers; pesticides; and waste products such as ashes, slag, and sludge that have the potential to be discharged.

**Significant quantities** are the volumes, concentrations, or masses of pollutants that can cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; and/or cause or contribute to a violation of any applicable water quality standard for the receiving water or any receiving water limitation.

**Site** means the land or water area where any facility or activity is physically located or conducted, including adjacent land used in connection with the facility or activity. (40 CFR 122.2)

**Storm water** means storm water runoff, snow melt runoff, and surface runoff and drainage. (40 CFR 122.26)

**Storm water discharge associated with industrial activity** is defined in 40 CFR 122.26.

**Storm water runoff associated with industrial activity** is analagous to **storm water discharge associated with industrial activity**, except it applies to runoff, whether or not such runoff is discharged to waters of the state or waters of the United States.

**Toxic pollutant** is defined in Section 502 of the CWA, and means any pollutant listed as toxic under Section 307(a)(1) of the CWA or, in the case of sludge use or disposal practices, any pollutant identified in regulations implementing section 405(d) of the CWA. (40 CFR 122.2, 40 CFR 401.15)

**Waste** includes sewage and any and all other waste substances, liquid, solid, gaseous, or radioactive, associated with human habitation, or of human or animal origin, or from any producing, manufacturing, or processing operation, including waste placed within containers of whatever nature prior to, and for purposes of, disposal. (CWC § 13050(d))

**Waters of the state** means any surface water or groundwater, including saline waters, within the boundaries of the state. (CWC § 13050(e))

**Order No. 97-36**

**E-5**

**October 15, 1997**

**Waters of the United States** is defined in 40 CFR 122.2.

October 15, 1997

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**MONITORING AND REPORTING PROGRAM NO. 97-36**

**FOR**

**DISCHARGES  
FROM  
SHIP CONSTRUCTION, MODIFICATION, REPAIR, AND  
MAINTENANCE  
FACILITIES AND ACTIVITIES  
LOCATED IN  
THE SAN DIEGO REGION  
(TTWQ/CPLX 1A)**

**A. MONITORING PROVISIONS**

1. Samples and measurements taken for the purpose of monitoring as required herein shall be representative of the volume, and nature of the discharge, and shall be representative of the monitored activity. All samples shall be taken at the monitoring points specified in Order No. 97-36 or in this Monitoring and Reporting Program (MRP) and, unless otherwise specified, before the effluent joins or is diluted by any other waste stream, body of water, or substance. Monitoring points shall not be changed without notification to, and the approval of, the Executive Officer. Samples shall be representative of "worst case" conditions with respect to compliance with the requirements of Order No. 97-36.
2. Appropriate flow measurement devices or methods consistent with accepted scientific practices shall be selected and used to ensure the accuracy and reliability of measurements of the volume of monitored discharges. The devices shall be installed, calibrated, and maintained to ensure that the accuracy of the measurements are consistent with the accepted capability of that type of device. Devices selected shall be capable of measuring flows with a maximum deviation of less than  $\pm 5\%$

from true discharge rates throughout the range of expected discharge volumes. Guidance in selection, installation, calibration, and operation of acceptable flow measurement devices can be obtained from the following references:

- a. *A Guide to Methods and Standards for the Measurement of Water Flow*, U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 421, May 1975, 97 pp. (Available from the U.S. Government Printing Office, Washington D.C. 2040. Order by SD Catalog No. C13.10:421.);
  - b. *Water Measurement Manual*, U.S. Department of Interior, Bureau of Reclamation, Second Edition, Revised Reprint, 1974, 327 pp. (Available from the U.S. Government Printing Office, Washington, D.C. 20402. Order by Catalog No. 127,19/2:W29/2, Stock No. S/N 24003-0027.)
  - c. *Flow Measurement in Open Channels and Closed Conduits*, "U.S. Department of Commerce, National Bureau of Standards, NBS Special Publication 484, October 1997, 982 pp. (Available in paper copy or microfiche from National Technical Information Service (NTIS) Springfield, VA 22151. Order by NTIS No. PB-273-535/5ST.)
  - d. *NPDES Compliance Sampling Manual*, U.S. Environmental Protection Agency, Office of Water Enforcement. Publication MCD-51, 1977, 140 pp. [available from the General Services Administration (8FFS), Centralized Mailing Lists Services, Building 41, Denver Federal Center, Denver, CO 80225.]
3. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services Environmental Laboratory Accreditation Program (ELAP), or a laboratory approved by the Executive Officer.
  4. Monitoring shall be conducted according to USEPA test procedures approved under Title 40 of the Code of Federal Regulations Part 136 (40 CFR 136), *Guidelines Establishing Test Procedures for the Analysis of Pollutants*, as amended, unless other test procedures have been specified in Order No. 97-36 and/or in this MRP.
  5. If the discharger monitors any pollutants more frequently than required by

Order No. 97-36, or by this MRP, using test procedures approved under 40 CFR 136, or as specified in Order No. 97-36 or this MRP, the results of this monitoring shall be included in the calculation and reporting of the data submitted in the discharger's monitoring report. The increased frequency of monitoring shall also be reported.

6. The discharger shall retain records of all monitoring information, including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation, copies of all reports required by Order No. 97-36 and this MRP, and records of all data used to complete the application for Order No. 97-36. Records shall be maintained for a minimum of five years from the date of the sample, measurement, report, or application. This period may be extended during the course of any unresolved litigation regarding this discharge or when requested by the Executive Officer or by the USEPA.
7. Records of monitoring information shall include:
  - a. The date, exact location, and time of sampling or measurements;
  - b. The individual(s) who performed the sampling or measurements;
  - c. The date(s) analyses were performed;
  - d. The laboratory and individual(s) who performed the analyses;
  - e. The analytical techniques or methods used; and
  - f. The results of such analyses.
8. Calculations for all limitations which require averaging of measurements shall utilize an arithmetic mean unless otherwise specified in Order No. 97-36 or this MRP.
9. All monitoring instruments and devices used by the discharger to fulfill the prescribed monitoring program shall be properly maintained and calibrated as necessary to ensure their continued accuracy. All flow measurement devices shall be calibrated at least once per year, or more frequently, to ensure continued accuracy of the devices.
10. The discharger shall report all instances of noncompliance not reported pursuant to 40 CFR Part 122.41(l)(7) at the time monthly monitoring reports are submitted. The reports shall contain the information listed in 40 CFR 122.41(l)(6).
11. By August 30 of each year, the discharger shall submit an annual report

to the Executive Officer and USEPA Region 9 which contains tabular and graphical summaries of the monitoring data obtained during the previous year. The discharger shall discuss the compliance record and corrective actions taken, or which may be needed to bring the discharge into full compliance with the requirements of Order No. 97-36 and this MRP.

12. Laboratory method detection limits (MDLs) and practical quantitation levels (PQLs) shall be identified for each constituent in the matrix being analyzed with all reported analytical data. Acceptance of data shall be based on demonstrated laboratory performance.
13. The monitoring reports shall be signed by an authorized person as required by Standard Provision 1.(c) of Order No. 97-36 (see Attachment C of Order No. 97-36).
14. With the exception of stormwater monitoring, the discharger shall provide Regional Board staff with a written sampling schedule at least 5 working days in advance of each proposed sampling date to enable staff to observe sampling activities. If a written sample schedule can not be provided at least 5 working days in advance of a proposed sampling date, the discharger shall provide Regional Board staff a written sample schedule as soon as the discharger is aware that sampling will occur. The written sampling schedule shall include an explanation of why notice could not be provided at least 5 working days in advance of the proposed sampling date. If notification can not be made at least 24 hours prior to the proposed sampling date, the discharger shall notify the appropriate Regional Board staff directly by telephone. For the purposes of this provision, a voice mail or other message does not constitute direct notification.
15. Upon request, the discharger shall provide the Regional Board with split samples from any monitoring sample.
16. A grab sample is an individual sample of at least 100 milliliters collected at a randomly selected time over a period not exceeding 15 minutes.
17. Monitoring results shall be reported on Discharge Monitoring Report forms approved by the Executive Officer. Discharge Monitoring Report forms shall be submitted to the Executive Officer in IBM Microsoft Word Version 6.0 format. Tabular and graphical data shall be submitted in Excel Version 5.0 format. In the future, data may be submitted in an electronic format

specified by the Executive Officer.

18. See Standard Provisions (Attachment C of Order No. 97-36) for additional monitoring and reporting requirements.
19. Each discharger shall implement this MRP on the first day of the month following the effective date of Order No. 97-36.
20. Revisions to this MRP may be made by the Executive Officer at any time, and may include a change in the location of sampling stations and/or a reduction or increase in the number of parameters to be monitored, the frequency of monitoring, the number of sampling stations and/or the number and/or size of samples collected.
21. Monitoring results shall be reported at intervals and in a manner specified in Order No. 97-36 or in this MRP. Unless otherwise specified in Order No. 97-36 or this MRP, monitoring reports shall be submitted to the Executive Officer and to USEPA Region 9 according to the following schedule:

Table 1. Monitoring Report Schedule

Monitoring Frequency	Reporting Period	Report Due
<b>DAILY, MONTHLY</b> Compliance Certification	all	By the last day of the following month
<b>QUARTERLY</b> Quarterly Effluent Monitoring Reports, Spill/ Illicit Discharge Log, Floating Drydock Submergence/ Emergence Water, Graving Dock Flood Water, Shipbuilding Ways Flood Water, & Ship Launch Grease / Wax Monitoring Reports	January - March April - June July - September October - December	April 30 July 30 October 30 January 30

Monitoring Frequency	Reporting Period	Report Due
<b>SEMIANNUALLY</b> Semiannual Effluent Monitoring Reports  Waste Hauling Log	January - June July - December  January - June July - December	July 30 January 30  July 30 January 30
<b>ANNUALLY</b> Annual Report Summary  Annual Effluent Monitoring Reports  Annual Stormwater Monitoring Reports  Chemical Utilization Audit  Sediment Monitoring Reports (tables, graphs, maps), Sediment Trend Curves & Statistical Analyses, Paint Chip Analysis	July - June  July-June  July - June  July - June  July - June	August 30  August 30  August 30  August 30  August 30
<b>TWICE EVERY FIVE YEARS</b> Effluent Monitoring Reports	---	August 30

## B. EFFLUENT MONITORING

### 1. Flows of Water Identified in Finding No. 2.b of Order No. 97-36

The discharger shall monitor discharges to surface waters of the flows of water identified in 1.a -1.g below. The sampling stations for each flow of water shall be located at all applicable discharge points, and where samples representative of the flow of water discharge can be obtained.

Monitoring stations shall be specified in the Best Management Practices (BMP) Program Manual and shall not be changed without notice to and the approval of the Executive Officer.

The following shall constitute the effluent monitoring program for discharges of:

- a. vessel washdown water;
- b. graving dock sump pump test water;
- c. floating drydock sump water when the drydock is not in use as a work area after the sump has been purged following such use;
- d. pipe and tank hydrostatic test water;
- e. graving dock gate and wall leakage water;
- f. shipbuilding ways gate and wall leakage and hydrostatic relief water; and
- g. miscellaneous low-volume water.

Table 2. Sample Analysis Parameters

<u>PARAMETER</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY</u> <sup>d</sup>
flow	gallons	estimate	quarterly
Oil & Grease	mg/L	grab	quarterly
Settleable Solids	ml/L	grab	quarterly
Turbidity	NTU	grab	quarterly
pH	pH Units	grab	quarterly
Temperature	° F	measurement	quarterly
Total Suspended Solids (TSS)	mg/L	grab	quarterly

<u>PARAMETER</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY</u> <sup>d</sup>
Arsenic	mg/L	grab	semiannually
Cadmium	mg/L	grab	semiannually
Chromium	mg/L	grab	semiannually
Copper	mg/L	grab	quarterly
Lead	mg/L	grab	semiannually
Mercury	ug/L	grab	semiannually
Nickel	mg/L	grab	semiannually
Silver	mg/L	grab	semiannually
Zinc	mg/L	grab	quarterly
Tributyltin (TBT)	ug/L	grab	semiannually
Acute Toxicity <sup>a</sup>	% survival	grab	semiannually
Chronic Toxicity <sup>b</sup>	TUc	grab	semiannually
Polynuclear Aromatic Hydrocarbons (PAH) <sup>c</sup>	ug/L	grab	semiannually
Total Residual Chlorine	mg/L	grab	semiannually

2. Flows of Water Identified In Finding 2.c of Order No. 97-36

The discharger shall monitor discharges to surface waters of the flows of water identified in 2.a -2.c below. The sampling stations for each flow of water shall be located at all applicable discharge points, and where samples representative of the flow of water discharge can be obtained. Monitoring stations shall be specified in the BMP Plan and shall not be changed without notice to and the approval of the Executive Officer.

The following shall constitute the effluent monitoring program for

discharges of:

- a. saltbox water;
- b. steam condensate; and
- c. compressor and condenser non-contact cooling water.

Table 3. Sample Analysis Parameters

<u>PARAMETER</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY</u> <sup>d</sup>
flow	gallons	estimate	annually
Oil & Grease	mg/L	grab	annually <sup>1</sup>
Settleable Solids	ml/L	grab	annually <sup>1</sup>
Turbidity	NTU	grab	annually <sup>1</sup>
pH	pH Units	grab	annually <sup>1</sup>
Temperature	° F	measurement	annually
TSS	mg/L	grab	annually <sup>1</sup>
Arsenic	mg/L	grab	annually <sup>1</sup>
Cadmium	mg/L	grab	annually <sup>1</sup>
Chromium	mg/L	grab	annually <sup>1</sup>
Copper	mg/L	grab	annually <sup>1</sup>
Lead	mg/L	grab	annually <sup>1</sup>
Mercury	ug/L	grab	annually <sup>1</sup>
Nickel	mg/L	grab	annually <sup>1</sup>
Silver	mg/L	grab	annually <sup>1</sup>
Zinc	mg/L	grab	annually <sup>1</sup>
TBT	ug/L	grab	annually <sup>1</sup>

<u>PARAMETER</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY</u> <sup>d</sup>
Acute Toxicity <sup>a</sup>	% survival	grab	annually <sup>1</sup>
Chronic Toxicity <sup>b</sup>	TUc	grab	annually <sup>1</sup>
PAH <sup>c</sup>	ug/L	grab	annually <sup>1</sup>
Total Residual Chlorine	mg/L	grab	annually <sup>1</sup>

<sup>1</sup> Monitoring for this parameter shall be conducted annually unless the discharger submits an annual certification, signed by an authorized person as required in Monitoring Provision A.13 of this MRP, that this parameter has not been added to the discharge, and that no change has occurred in activities that could cause this parameter to be present in the discharge.

If the discharger submits such certification, monitoring for this parameter shall be conducted within the first year after the effective date of Order No. 97-36, and within the period of not more than 12 months and not less than 6 months prior to the expiration date of Order No. 97-36 (October 15, 2002). Certification shall be submitted no later than January 31 of each year. Monitoring results for this parameter shall be submitted no later than 30 days after sample collection.

3. Flows of Water Identified in Finding No. 2.d of Order No. 97-36

The discharger shall monitor discharges to surface waters of the flows of water identified in 3.a -3.c below. The sampling stations for each flow of water shall be located at all applicable discharge points, and where samples representative of the flow of water discharge can be obtained. Monitoring stations shall be specified in the BMP Plan and shall not be changed without notice to and the approval of the Executive Officer.

The following shall constitute the effluent monitoring program for discharges of:

- a. fire protection water;
- b. graving dock caisson ballast water; and
- c. graving dock hydrostatic relief water.

Table 4. Sample Analysis Parameters

<u>PARAMETER</u>	<u>UNIT</u>	<u>TYPE OF SAMPLE</u>	<u>MINIMUM FREQUENCY</u> <sup>d</sup>
flow	gallons	estimate	annually
Oil & Grease	mg/L	grab	annually <sup>1</sup>
Settleable Solids	ml/L	grab	annually <sup>1</sup>
Turbidity	NTU	grab	annually <sup>1</sup>
pH	pH Units	grab	annually <sup>1</sup>
Temperature	° F	measurement	annually <sup>1</sup>
TSS	mg/L	grab	annually <sup>1</sup>
Arsenic	mg/L	grab	annually <sup>1</sup>
Cadmium	mg/L	grab	annually <sup>1</sup>
Chromium	mg/L	grab	annually <sup>1</sup>
Copper	mg/L	grab	annually <sup>1</sup>
Lead	mg/L	grab	annually <sup>1</sup>
Mercury	ug/L	grab	annually <sup>1</sup>
Nickel	mg/L	grab	annually <sup>1</sup>
Silver	mg/L	grab	annually <sup>1</sup>
Zinc	mg/L	grab	annually <sup>1</sup>
TBT	ug/L	grab	annually <sup>1</sup>
Acute Toxicity <sup>a</sup>	% survival	grab	annually <sup>1</sup>
Chronic Toxicity <sup>b</sup>	TUc	grab	annually <sup>1</sup>
PAH <sup>c</sup>	ug/L	grab	annually <sup>1</sup>
Total Residual Chlorine	mg/L	grab	annually <sup>1</sup>

- <sup>1</sup> Monitoring for this parameter shall be conducted annually unless the discharger submits an annual certification, signed by an authorized person as required in Monitoring Provision A.13 of this MRP, that this parameter has not been added to the discharge, and that no change has occurred in activities that could cause this parameter to be present in the discharge.

If the discharger submits such certification, monitoring for this parameter shall be conducted within the first year after the effective date of Order No. 97-36, and within the period of not more than 12 months and not less than 6 months prior to the expiration date of Order No. 97-36 (October 15, 2002). Certification shall be submitted no later than January 31 of each year. Monitoring results for this parameter shall be submitted no later than 30 days after sample collection.

4. Floating Drydock Submergence/Emergence Water Discharge, Shipbuilding Ways Flood Water Discharge, and Graving Dock Flood Water Discharge Monitoring

The discharger shall provide written notification to staff at least 48 hours prior to flooding of its floating drydock, graving dock, or shipbuilding ways.

The discharger shall record on VHS video tape the condition of its floating drydock, graving dock, or shipbuilding ways immediately prior to each flooding. Recordings shall include the initial flooding of the drydock, graving dock, or shipbuilding ways. The discharger shall also submit a report describing its use and recovery of ship launch grease / wax. The report shall include the dates used, the amount (by weight) applied, and the amount (by weight) recovered. If the amount recovered is different than the amount applied, the report shall describe the reason(s) for the difference and the fate of unrecovered ship launch grease / wax. The discharger shall submit the video tapes and ship launch grease / wax report quarterly to the Executive Officer in accordance with Table 1 of this MRP.

If the discharger's floating drydock, graving dock, or shipbuilding ways was not flooded during the quarter, the discharger shall document in the quarterly effluent monitoring report that no flooding occurred during that monitoring period.

5. Floating Drydock Ballast Tank Monitoring

The discharger shall submit U.S. Navy and ASTM reports certifying the integrity of its floating drydock ballast tank.

6. Stormwater Monitoring

a. Non-Stormwater Discharge Visual Observations

- i. The discharger shall visually observe all drainage areas within its facility for the presence of unauthorized non-stormwater discharges.
- ii. Visual observations shall document the presence of any discolorations, stains, odors, floating materials, etc., as well as the source of any discharge (if known). Records shall be maintained of the visual observation dates, locations observed, observations, and response taken to eliminate unauthorized non-stormwater discharges and to reduce or prevent pollutants from contacting non-stormwater discharges. The BMP Program Manual shall be revised, as necessary, and implemented in accordance with Order No. 97-36.
- iii. The visual observations required above shall be conducted at the following frequencies:

(a) High Risk Areas

The discharger shall conduct monthly visual observations in high risk areas, as defined in Attachment E of Order No. 97-36, during daylight scheduled facility operating hours<sup>1</sup>, on days with no discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activities.

(b) All other areas

The discharger shall conduct quarterly visual observations in all other areas during daylight

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<sup>1</sup> "Scheduled facility operating hours" are the time periods when the facility is staffed to conduct any function related to industrial activity, but excluding time periods where only routine maintenance, emergency response, security, and/or janitorial services are performed.

scheduled facility operating hours, on days with no discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activities. Quarterly visual observations shall be conducted in each of the following periods: January-March, April-June, July-September, and October-December. The discharger shall conduct quarterly visual observations within 6-18 weeks of each other.

b. Stormwater Discharge Visual Observations

- i. Visual observations are required of all discharges of stormwater runoff associated with industrial activity occurring during daylight hours that are preceded by at least 48 hours without discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activities.
- ii. Visual observations shall document the presence of any floating and suspended material, oil and grease, discolorations, turbidity, odor, and source of any pollutants. Records shall be maintained of observation dates, locations observed, observations, and response taken to reduce or prevent pollutants in discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activities. The BMP Program Manual shall be revised, as necessary, and implemented in accordance with Order No. 97-36.
- iii. Stormwater discharge visual observations shall be conducted at the following frequencies:

(a) High Risk Areas

The discharger shall conduct visual observations of discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activity from high risk areas, as defined in Attachment E of Order No. 97-36, during each storm event. These visual observations shall occur during the first hour of discharge and at all discharge locations.

Visual observations of stored or contained stormwater shall occur at the time of release.

(b) All other areas

The discharger shall conduct visual observations of discharges, as defined in Attachment E of Order No. 97-36, of stormwater runoff associated with industrial activity from all other areas during one storm event per month during the wet season (October 1-May 30). These visual observations shall occur during the first hour of discharge and at all discharge locations. Visual observations of stored or contained stormwater shall occur at the time of release.

c. Sampling and Analysis

- i. The discharger shall collect stormwater samples during the first hour of discharge from (1) the first storm of the wet season that produces discharges, as defined in Attachment E of Order No. 97-36, and (2) at least one other storm in the wet season that produces discharges, as defined in Attachment E of Order No. 97-36. All stormwater discharge locations shall be sampled. Sampling of stored or contained stormwater shall occur at the time the stored or contained stormwater is released. If a sample is not collected from the first storm of the wet season that produces discharges, as defined in Attachment E of Order No. 97-36, the discharger is still required to collect samples from two other storms of the wet season that produces discharges, as defined in Attachment E of Order No. 97-36 and shall explain in the Stormwater Annual Report why the first storm that produces discharges, as defined in Attachment E of Order No. 97-36 was not sampled. If a sample cannot be taken during the first hour of a discharge, the discharger shall explain why the samples could not be taken during this period of time.
- ii. Samples shall be collected from discharges, as defined in Attachment E of Order No. 97-36, of stormwater that are preceded by at least 7 days without stormwater discharge.

- iii. The samples shall be analyzed in accordance with Table 5 of this MRP:

Table 5. Sample Analysis Parameters

PARAMETER	UNIT	TYPE OF SAMPLE <sup>1</sup>	FREQUENCY OF MONITORING
Volume of Discharge	gallons	estimate <sup>2</sup>	2 storms per year
Total Petroleum Hydrocarbons (TPH)	mg/L	grab	2 storms per year
TSS	mg/L	grab	2 storms per year
Settleable Solids	ml/L	grab	2 storms per year
pH	pH Units	grab	2 storms per year
Arsenic	ug/L	grab	2 storms per year
Cadmium	ug/L	grab	2 storms per year
Chromium	ug/L	grab	2 storms per year
Copper	ug/L	grab	2 storms per year
Lead	ug/L	grab	2 storms per year
Mercury	ug/L	grab	2 storms per year
Nickel	ug/L	grab	2 storms per year
Silver	ug/L	grab	2 storms per year
Zinc	ug/L	grab	2 storms per year
Chemical Oxygen Demand (COD)	mg/L	grab	2 storms per year
TBT	ug/L	grab	2 storms per year
Acute Toxicity <sup>3</sup>	% survival	grab	1 storm per year
Chronic Toxicity <sup>4</sup>	TUc	grab	1 storm per year
Oil & Grease	mg/L	grab	2 storms per year
Total Organic Carbon (TOC)	mg/L	grab	2 storms per year

PARAMETER	UNIT	TYPE OF SAMPLE <sup>1</sup>	FREQUENCY OF MONITORING
Specific Conductance	umho/cm	measurement	2 storms per year

<sup>1</sup> mg/L = milligrams per liter  
 ml/L = milliliters per liter  
 ug/L = micrograms per liter  
 ng/L = nanograms per liter  
 umho = micromhos per centimeter

<sup>2</sup> The volume of stormwater discharge can be estimated by multiplying: amount of rainfall in feet × square feet of surface area × impervious factor. There are 7.5 gallons per cubic foot.

<sup>3</sup> The presence of acute toxicity in the stormwater shall be determined as specified in *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (EPA 600/4-90-027F, August 1993 or subsequent editions). Dischargers shall conduct an annual acute toxicity test on a sample of stormwater. Dischargers shall conduct a 96 hour static-renewal test with the vertebrate Menidia beryllina, or the invertebrate Mysidopsis bahia. The acute toxicity testing shall be a 96-hour static renewal test conducted on a sample of 100% stormwater and a laboratory control. Use of two laboratory controls, a receiving water control, and a synthetic laboratory seawater control, is highly recommended. The salinity of the sample should be adjusted to the salinity level typical of the receiving water using dry sea salt. The adjusted salinity level shall be reported. The stormwater tests shall be conducted with concurrent reference toxicant tests. Both the reference toxicant and the stormwater test shall meet all test acceptability criteria as specified in the above named manual. If the test acceptability criteria are not achieved, the discharger shall re-sample and re-test by the next storm.

<sup>4</sup> The presence of chronic toxicity shall be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/600/4-87/028, 1988) and/or *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95-136). Dischargers shall conduct an annual chronic toxicity test on a sample of stormwater. Dischargers shall conduct a 7-day survival and larval growth test on Menidia beryllina or a 7-day survival, growth/ fecundity test on Mysidopsis bahia. Since the test methods provide for an acute/chronic dual endpoint, the discharger may use the same test species as is used for the acute toxicity test. The chronic toxicity testing shall be a 7 day static renewal test on a sample of 100% effluent and a laboratory control. Use of two laboratory controls, a receiving water control, and a synthetic laboratory seawater control, is highly recommended. The salinity of the sample should be adjusted to the salinity level typical of the receiving water using dry sea salt. The adjusted salinity level shall be reported. The stormwater

tests shall be conducted with concurrent reference toxicant tests. Both the reference toxicant and the stormwater test shall meet all test acceptability criteria as specified in the above named manual. If the test acceptability criteria are not achieved, the discharger shall re-sample and re-test by the next storm.

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d. Stormwater Discharge Sample Locations

- i. The discharger shall visually observe and collect samples of stormwater discharges from all drainage areas that represent the quality and quantity of the facility's stormwater discharges from the storm event or storm. Monitoring stations shall be established at each point of discharge from areas where industrial activities occur or have occurred during the previous year. Monitoring stations shall be positioned at points where the stormwater flow has not commingled with any flow of water from a non-industrial area, and where samples representative of the discharge of stormwater runoff associated with industrial activity in the drainage area can be obtained.

Until the discharger prevents commingling of stormwater runoff associated with industrial activity with other stormwater runoff in accordance with Provision E.7 of Order No. 97-36, monitoring shall be required for all stormwater discharges. After the discharger prevents commingling of stormwater runoff associated with industrial activity with other stormwater runoff, monitoring shall only be required for discharges of stormwater runoff associated with industrial activity.

Monitoring station locations shall be specified in the BMP Program Manual, depicted on a site map, and shall not be changed without notice to and the approval of the Executive Officer. The installation of automatic or mechanical stormwater samplers at the monitoring station is recommended.

- ii. With the exception of high risk areas, as defined in Attachment E of Order No. 97-36, dischargers that determine

that the industrial activities and BMPs within two or more drainage areas are substantially identical may either (a) collect samples from a reduced number of substantially identical drainage areas, or (b) collect samples from each substantially identical drainage area and analyze a combined sample from each substantially identical drainage area. The discharger must document such a determination in the annual report.

e. Visual Observation and Sample Collection Exceptions

The discharger is required to be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1) and throughout the wet season until the minimum requirements of Sections B.6.b and B.6.c. are completed with the following exception:

- i. The discharger is not required to collect a sample and conduct visual observations in accordance with Section B.6.b and Section B.6.c due to dangerous weather conditions, such as flooding, electrical storm, etc. Non-stormwater visual observations are only required during daylight scheduled facility operating hours. Stormwater visual observation are only required during daylight hours. Dischargers that do not collect the required samples or visual observations during a wet season due to this exception shall include an explanation in the Stormwater Annual Report why the sampling or visual observations could not be conducted.

f. Monitoring Methods

- i. All sampling and sample preservation shall be in accordance with the current edition of "Standard Methods for the Examination of Water and Wastewater" (American Public Health Association). All monitoring instruments and equipment (including a facility operator's own field instruments for measuring pH and Electro Conductivity) shall be calibrated and maintained in accordance with

manufacturers' specifications to ensure accurate measurements. All laboratory analyses must be conducted according to test procedures under 40 CFR Part 136, unless other test procedures have been specified in this General Permit or by the Regional Water Board. All metals shall be reported as total metals.

g. Records

Records of all stormwater monitoring information and copies of all reports (including the Annual Reports) required by Order No. 97-36 or this MRP shall be retained for a period of at least five years. These records shall include:

- i. The date, place, and time of site inspections, sampling, visual observations, and/or measurements;
- ii. The individual(s) who performed the site inspections, sampling, visual observations, and or measurements;
- iii. Flow estimates;
- iv. The date and approximate time of analyses;
- v. The individual(s) who performed the analyses;
- vi. Analytical results, method detection limits, and the analytical techniques or methods used;
- vii. Quality assurance/quality control records and results;
- viii. Non-stormwater discharge inspections and visual observations and stormwater discharge visual observation records (see Sections B.6.a. and B.6.b.);
- ix. Visual observation and sample collection exception records (see Section B.6.c.i., B.6.d.ii., and B.6.e);

- x. All calibration and maintenance records of on-site instruments used;
  - xi. The records of any corrective actions and follow-up activities that resulted from the visual observations.
- h. Stormwater Annual Report

The discharger shall submit a Stormwater Annual Report by August 30 of each year to the Executive Officer.

The report shall include a summary of visual observations and sampling results, an evaluation of the visual observation and sampling and analysis results, laboratory reports, the Annual Comprehensive Site Compliance Evaluation Report required by Order No. 97-36, an explanation of why a facility did not implement any activities required by Order No. 97-36 (if not already included in the Evaluation Report), and records specified in Section B.6.g.ix. The method detection limit of each analytical parameter shall be included. Analytical results that are less than the method detection limit shall be reported as "less than the method detection limit." The Annual Report shall be signed and certified in accordance with Monitoring Provision A.13 of this MRP. The discharger shall prepare and submit the Stormwater Annual Reports using the annual report forms provided by the State Water Board or Regional Water Board or shall submit their information on a form that contains equivalent information.

- i. Based on a review of the BMP Program Manual and the annual report, the Executive Officer may direct a discharger(s) to monitor at different and/or additional stormwater discharge points.

### **C. COMPLIANCE CERTIFICATION**

The discharger shall submit a report certifying either compliance or noncompliance with all requirements and conditions of Order No. 97-36 during each month. The certification shall be signed by an authorized person as

required in Monitoring Provision A.13 of this MRP, and shall be submitted monthly to the Executive Officer in accordance with Table 1 of this MRP.

**D. SPILL / ILLICIT DISCHARGE LOG**

The discharger shall log and report all spills and illicit discharges within and from its leasehold, which occur at its facility during each month. The spill / illicit discharge reports shall identify:

- the time and date of the spill or illicit discharge;
- the cause of the spill or illicit discharge;
- the materials or wastes involved in the spill or illicit discharge,
- the estimated volume of the spill or illicit discharge;
- the specific location where the spill or illicit discharge originated;
- the fate of the spill or illicit discharge (e.g., San Diego Bay, floating drydock, etc.);
- the physical extent or size of the problem area(s);
- whether the spill or illicit discharge contained pollutants;
- the public agencies notified;
- the corrective actions taken; and
- the means to prevent or minimize future spills or illicit discharges.

The reports shall be signed by an authorized person as required in Monitoring Provision A.13 of this MRP, and shall be submitted quarterly to the Executive Officer in accordance with Table 1 of this MRP.

The discharger shall include in its annual effluent report, a summary of the spills

and illicit discharges which occurred in or on its leasehold. The spill / illicit discharge summary report shall indicate the total number of spills and illicit discharges for the year, categorize the spills and illicit discharges, and provide the percentages of each type of spill or illicit discharge in a graphical representation. The summary report shall also indicate the efforts the discharger used in the year to prevent or minimize spills.

#### **E. CHEMICAL UTILIZATION AUDIT**

The discharger shall submit a complete Chemical Utilization Audit form to summarize the use of hazardous materials and wastes generated. The form shall be signed by an authorized person as required in Monitoring Provision A.13 of this MRP, and shall be submitted annually to the Executive Officer in accordance with Table 1 of this MRP.

#### **F. WASTE HAULING LOG**

The discharger shall submit a log showing the volume, type, disposition, and date of disposal for all wastes originating from ship construction, modification, repair, and maintenance facilities and activities during each month. The log shall be signed by a shall be signed by an authorized person as required in Monitoring Provision A.13 of this MRP, and shall be submitted semiannually to the Executive Officer in accordance with Table 1 of this MRP.

#### **G. RECEIVING WATER AND SEDIMENT CHEMISTRY MONITORING**

##### **1. Sediment Monitoring**

##### **a. SAMPLE COLLECTION**

- i.** The sediment sampling program shall consist entirely of surficial sediment samples, and shall be conducted by each discharger at the stations within its leasehold, as specified in Section H (Sediment Monitoring Station Locations) of this MRP.

Sediment monitoring stations for new dischargers, and existing dischargers not listed in Table 1 of Finding No. 5 of Order No. 97-36 shall be designated by the Executive Officer.

- ii. One sample shall be collected from each designated station on an annual basis.
- iii. Each sample shall consist of three replicates (jars of sediment) to be composited in the laboratory prior to analysis.

Samples shall not be discarded after analysis. All samples shall be frozen and retained for a period of no less than 45 days from the date on which Regional Board staff received the corresponding analytical results. At that time, the Executive Officer shall be notified and approval to discard the samples shall be obtained, before the samples are discarded.

- iv. Surficial sediment samples shall be collected by grab. Grab samples shall be collected with a 0.1 m<sup>2</sup> modified van Veen grab. The grab sampler shall be galvanized, stainless steel, or Teflon-coated. All surfaces of the grab shall be clean and free of rust. Grab sample collection procedures shall be consistent with appropriate methods, including the criteria for acceptable grab samples specified in the Southern California Coastal Water Research Project (SCCWRP) Field Methods Manual. The subsample to be analyzed, shall be taken from the top 2-3 cm of undisturbed grab sample. Detailed field protocol is provided in EPA's guidance documents 430/9-86-004 and 430/9-82-010, or in the SCCWRP Field Methods Manual cited above.
- v. Sample Collection Plan

Samples shall be collected in accordance with a detailed Sample Collection Plan which shall be approved by the Executive Officer prior to sampling. The discharger may submit an existing Sample Collection Plan for approval by the

Executive Officer. The plan shall address all collection protocol including station positioning method, sampling equipment, containers, preservation, transportation, etc.

The Sample Collection Plan shall be submitted no later than November 30, 1997. Upon approval by the Executive Officer, the Sample Collection Plan shall be followed for the collection of all data required under this monitoring program. Any proposed future changes to the Sample Collection Plan shall be submitted to the Executive Officer for review no later than August 30 of the year in which the changes are proposed to take effect.

A "pre-sampling field effort" shall be conducted to collect and/or confirm the station locations which shall be included in the final Sample Collection Plan:

(a) Narrative Descriptions:

A detailed narrative description of each station location including distances from permanent key landmarks shall be developed and confirmed in the field.

(b) Photographs:

Each station shall be marked (if feasible) and photographed. A minimum of two photos shall be taken to show the location of each station relative to the key landmarks which will be used to relocate it (e.g., storm drain outlet, corner of dry dock, etc).

(c) Station Coordinates:

The discharger shall convert the station coordinates from the Lambert coordinate grid system (i.e., Easting and Northing) into Latitude and Longitude coordinates. All station coordinates shall be confirmed in the field or corrected.

(d) Facility and Reference Station Maps:

Accurate facility and reference station maps shall be developed and confirmed in the field. All maps shall be drawn to a scale of 1"=50' or 1"=100' overlain on a Latitude/Longitude coordinate grid system. In addition to the monitoring stations, the maps shall show only pertinent details such as structures, storm drains, and work areas. A mylar master is recommended, photocopies may be submitted.

The final Sample Collection Plan and shall remain unchanged from station to station and year to year.

vi. Method/Sampler Substitution:

If over the course of the monitoring program, conditions at a particular station are encountered which render collection of samples by grab dangerous or impractical, the discharger may use in its place another of the approved methods/samplers (e.g. Ekman or diver). If possible, substitutions should be approved in advance by the Executive Officer.

When substitutions are necessary, the corresponding Discharge Monitoring Reports shall specify the station(s) involved and the substitute method/sampler employed.

vii. Double Sampling Requirement:

During the first three sampling/reporting periods in which the use of the "usual" method/sampler can be resumed at the station (because access has been restored), the discharger shall collect two samples from that station at the same time, one with the usual method/sampler and the other with the substitute. The results will be compared to evaluate the variability due to the method or sampling equipment. This information will assist in interpreting data, should changes in

contaminant concentrations be observed during the period in which the substitute method/ sampler was used.

The final Sample Collection Plan shall also address all collection protocol including station positioning method, decontamination procedures, containers, preservation, transportation, etc.

The final Sample Collection Plan shall be followed for the collection of all data required under this monitoring program. Any proposed future changes to the Sample Collection Plan shall be submitted to the Executive Officer for review no later than 90 days before the start of the sampling/reporting period in which the changes are proposed to take effect.

After confirmation (of facility maps, narrative description, and coordinates), monitoring stations may be permanently marked for faster and more accurate station positioning.

b. SAMPLING STATIONS AND ANALYSIS

i. Station Location/Sample Collection - General Guidelines

The following general guidelines regarding station location/sample collection shall apply, unless otherwise specified in this MRP.

Table 6. Station Location General Guidelines

STATIONS ADJACENT TO:	SAMPLE COLLECTION
PIERS/ FLOATS/ DOCKS/ DRYDOCKS/ QUAY WALLS	<p>Samples shall be taken immediately below the edge of a pier float, dock, dry dock, or quay wall and shall be collected by 0.1 m<sup>2</sup> modified van Veen dredge deployed from a boat or the side of the pier, float, dock, dry dock, or quay wall.</p> <p>When a float and quay wall or pier are present side-by-side, samples should be taken below the outside (or bay-side) edge of the float (rather than between the float and quay wall or under the float).</p>
RIP RAP	Samples should be collected 5 feet further from shore than where the rip rap first meets the soft bottom sediment. (In some cases, 10 feet may be specified.)
STORM DRAINS	Storm drain samples of bay sediment should be collected at a point approximately 10 feet from the mouth of the drain and in line with the centerline of the drain unless otherwise specified in this MRP.
BEACH	The narrative descriptions will indicate the distance that a station is located relative to a stationary landmark, such as a pier or other nearby structure.
DOCK/RIP RAP INTERSECTION	Follow guidelines for rip rap station.
DOCK/BEACH INTERSECTION	Follow guidelines for beach station.

ii. Remote Reference Stations

The three remote reference stations are common to all dischargers. The discharger may fulfill its sampling requirements for the remote reference stations by submitting results from samples collected at these stations by other

entities during the sampling/reporting period. Reference station locations are specified in Section H (Sediment Monitoring Station Locations) of this MRP.

It is the discharger's responsibility to request and obtain permission from the appropriate party or parties prior to sample collection at each of the three reference stations.

c. ANALYSIS PARAMETERS AND DETECTION LIMITS

Sample analyses shall be conducted using approved laboratory methods capable of meeting the detection limits shown in Table 7 below. Surficial sediment samples shall be analyzed for the parameters and to the detection limits indicated in Table 7 of this MRP.

Table 7. Sediment Chemistry Methods and Detection Limits

PARAMETER	METHOD NUMBER	DETECTION LIMIT (dry weight)
grain size	--	NA
Cadmium, Chromium, Copper, Nickel, Silver <sup>1</sup>	6010	0.5 mg/kg
Mercury <sup>1</sup>	7471	0.1 mg/kg
Arsenic <sup>1</sup>	7060 or 7061	0.5 mg/kg
Lead <sup>1</sup>	7421	0.5 mg/kg
Zinc <sup>1</sup>	6010	2.0 mg/kg
Tributyltin (TBT) <sup>2</sup>	See Footnote 2	1.0 ug/kg
Total Petroleum Hydrocarbons (TPH) <sup>3</sup>	Modified 8015 or DHS	500. ug/kg
Polychlorinated biphenyls/ Polychlorinated terphenyls (PCBs/PCTs) <sup>4</sup>	8080	20.0 ug/kg
PAH <sup>5</sup>	8270	100. ug/kg

1. Metals

Trace metal analysis shall include the individual concentrations of arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, and zinc. Method 3050 shall be used in preparation for all metal analyses except mercury. Preparation procedures for mercury are included in method 7471.

2. Tributyltin (TBT)

Concentrations of Tributyltin shall be analyzed using protocol approved by the Executive Officer or as described in:

Stephenson, M.D., and D.R. Smith. 1988. Determination of Tributyltin in Tissues and Sediments by Graphite Furnace Atomic Absorption Spectrometry. Analytical Chemistry, Vol.60, No. 7. pp 696-698; or

Stallard M.O., and S.Y. Cola. 1989. Optimization of Butyltin Measurements for Seawater, Tissue, and Marine Sediment Samples. Applied Organometallic Chemistry 3:105-114; or

Unger, M.A. et al. 1986. GC Determination of Butyltin in Natural Waters by Flame Photometric Detection of Hexyl Derivatives with Mass Spectrometric Confirmation. Chemosphere, Volume 15, Number 4. p 461.

3. Total Petroleum Hydrocarbons, nC<sub>12</sub> - nC<sub>32</sub>

Using gas chromatography, analyze for the medium molecular weight hydrocarbons, boiling point range nC<sub>12</sub>- nC<sub>32</sub>. Separate the two resulting fractions, specifying the concentrations of (1) saturated aliphatic hydrocarbons; (2) unsaturated aromatic hydrocarbons; and their sum, the Total Petroleum Hydrocarbons. The concentrations of the remaining monitored contaminants, PCBs, PCTs, and PAHs, can be determined by further analysis of these two fractions.

## TOTAL PETROLEUM HYDROCARBONS

Aliphatic

Aromatic

PCBs/PCTs

PAHs

4. PCBs/PCTs

Analyze the saturated aliphatic fraction for PCBs and PCTs, both of which can be measured in a single procedure. Run the PCB analysis as usual but include one additional standard for Aroclor 5460. At approximately 40 minutes, increase the

temperature to 285 degrees celsius. PCTs elute later than PCBs and the entire procedure will take approximately 90 minutes.

Report the concentration of Total PCBs, indicating the name and degradation status of the predominant aroclor (e.g., Aroclor 1260, undegraded). The name and status of a secondary PCB aroclor shall also be reported, if present. Similarly, specify the concentration of Total PCTs assumed to be Aroclor 5460. Report the presence of any unidentified mixture of chlorinated hydrocarbons detected by electron capture gas chromatography. Additional PCB/PCT information, such as the concentrations of individual congeners, should also be provided if available without additional analytical costs.

5. Polynuclear Aromatic Hydrocarbons (PAHs)

The concentrations of the individual PAHs can be determined by further analysis of the unsaturated aromatic fraction. The concentrations of the following eight PAHs shall be reported: Phenanthrene, 1-Methyl Phenanthrene, 2-Methyl Phenanthrene, Benzo(a)pyrene, Chrysene, Fluoranthene, Pyrene, and Anthracene.

Additional information, such as the concentration of other PAHs, should also be provided if available without additional analytical costs.

6. Total Organic Carbon

Although not initially required, composited sediment from each sample shall be retained for possible future Total Organic Carbon (TOC) analysis. All samples shall be frozen and retained for a period of no less than 45 days from the date on which Regional Board staff received the corresponding analytical results. At that time, the Executive Officer shall be notified and approval to discard the samples shall be obtained, before the samples are discarded.

d. **MONITORING RESULTS AND REPORTS**

i. Discharge Monitoring Reports

Monitoring results must be reported on Discharge Monitoring Report forms. Discharge Monitoring Report forms shall be submitted to the Executive Officer on a 3.5 inch DOS-formatted, double sided, high density diskette in IBM Microsoft Word Version 6.0 format, and in hard copy form.

Each Discharge Monitoring Report shall contain all required sampling results in the following three forms:

(a) Tables:

Current, as well as historical, monitoring data shall be provided in tabular form. Historical monitoring data is defined as sample results from all previous reporting periods collected as a part of this MRP. All concentrations shall be reported in both dry and wet weights. Tabular data shall be submitted on a 3.5 inch DOS-formatted, double sided, high-density diskette in Excel Version 5.0 format, and in hard copy form.

(b) Graphs:

The specific type of graph(s) to be generated (e.g., histogram) is not specified, but left to the discretion of the discharger's consultant who should determine the most effective way of presenting the data. Graphical data shall be submitted on a 3.5 inch DOS-formatted, double sided, high-density diskette in Excel Version 5.0 format, and in hard copy form.

(c) Facility And Reference Station Maps:

The facility and reference station maps developed for the final Sample Collection Plan and confirmed during the "pre-sampling field effort" shall be used to present the monitoring data. A separate facility and reference station map shall be developed for each monitored contaminant or contaminant group indicating the measured concentrations at each station (rather than concentration contours).

(d) Paint Chip Analyses

In addition to tables, graphs, and maps, shipyard Discharge Monitoring Reports must also include the results of the annual paint chip analyses.

ii. Trend Curves And Statistical Analyses

The discharger shall submit annual "trend curves" for each monitored constituent, in which concentrations are plotted as a function of time. The discharger shall also determine if a statistically significant change (increase or decrease) in sediment concentrations has occurred over time for each contaminant, relative to reference concentrations.

In making this determination, the discharger shall employ Cochran's Approximation to the Behrens-Fisher Students' T-Test as described in 40 CFR Part 264, Appendix IV, or another statistical procedure approved or directed by the Executive Officer.

In all cases, the discharger shall report as soon as possible the cause(s) or suspected cause(s) of any increase in contaminant concentrations, if they are known.

Monitoring results shall be compared against the following three sets of reference data:

- (a) The discharger's own historical baseline data (historical data is defined as sample results from all previous sampling/reporting periods collected as a part of the Sediment MRP);
- (b) Concentrations measured at the three remote reference sites;
- (c) Concentrations measured at nearby city storm drain(s), if present.

e. **SEDIMENT MONITORING SUSPENSION**

Each discharger may suspend its sediment monitoring program, on a one time limited term basis, subject to the conditions specified below.

- i. Sediment monitoring required by this MRP may be suspended for a period not to exceed two years when all of

the following conditions have been met:

- (a) The Regional Board has issued an enforceable time schedule for cleanup of contaminated Bay sediment from within and/or adjacent to the dischargers leasehold; and
  - (b) The discharger has developed a sediment cleanup plan acceptable to the Regional Board and has agreed to implement that plan in accordance with the Regional Board's time schedule.
- ii. The sediment monitoring program required by this MRP shall be resumed no later than the earliest date when any of the following have occurred:
- (a) The discharger is not in compliance with the Regional Board's time schedule.
  - (b) Two years have elapsed from the effective date of the Regional board's time schedule for sediment cleanup; or
  - (c) The Executive Officer directs resumption of the sediment monitoring program.

**H. SEDIMENT MONITORING STATION LOCATIONS**

1. Campbell Industries shall collect surficial sediment sample in accordance with the following table:

Table 8. Campbell Industries Monitoring Station Locations (Lambert/California Coordinates)

Station Number	Easting	Northing	Indicators Only <sup>1</sup>	Full Analysis <sup>2</sup>	Paint Chips
CMB-01	1720020	196576		X	X
CMB-02	1720082	196579	X		
CMB-03	1720208	196534	X		
CMB-04	1720121	196416		X	X
CMB-05	1720175	196392	X		
CMB-06	1720223	196274	X		
CMB-07	1720413	196349	X		
CMB-08	1720489	196267		X	X
CMB-09	1720191	196085	X		
CMB-10	1720563	196145	X		
CMB-11	1720730	196091	X		
STD-CMB-01	1719510	197150		X	X
STD-CMB-02	1719770	196926	X		X
STD-CMB-03	1720020	196684	X		
STD-CMB-04	1720965	195926	X		X

1. Indicators Only Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)

2. Full Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)  
Total Petroleum Hydrocarbons (TPH)  
Polychlorinated Biphenyls/Terphenyls (PCBs/PCTs)  
Polynuclear Aromatic Hydrocarbons (PAHs)

3. Paint Chip Analysis

For each analysis, paint chips shall be extracted from a total of approximately 9 liters of sediment; 3 liters from each of three discharger stations.

In the laboratory, the sediment shall be sieved using a screen size just large enough to allow the sediment to pass but not the paint chips. Do not exceed a maximum screen size of 16 openings per inch (openings are approximately 1/16th of an inch). The remaining debris shall then be sorted by hand to remove paint chips. After removal, the paint chips shall be photographed, quantified, and analyzed for metals and TBT.

If paint chips are present, three separate analyses shall be conducted annually. Each analysis will be conducted on paint chips extracted from three stations or replicates; the first analysis will use paint chips extracted from the three discharger stations indicated and the second analysis shall use paint chips from the three remote reference stations. The third analysis shall be conducted on three replicates taken from a single storm drain station.

2. NASSCO shall collect surficial sediment sample in accordance with the following table:

Table 9. NASSCO Facilities Sampling Site Coordinates (Lambert/California Coordinates)

Station Number	Easting	Northing	Indicators Only <sup>1</sup>	Full Analysis <sup>2</sup>	Paint Chips
NSS-01	1725720	191680		X	X
NSS-02	1725925	191535	X		
NSS-03	1726265	191650	X		
NSS-04	1726705	191685	X		
NSS-05	1726545	191635		X	X
NSS-06	1726505	190095	X		
NSS-07	1726835	191690	X		
NSS-08	1726925	191580	X		
NSS-09	1726780	191365	X		
NSS-10	1726905	191255		X	
NSS-11	1727025	191150	X		
NSS-12	1727395	191130	X		
NSS-13	1727165	190820		X	X
NSS-14	1727125	190835	X		
NSS-15	1726725	190575	X		
NSS-16	1727570	190615	X		
NSS-17	1728395	190770	X		
STD-NSS-01	1728575	190650		X	X

1. Indicators Only Analysis

Grain Size

Trace Metals  
Tributyltin (TBT)

2. Full Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)  
Total Petroleum Hydrocarbons (TPH)  
Polychlorinated Biphenyls/Terphenyls (PCBs/PCTs)  
Polynuclear Aromatic Hydrocarbons (PAHs)

3. Paint Chip Analysis

For each analysis, paint chips shall be extracted from a total of approximately 9 liters of sediment; 3 liters from each of three discharger stations.

In the laboratory, the sediment shall be sieved using a screen size just large enough to allow the sediment to pass but not the paint chips. Do not exceed a maximum screen size of 16 openings per inch (openings are approximately 1/16th of an inch). The remaining debris shall then be sorted by hand to remove paint chips. After removal, the paint chips shall be photographed, quantified, and analyzed for metals and TBT.

If paint chips are present, three separate analyses shall be conducted annually. Each analysis will be conducted on paint chips extracted from three stations or replicates; the first analysis will use paint chips extracted from the three discharger stations indicated and the second analysis shall use paint chips from the three remote reference stations. The third analysis shall be conducted on three replicates taken from a single storm drain station.

3. Southwest Marine shall collect surficial sediment sample in accordance with the following table:

Table 10. Southwest Marine Sampling Site Coordinates (Lambert/California Coordinates)

Station Number	Easting	Northing	Indicators Only <sup>1</sup>	Full Analysis <sup>2</sup>	Paint Chips
SWM-01	1724820	172460	X		
SWM-02	1724750	192320		X	X
SWM-03	1724720	192220	X		
SWM-04	1724915	197400		X	X
SWM-05	1724975	192400	X		
SWM-06	1724960	192290		X	X
SWM-07	1725000	192240	X		
SWM-08	1725060	192210	X		
SWM-09	1724925	191975	X		
SWM-10	1725100	192020	X		
SWM-11	1725160	191820	X		
SWM-12	1725460	192115	X		
SWM-13	1725475	192000	X		
SWM-14	1725380	191760	X		
SWM-15	1725385	191680	X		
STD-SWM-01	1725400	192150		X	X

1. Indicators Only Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)

2. Full Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)  
Total Petroleum Hydrocarbons (TPH)  
Polychlorinated Biphenyls/Terphenyls (PCBs/PCTs)  
Polynuclear Aromatic Hydrocarbons (PAHs)

3. Paint Chip Analysis

For each analysis, paint chips shall be extracted from a total of approximately 9 liters of sediment; 3 liters from each of three discharger stations.

In the laboratory, the sediment shall be sieved using a screen size just large enough to allow the sediment to pass but not the paint chips. Do not exceed a maximum screen size of 16 openings per inch (openings are approximately 1/16th of an inch). The remaining debris shall then be sorted by hand to remove paint chips. After removal, the paint chips shall be photographed, quantified, and analyzed for metals and TBT.

If paint chips are present, three separate analyses shall be conducted annually. Each analysis will be conducted on paint chips extracted from three stations or replicates; the first analysis will use paint chips extracted from the three discharger stations indicated and the second analysis shall use paint chips from the three remote reference stations. The third analysis shall be conducted on three replicates taken from a single storm drain station.

4. The dischargers shall collect surficial sediment sample from three reference stations in accordance with the following table:

Table 11. Reference Station Sampling Site Coordinates (Lambert/California Coordinates)

Station Number	Easting	Northing	Indicators Only <sup>1</sup>	Full Analysis <sup>2</sup>	Paint Chips
REF-01	1697300	196600		X	X
REF-02	1706085	204810		X	X
REF-03	1715225	201110		X	X

1. Indicators Only Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)

2. Full Analysis

Grain Size  
Trace Metals  
Tributyltin (TBT)  
Total Petroleum Hydrocarbons (TPH)  
Polychlorinated Biphenyls/Terphenyls (PCBs/PCTs)  
Polynuclear Aromatic Hydrocarbons (PAHs)

3. Paint Chip Analysis

For each analysis, paint chips shall be extracted from a total of approximately 9 liters of sediment; 3 liters from each of three discharger stations.

In the laboratory, the sediment shall be sieved using a screen size just large enough to allow the sediment to pass but not the paint chips. Do not exceed a maximum screen size of 16 openings per inch (openings are approximately 1/16th of an inch). The remaining debris shall then be sorted by hand to remove paint chips. After removal, the paint chips shall be photographed, quantified, and analyzed for metals and TBT.

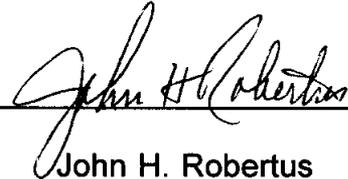
If paint chips are present, three separate analyses shall be conducted annually. Each analysis will be conducted on paint chips extracted from three stations or replicates; the first analysis will use paint chips extracted from the three discharger stations indicated and the second analysis shall use paint chips from the three remote reference stations. The third analysis shall be conducted on three replicates taken from a single storm drain station.

**I. ENDNOTES**

- <sup>a</sup> The presence of acute toxicity shall be determined as specified in *Methods for Measuring the Acute Toxicity of Effluents to Freshwater and Marine Organisms* (EPA 600/4-90-027F, August 1993 or subsequent editions). Dischargers shall conduct a 96 hour static-renewal test with the vertebrate Menidia beryllina, or the invertebrate Mysidopsis bahia. The acute toxicity testing shall be a 96-hour static renewal test conducted on a sample of 100% effluent and a laboratory control. Use of two laboratory controls, a receiving water control, and a synthetic laboratory seawater control, is highly recommended. The salinity of the sample should be adjusted to the salinity level typical of the receiving water using dry sea salt. The adjusted salinity level shall be reported. The effluent tests shall be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test shall meet all test acceptability criteria as specified in the above named manual. If the test acceptability criteria are not achieved, the discharger shall re-sample and re-test.
- <sup>b</sup> The presence of chronic toxicity shall be determined as specified in *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/600/4-87/028, 1988) and/or *Short-Term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to West Coast Marine and Estuarine Organisms* (EPA/600/R-95-136). Dischargers shall conduct a 7-day survival and larval growth test on Menidia beryllina or a 7-day survival, growth/ fecundity test on Mysidopsis bahia. Since the test methods provide for an acute/chronic dual endpoint, the discharger may use the same test species as is used for the acute toxicity test. The chronic toxicity testing shall be a 7 day static renewal test on a sample of 100% effluent and a laboratory control. Use of two laboratory controls, a receiving water control, and a synthetic laboratory seawater control, is highly recommended. The salinity of the sample should be adjusted to the salinity level typical of the receiving water using dry sea salt. The adjusted salinity level shall be reported. The effluent tests shall be conducted with concurrent reference toxicant tests. Both the reference toxicant and the effluent test shall meet all test acceptability criteria as specified in the above named manual. If the test acceptability criteria are not achieved, the discharger shall re-sample and re-test.
- <sup>c</sup> PAHs (polynuclear aromatic hydrocarbons) shall mean the sum of acenaphthylene, anthracene, 1,2-benzanthracene, 3,4-benzofluoranthene, benzo(k)fluoranthene, 1,12-benzoperylene, benzo(a)pyrene, chrysene, dibenzo(ah)anthracene, fluorene, indeno(1,2,3-cd)pyrene, phenanthrene, and pyrene.

- <sup>d</sup> If one type of flow of water (waste stream) is combined with one or more other types of waste streams prior to discharge, the discharger shall monitor the combined discharge at the highest monitoring frequency required for any individual waste stream which is part of the combined discharge. The discharger's monitoring reports shall indicate which types of waste streams were combined.

I, John Robertus, Executive Officer of the San Diego Regional Water Quality Control Board, do hereby certify the foregoing is a full, true, and correct copy of Monitoring and Reporting Program No. 97-36 adopted by the California Regional Water Quality Control Board, San Diego Region, on October 15, 1997.

A handwritten signature in cursive script, reading "John H. Robertus", is written over a horizontal line.

John H. Robertus  
Executive Officer

"ATTACHMENT A"

CHEMICAL UTILIZATION AUDIT

The attached Chemical Utilization Audit will serve as Attachment A for all addenda.

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION

MONITORING AND REPORTING PROGRAMS 97-36 AND 97-37

"ATTACHMENT A"

CHEMICAL UTILIZATION AUDIT

1. GENERAL INFORMATION

Company Name: \_\_\_\_\_

Company Address: \_\_\_\_\_

Company Phone: (\_\_\_\_) \_\_\_\_\_

Contact: \_\_\_\_\_

Position: \_\_\_\_\_

SIC Code(s) \_\_\_\_\_

Types of Vessels Serviced (Check those which apply):

\_\_\_ Commercial                      \_\_\_ Recreational

\_\_\_ Other (Specify) \_\_\_\_\_

Number of Employees \_\_\_\_\_

Average Number of Vessels Serviced Annually \_\_\_\_\_

Size Range of Vessels Serviced, Length or Tonnage \_\_\_\_\_

Type of Dry Dock (Check those which apply):

\_\_\_ Graving \_\_\_ Floating \_\_\_ Marine Railway \_\_\_ Other \_\_\_\_\_



Attachment A

2. RAW MATERIALS INVENTORY

Please specify the exact chemical composition of each item or attach the corresponding Material Safety Data Sheet.

Quantity Stored (Gal)	Container Volume (Gal)	Type of Container	Usage Rate (Gal/mo)
-----------------------	------------------------	-------------------	---------------------

Raw Material

\_\_\_ Primer \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_ Epoxy Paint \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_\_\_ \_\_\_\_\_  
Brand Name \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_ Vinyl Paint \_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Attachment A

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Antifouling  
Paint

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Paint  
Thinner

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Acetone

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

Attachment A

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ Methyl  
Ethyl  
Ketone  
(MEK)

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ Cleaning  
Solvent

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_ Petroleum  
Naphtha

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

Attachment A

\_\_\_ Chemical  
Degreaser

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_ Carburetor  
Cleaner

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

\_\_\_ Acids

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Attachment A

\_\_\_ Caustics

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Chlorine Bleach

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Lube Oil

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

Attachment A

\_\_\_ Cutting Oil \_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Hydraulic Oil \_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

\_\_\_ Fiberglass Resin \_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

Attachment A

\_\_\_ Batteries

Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_

Attachment A

\_\_\_\_\_  
Brand Name(s) \_\_\_\_\_  
Chemical Composition \_\_\_\_\_  
\_\_\_\_\_

Attachment A

\* Drum, aboveground tank, underground tank, pail, etc.

Has the company evaluated the applicability of nonhazardous substitutes for any of these substances?  Yes  No

Use of water-based paints

Use of detergents for solvents

Other \_\_\_\_\_

3. MATERIALS STORAGE

How often are storage areas routinely inspected for spills/leaks?

Daily  No routine

Weekly  Other \_\_\_\_\_

Monthly \_\_\_\_\_

Have personnel been trained in proper methods to clean spills or leaks?  Yes  No

Are storage containers fitted with tight-fitting lids?  Yes  No

Are drum bung holes sealed or fitted with tight valves?  Yes  No

Are material transfers conducted using spigots, pumps, and/or funnels?  Yes  No

Are drip pans used beneath spigots and valves to collect spills and drips?  Yes  No

Are spilled liquids recovered for reuse?  Yes  No

Are storage areas paved?  Yes  No

Are storage areas bermed or can spills otherwise be controlled?  Yes  No

Are storage areas covered?  Yes  No

Are storage areas locked at all times?  Yes  No

Attachment A

Is an up-to-date inventory maintained for all products  Yes  No in storage?

Are any of the following measures taken to control inventory?

- Stockroom Attendant  Limited Access  
 Sign-out Sheet  First In, First Out  
 Expiration Dates Clearly Marked

Are expired materials reclaimed, reused, or returned to the vendor?  
 Yes  No

Are practices implemented to extend the shelf life of these materials?  
 Yes  No.  
 If yes, explain.

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4. WASTE GENERATING ACTIVITIES AND WASTES GENERATED. Indicate which of the following activities occur and which wastes are generated:

<u>Activity</u>	<u>Waste Type</u>	<u>Average Monthly Generation Rate</u>
<input type="checkbox"/> Sandblasting	<input type="checkbox"/> Blast Grit <input type="checkbox"/> Paint Chips <input type="checkbox"/> Other _____	_____ _____ _____
<input type="checkbox"/> Nonabrasive Paint Removal	<input type="checkbox"/> Organic Paint Removers <input type="checkbox"/> Contaminated Wastewaters <input type="checkbox"/> Paint Sludges <input type="checkbox"/> Other _____	_____ _____ _____ _____
<input type="checkbox"/> Painting	<input type="checkbox"/> Waste Paints <input type="checkbox"/> Spent Thinners <input type="checkbox"/> Spent Cleaning Solvents <input type="checkbox"/> Other _____	_____ _____ _____ _____
<input type="checkbox"/> Fiberglass Repair	<input type="checkbox"/> Off-Spec Resins <input type="checkbox"/> Other _____	_____ _____





Attachment A

6. CURRENT WASTE MANAGEMENT PRACTICES

<u>Waste Material</u>	<u>Management Practice*</u> <u>(Check One or More)</u>							<u>Other</u>
	A	B	C	D	E	F	G	
-Blast Grit								_____
_Paint Chips								_____
_Organic Paint Removers								_____
_Paint-Contaminated Wastewater								_____
_Paint Sludges								_____
_Excess Paints								_____
_Spent Thinners								_____
_Spent Cleaning Solvents								_____
_Off-Spec Resins								_____
_Used Batteries								_____
_Battery Acid								_____
_Used Oil								_____
_Chemical Degreasers								_____
_Carburetor Cleaner								_____
_Spent Acids/Caustics								_____
_Spent Hydraulic Fluids								_____
_Cutting Oils								_____
_Spent Plating Solutions								_____
_Plating Rinse Water								_____
_Bilge Waste								_____
_____								_____
_____								_____
_____								_____

- \* A = On-Site Reuse or Recycling.
- B = Off-Site Treatment or Recycling.
- C = On-Site Treatment.
- D = Collected by Waste Service Contractor.
- E = Disposal in Municipal Solid Waste.\*\*
- F = Disposal in Municipal Sewer.\*\*
- G = Discharge to Land or Surface Water.\*\*

\*\* These practices may be illegal.  
How are wastes recovered or reused on site?

- \_\_\_ Use in Other Processes
- \_\_\_ Gravity Separation
- \_\_\_ Reuse Distillation

Attachment A

Energy Recovery  
 Other Reuse/Treatment \_\_\_\_\_

Costs for off-site waste management:

	<u>Cost (\$/gal)</u>
<input type="checkbox"/> Waste Exchange	_____
<input type="checkbox"/> Recycler/Reclaimer	_____
<input type="checkbox"/> Private Waste Hauler	_____
<input type="checkbox"/> Other _____	_____

Are wastes removed by a hauler registered with the DHS?  Yes  No

How does the hauler remove wastes?

Pump truck  Removal/replacement of container  
 Other \_\_\_\_\_

Are wastes hauled to a licensed TSDR facility?  Yes  No

	<u>Cost (\$/gal)</u>
<input type="checkbox"/> Reclamation Facility	_____
<input type="checkbox"/> Incinerator	_____
<input type="checkbox"/> Landfill	_____

Are manifests received from hauler for off-site disposal?  Yes  No

Attachment A

"I certify under penalty of law that I have personally examined and am familiar with the information submitted in this document and all attachments and that, based on my inquiry of those individuals immediately responsible for obtaining the information, I believe that the information is true, accurate, and complete. I am aware that there are significant penalties for submitting false information including the possibility of fine and imprisonment."

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Signature

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Name and Title\*

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Date

\* This form shall be signed by a responsible company official as designated in Monitoring Provision A.13.

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
NPDES PERMIT NO. CAG039001**

**FACT SHEET**

**FOR**

**DISCHARGES FROM  
SHIP CONSTRUCTION, MODIFICATION, REPAIR, AND  
MAINTENANCE  
FACILITIES AND ACTIVITIES  
LOCATED IN  
THE SAN DIEGO REGION  
(TTWQ/CPLX 1A)**

1. The shipbuilding and repair industry is engaged in the construction, conversion, alteration, repair, and maintenance of all types of military and commercial ships and vessels. Shipbuilding and repair encompasses a large number and variety of activities and industrial processes including, but not limited to, formation and assembly of steel hulls and superstructures; application of paint systems; installation and repair of a large variety of mechanical, electrical, and hydraulic systems and equipment; repair of damaged vessels; removal and replacement of expended/failed paint systems; and provision of entire utility/support systems to ships (and crew) during repair.
2. Typical industrial processes at a shipyard might include:
  - a. Structural (aluminum and steel) repairs and refit aboard ship
  - b. Ship prefabrication ashore
  - c. Surface preparation (abrasive blasting, slurry blasting, hydroblasting, scaling, paint removal)
  - d. Paint/primer application
  - e. Rigging of shipboard components from small pumps and motors to large structures and main engines
  - f. Electrical/electronics repairs and alterations
  - g. Sheetmetal fabrication for berthing, messing, and sanitary spaces
  - h. Component inspection and testing
  - i. Tank cleaning

- j. Mechanical repair
- k. Integrity/hydrostatic testing
- l. Hydraulic repair
- m. Pipe fitting
- n. Tank emptying
- o. Fueling
- p. Patternmaking
- q. Shipfitting
- r. Boiler cleaning
- s. Carpentry
- t. Refurbishing/modernization
- u. Air conditioning/refrigeration repair
- v. Fiberglass repair
- w. Electroplating/metal finishing
- x. Blacksmithing
- y. Printing
- z. Photo processing

3. Shipyards conduct a wide range of support activities listed above that may use a variety of chemicals, and generate many types of waste. Frequently vessels are cleaned of marine fouling organisms while on a floating drydock or marine railway, in a graving dock, or docked at berths or piers. When ship hulls are refinished, antifouling paints and primers are removed, and new primers/paints are applied to inhibit the growth of marine fouling organisms and/or to inhibit corrosion. Removal can be accomplished by abrasive grit media, slurry abrasive, and/or hydroblasting. Antifouling paints may contain significant quantities of toxic substances such as copper, lead, zinc, chromate, tin, mercury, and arsenic. New paint/primer may be applied by brushes, rollers, or sprayed. Tank cleaning operations utilize steam to remove dirt and sludges from internal tanks, particularly fuel tanks and bilges. Detergents, cleaners, and hot water may be injected into the steam supply hoses; and wastewater is generated. Boiler cleaning involves the use of solvent and caustic cleaners. Integrity/hydrostatic testing is conducted on hull, tank, or pipe repairs and generates significant water flow. Pipe fitting involves pickling, brazing, and welding. Steel fabrication and machining uses cutting oils, fluids, acetone, methyl ethyl ketone, and chlorinated solvents. Sheetmetal fabrication involves the use of degreasing solvents, chromic acid, alkaline cleaners, and acid cleaners.
4. Wastes generated at shipyard facilities can include spent abrasives, paint and paint chips, primer, marine organisms, rust, bilge water and other oily wastewater, blast wastewater, oils (engine, cutting, and hydraulic), lubricants, grease, fuels, sludges, solvents, thinners, demolition waste, trash from

sweeping, asbestos, sewage, spent hydrocarbon or chlorinated solvents, electroplating/metal finishing wastes, acid wastes, caustic wastes, and aqueous wastes. Activities that could result in introducing waste to San Diego Bay from shipyard operations include floating drydock deballasting, floating drydock submergence/emergence, graving dock floodwaters, gate leakage, hydrostatic relief flow, and shipbuilding ways floodwaters/gate leakage, hydrostatic relief flows. Activities that could result in direct discharges to San Diego Bay include discharges of cooling seawater, fire protection system water, boiler and cogeneration feedwater, steam condensate water, saltbox water, integrity/hydrostatic testing water, and hosedown of drydocks and hulls.

5. a. Ship construction, modification, repair, and maintenance activities result or have the potential to result in discharges to San Diego Bay of wastes and pollutants which are likely to cause or threaten to cause pollution, contamination, or nuisance; adversely impact human health or the environment; cause or contribute to violation of an applicable water quality objective; and/or otherwise adversely affect the quality and/or beneficial uses of waters of the state and waters of the United States. Such discharges include:
  - i. Water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum.
  - ii. Hydroblast water - Water generated from hydroblasting is discharged to the sanitary sewer system. Hydroblasting is performed to remove layers of hull paint with water at pressures greater than 150 pounds per square inch.
  - iii. Tank cleaning water - Water from tank cleaning to remove sludge and/or dirt.
  - iv. Clarified water from oil/water separator - Most ship construction, repair, and maintenance facilities and operations have a system to collect oily water into an oil/water separator. The water is discharged to the sanitary sewer system, and the oil is either recycled or disposed of as hazardous waste.
  - v. Steamcleaning water - Water generated from steamcleaning equipment and vehicles at the facility as part of maintenance is collected in a sump and transferred to an oil/water separator. The water is discharged to the sanitary sewer system, and the oil is either recycled or disposed of as hazardous waste.

- vi. Demineralizer/reverse osmosis brine - The brine generated by demineralizer/reverse osmosis systems is discharged to the sanitary sewer system.
  - vii. Floating drydock sump water when the drydock is in use as a work area - Industrial process water, or storm water that has come in contact with pollutants, accumulating on the deck of a floating drydock is diverted to the sanitary sewer system.
  - viii. Oily bilge water.
  - ix. Contaminated ballast water.
  - x. The first flush of storm water from high risk areas.
- b. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of wastes and pollutants which pose less of a threat than those identified above. Such discharges include:
- i. Vessel washdown water - Fresh water and San Diego Bay water is used to wash surfaces of ship hulls, superstructures and masts at a low water pressure (less than 150 pounds per square inch). This water drains off the vessels and is discharged to San Diego Bay.
  - ii. Floating drydock submergence/emergence water - A floating drydock is used to lift a ship out of the water so work can be done on the exterior of the ship below the water line. A floating drydock is flooded to dock and launch a ship. The drydock's ballast tanks are filled with San Diego Bay water to lower (submerge) the drydock, the ship is docked (or launched) and the drydock is raised (emerge) by pumping out the ballast tanks. The flood waters on the drydock flow into San Diego Bay.
  - iii. Graving dock flood water - A graving dock is a large, enclosed, elongated area shoreward from the bulkhead which is used for ship repair or construction. A graving dock enables work to be done on the exterior of a ship below the water line. A caisson at the entrance to the graving dock along the bulkhead is moved in order to open or close the graving dock so that ships can be moved into and out of the graving dock and so flood water in the

- graving dock can be pumped out. Flood water is pumped back to San Diego Bay.
- iv. Graving dock sump pump test water - During test of graving dock sump pums, the water is pumped to San Diego Bay.
  - v. Shipbuilding ways flood water - A shipbuilding ways is an inclined structure used for construction of ships. A sliding platform is used to launch ships. A caisson at the bayward end of the ways is moved in order to open or close the ways to the bay. The gate is opened to allow the shipbuilding ways to be flooded before a ship is launched. After launching, the caisson is closed and the flood waters are pumped back to San Diego Bay.
  - vi. Floating drydock sump water when the drydock is not in use as a work area - Water accumulating on the deck of a floating drydock that is runoff associated with industrial activity, and runoff when the drydock is not in use as a work area and the sump has been purged, is discharged to San Diego Bay.
  - vii. Pipe and tank hydrostatic test water - Pressure tests are required to validate the integrity of systems, such as pumps, tanks, piping, and hoses. Pressure tests are performed by filling the systems being tested with either water from San Diego Bay, freshwater, or water with chemicals added, and applying pressure in a closed loop system. After completion of the test, the water is either pumped back to San Diego Bay, or collected and disposed of properly.
  - viii. Graving dock gate and wall leakage - Since the graving dock floor is located below the San Diego Bay water surface at a depth sufficient to allow a vessel to be floated into the dock area when the gate is open, gate and wall leakage is continuously removed by pumping the water to San Diego Bay.
  - ix. Shipbuilding ways gate and wall leakage - Gate and wall leakage at shipbuilding ways is pumped back to San Diego Bay.
  - x. Miscellaneous, low volume, water - A variety of low volume, chemically unchanged water is discharged to San Diego Bay. This category includes water from drinking fountains, distilling unit cooling water, emergency showers, portable air conditioning condensate, and fire hose testing.

- xi. Storm water runoff other than the first flush of storm water runoff from high risk areas - Except where otherwise diverted to the sanitary sewer system, storm water flows off the site to San Diego Bay, either directly, or indirectly through storm drains which discharge to San Diego Bay.
  
- c. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the discharge to San Diego Bay of water which representatives of operators of ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants, other than heat, and to which no wastes or pollutants, other than heat, are ordinarily added by such activities. Such discharges include:
  - i. Saltbox water - For generator load tests, a container, often called a salt box, is filled with water from San Diego Bay. An electrode is placed in the water to act as the resistive load to the generator. During the test, the water can reach boiling temperatures, so it is continually replenished. After the test, the excess water is cooled to the ambient temperature of San Diego Bay at the point of discharge when it is discharged to San Diego Bay.
  - ii. Steam condensate - Steam is generated in boilers at ship construction, repair, and maintenance facilities and supplied to ships. As steam is conveyed through the pipes from the boiler to the ship, fresh water condensate forms within the pipes. This condensate is collected in condensation traps in the steam pipes and is periodically discharged from the traps to San Diego Bay.
  - iii. Compressor and condenser noncontact cooling water - Fresh water and San Diego Bay water is used to cool portable and stationary machinery and equipment used in ship construction and repair. This water is circulated once through the machinery heat exchanger and then discharged to San Diego Bay.

Periodic monitoring of such discharges is necessary to verify that wastes or pollutants, other than heat, from ship construction, modification, repair, and maintenance activities are not present.

- d. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in the release to San Diego Bay of water taken from San Diego Bay which representatives of operators of

ship construction, modification, repair and maintenance facilities have indicated does not ordinarily come in contact with wastes or pollutants and to which no wastes or pollutants are ordinarily added by such activities. Such discharges include:

- i. Fire protection water - Fire protection systems pump water from San Diego Bay through a series of pipes to vessels moored at berths and piers. Fire protection water is discharged back to San Diego Bay after a single pass through the system. No chemicals are added to the fire protection system water.
- ii. Floating drydock ballast tank water - A floating drydock has ballast tanks which can be filled with and emptied of water so that it can be lowered and raised to dock and launch ships. The ballast tank water is taken in from and discharged to San Diego Bay.
- iii. Graving dock caisson ballast water - A graving dock caisson holds water. The caisson is moved by emptying water from the gate so that it floats. The caisson is filled with San Diego Bay water and water emptied from the caisson is discharged to San Diego Bay.
- iv. Graving dock hydrostatic relief - Since the graving dock floor is located below the San Diego Bay water surface at a depth sufficient to allow a vessel to be floated into the dock area when the gate is open, hydrostatic pressure is continuously relieved by pumping the groundwater to San Diego Bay.

Periodic monitoring of such releases is necessary to verify that wastes or pollutants from ship construction, modification, repair, and maintenance activities are not present.

- e. Ship construction, modification, repair, and maintenance activities also result or have the potential to result in discharges to San Diego Bay of the following wastes and pollutants which also pose less of a threat than the discharges identified in 5.a above:
  - i. Ship launch grease / wax.
  - ii. Keel block sand.
  - iii. Marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations.

Procedures for Final Decision

In accordance with 40 CFR 124.10 the Regional Board must issue a public notice that a tentative NPDES permit has been prepared and that the tentative permit will be brought before the Regional Board at a public hearing. The public notice must be issued at least 30 days prior to the public hearing. The public notice for preparation of a tentative permit and the public notice for a public hearing may be given at the same time and the two notices may be combined.

Persons wishing to comment upon or object to the proposed determinations should submit their comments in writing by August 20, 5:00 p.m., 1997 to the California Regional Water Quality Control Board, San Diego Region, 9771 Clairemont Mesa Blvd., Suite A, San Diego, CA 92124-1331.

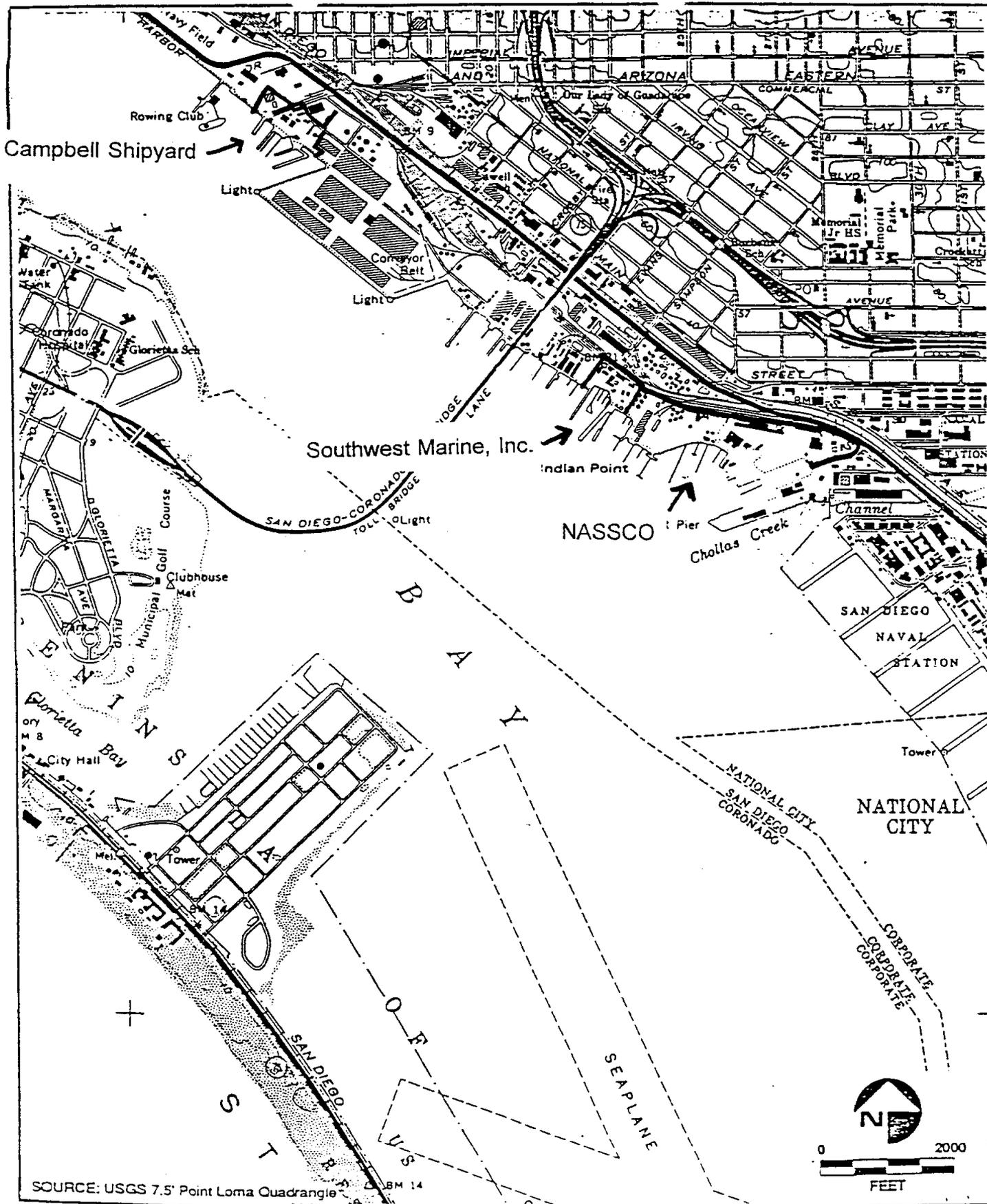
All comments or objections received at the above address of the Regional Board by the appropriate date will be retained and considered in the formulation of the final determinations regarding the draft permit. A public hearing will be held on August 13, 1997. Oral and written statements may be presented at the public hearing, and all comments and objections will be considered by the Regional Board.

For further information regarding the NPDES renewal application, tentative NPDES permit or public hearing, contact Ms. Susan Pease in writing at the above address or by telephone at (619) 637-5596. Copies of the application, tentative waste discharge requirements and other documents (other than those which the Executive Officer maintains as confidential) are available at the Regional Board office for inspection and copying between the hours of 8:00 a.m. and 5:00 p.m., Monday through Friday (excluding holidays).

After the close of the public hearing the Regional Board may adopt a final permit. The final permit will become effective ten (10) days after the notice of the final permit adoption, unless a later date is specified.

Regional Board adoption of a final permit may be petitioned for review to the State Board. Petitions for review to the State Water Resources Control Board must be filed in writing within thirty (30) days following the Regional Board's adoption of the final permit.

Petitions for review of Regional Board action must be sent to the State Water Resources Control Board, P.O. Box 100, Sacramento, CA 95812-0100.



Location Map

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
NPDES PERMIT NO. CAG039001**

**FACT SHEET**

**FOR**

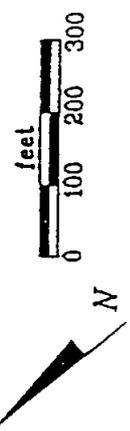
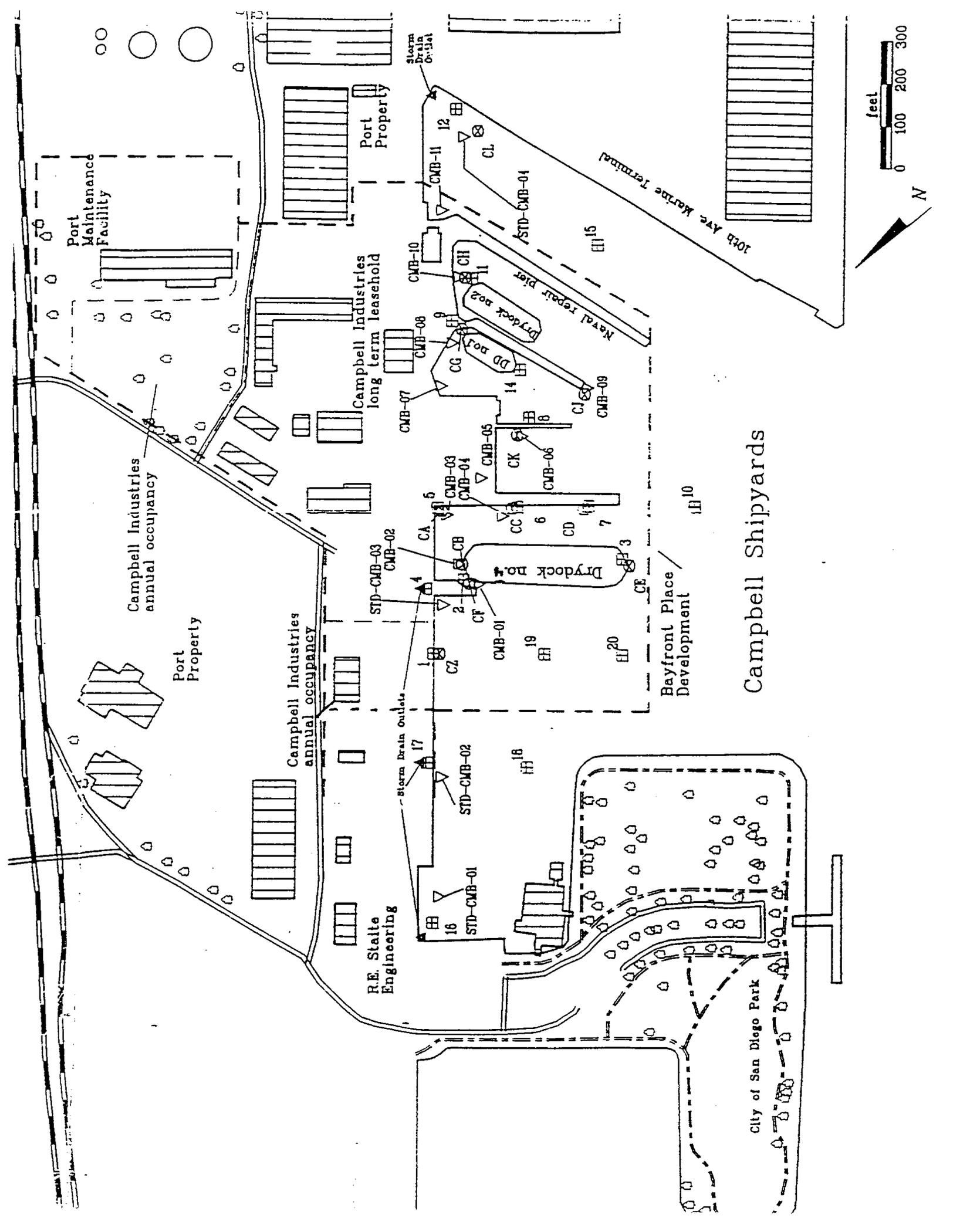
**CAMPBELL INDUSTRIES  
SAN DIEGO COUNTY**

1. On October 22, 1979, this Regional Board adopted Order No. 79-65, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107646, Waste Discharge Requirements for Campbell Industries. Order No. 79-65 regulated the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States.
2. On April 22, 1985, this Regional Board adopted Order No. 85-01, NPDES permit No. CA0107646, Waste Discharge Requirements for Campbell Industries, which superseded Order No. 79-65. Order No. 85-01 regulates the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States. Order No. 85-01 contains an expiration date of April 22, 1990.
3. On October 23, 1989, this Regional Board adopted Addendum No. 1 to Order No. 85-01. This addendum modified Monitoring and Reporting Program (MRP) No. 85-01 to include sediment monitoring requirements, and add the San Diego Unified Port District as a secondarily liable responsible party.
4. On October 19, 1989 Campbell Industries submitted an application for the renewal of Order No. 85-01, dated October 18, 1989 and an NPDES Best Management Practices Plan.
5. On May 17, 1990, the State Board adopted Order No. WQ 90-3 which addresses the Port District's petition regarding the naming of the Port District as a responsible party in the six boatyard and shipyard facilities. Order No. WQ 90-3 remanded the addenda for the six boatyard and shipyard permits to the Regional Board to clarify that the Port District is not primarily responsible for day-to-day operations of the facilities or for monitoring requirements and that the Regional

Board will provide the Port District with the opportunity to attain tenant compliance prior to Regional Board enforcement against the Port District.

6. On March 5, 1991, this Regional Board adopted TCO No. 1 to MRP No. 85-01. This TCO, and others issued at the same time, revised the MRP for Campbell Industries and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location guidelines, reference station guidelines, and requirements for notification of drydock flooding.
7. On March 11, 1991, this Regional Board adopted Addendum No. 2 to Order No. 85-01. This addendum replaces the language in Addendum No.1 to Order No. 85-01 naming the Port District as a responsible party with language written to conform with State Board Order No. WQ 90-3.
8. On September 13, 1991, this Regional Board adopted TCO No. 2 to MRP No. 85-01. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
9. On June 3, 1992, this Regional Board adopted TCO No. 3 to MRP No. 85-01. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
10. Campbell Industries is located on the eastern waterfront of central San Diego Bay, at 501 East Harbor Drive in the City of San Diego, on 21.66 acres. The San Diego Unified Port District is the lessor to Campbell Industries. Vessels to be repaired at Campbell Industries are removed from San Diego Bay by one of three floating drydocks or one of three marine railways. Currently, railways number one and two are not being used. Floating Drydock No. 1 measures 140' x 30' x 12' and is slightly inclined to direct water flow to a sump. Floating Drydock No. 2 measures 200' x 48' x 20'. Floating Drydock No. 4 measures 389' x 55' x 26'. The facility includes five repair piers (Piers 0, 1, 3, 4 and 5), and miscellaneous yard buildings for production, utility, personnel, and administration.
11. The following discharges occur at Campbell Industries:
  - a. Discharged to San Diego Bay:
    - i. Noncontact fire protection system water

- ii. Steam condensate water
  - iii. Saltbox discharges
  - iv. Pipe and tank hydrostatic test water
  - v. Condenser and compressor noncontact cooling water
  - vi. Washdown of vessels
  - vii. Stormwater runoff not associated with first flush of storm water runoff from high risk areas
  - viii. Miscellaneous, low volume water
  - ix. Floating drydock submergence/emergence water
  - x. Floating drydock ballast tank water
  - xi. Marine fouling organisms from non-painted surfaces
- b. Not discharged to San Diego Bay:
- i. Sewage from ships
  - ii. Steamcleaning water
  - iii. Ship bilge/ballast water
  - iv. Hydroblast water
  - v. Floating drydock sump water from industrial process water or stormwater that has contacted pollutants
  - vi. First flush stormwater from high risk areas



# Campbell Shipyards

Bayfront Place Development

City of San Diego Park

R.E. Staite Engineering

Campbell Industries annual occupancy

Port Property

Campbell Industries annual occupancy

Campbell Industries long term leasehold

Port Maintenance Facility

Port Property

10th Ave Marine Terminal

Naval repair pier

Storm Drain Outlet

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
NPDES PERMIT NO. CAG039001**

**FACT SHEET**

**FOR**

**NATIONAL STEEL AND SHIPBUILDING COMPANY  
SAN DIEGO COUNTY**

1. On October 22, 1979, this Regional Board adopted Order No. 79-63, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107671, Waste Discharge Requirements for National Steel and Shipbuilding Company. Order No. 79-63 established waste discharge requirements for an intermittent discharge of cooling water and boiler blowdown from National Steel and Shipbuilding Company (NASSCO), a ship construction, conversion, maintenance and repair facility, to San Diego Bay, a navigable water of the United States.
2. On June 10, 1985, this Regional Board adopted Order No. 85-05, NPDES permit No. CA0107671, Waste Discharge Requirements for National Steel and Shipbuilding Company, which superseded Order No. 79-63. Order No. 85-05 regulates the potential intermittent discharge of pollutants from this ship construction, conversion, maintenance, and repair facility to San Diego Bay, a navigable water of the United States. Order No. 85-05 contains an expiration date of June 10, 1990.
3. On October 23, 1989, this Regional Board adopted Addendum No. 1 to Order No. 85-05. This addendum modified Monitoring and Reporting Program (MRP) No. 85-05 to include sediment monitoring requirements, and add the San Diego Unified Port District as a secondarily liable responsible party.
4. On December 13, 1989, NASSCO submitted an application for the renewal of Order No. 85-05, dated December 13, 1989, and an updated NPDES Best Management Practices Plan.
5. On May 17, 1990, the State Board adopted Order No. WQ 90-3 which addresses the Port District's petition regarding the naming of the Port District as a responsible party in the six boatyard and shipyard facilities. Order No. WQ 90-3

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

remanded the addenda for the six boatyard and shipyard permits to the Regional Board to clarify that the Port District is not primarily responsible for day-to-day operations of the facilities or for monitoring requirements and that the Regional Board will provide the Port District with the opportunity to attain tenant compliance prior to Regional Board enforcement against the Port District.

6. On March 5, 1991, this Regional Board adopted TCO No. 1 to MRP No. 85-05. This TCO, and others issued at the same time, revised the MRP for NASSCO and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location guidelines, reference station guidelines, and requirements for notification of drydock flooding.
7. On March 11, 1991, this Regional Board adopted Addendum No. 2 to Order No. 85-05. This addendum replaces the language in Addendum No.1 to Order No. 85-05 naming the Port District as a responsible party with language written to conform with State Board Order No. WQ 90-3.
8. On September 13, 1991, this Regional Board adopted TCO No. 2 to MRP No. 85-05. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
9. On October 17, 1991, NASSCO submitted an amended application for the renewal of Order No. 85-05, dated September 27, 1991. The amended application provides current information regarding NASSCO's facility, and supersedes the December 13, 1989 application for renewal.
10. On June 3, 1992, this Regional Board adopted TCO No. 3 to MRP No. 85-05. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
11. The NASSCO facility covers approximately 127 acres of tidelands on the eastern waterfront of central San Diego Bay, at 28th and Harbor Drive in the City of San Diego. The San Diego Unified Port District is the lessor to NASSCO. The land portion of the lease covers approximately 80 acres. Improvements of the land area include approximately 1.6 million square feet (about 37 acres) of office, shop and warehouse space, and 392,800 square feet (about 9 acres) of concrete platens for steel fabrication, a graving dock, and two shipbuilding ways. Improvements of the 47 acres of water area include a floating drydock. Additionally 12 berths exist on piers or land to accommodate the berthing of ships.

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

- a. Graving Dock - This facility is isolated from San Diego Bay by a gate which is removed after the dock is flooded to allow launching of the ship or other structure. Non-contact hydrostatic relief water is collected in a sump and discharged to San Diego Bay. Gate leakage is isolated in a sump and discharged to San Diego Bay. When construction, conversion, maintenance, repair or production is ongoing, the "first flush"<sup>1</sup> (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. Industrial process wastewater is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Waste generated at the graving dock include spent abrasive, paint, rust, petroleum products, marine growth and general refuse.
- b. Shipbuilding Ways - The inclined ways are utilized for construction of ships and other structures. The ways are isolated from San Diego Bay by a gate which is removed after the ways are flooded to allow for the launch of ships or other structures. Non-contact hydrostatic relief water is isolated and discharged to San Diego Bay. Gate leakage and wall leakage are isolated in a sump and pumped into a holding tank for disposal or treatment and is not discharged to San Diego Bay. When construction or production is ongoing, the "first flush" (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. Industrial process water is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Wastes generated at the ways include spent abrasive, paint, petroleum products and general refuse.
- c. Floating Drydock - This facility is used to repair ships or other structures. Ship launching and recovery is accomplished by sinking and floating the entire structure by means of integral ballast tanks. When construction, conversion, maintenance, repair or production is ongoing, the "first flush" (0.1 inch) of rainfall is diverted to the San Diego Metropolitan Sewer System. When the drydock is not in use as a work area and the sump has been purged, storm water is discharged to San Diego Bay. Industrial process water is routed to a sump and pumped into a Baker tank for disposal or treatment and is not discharged to San Diego Bay. Waste generated during ship repair include spent abrasive, paint, rust, petroleum products, marine growth and general refuse.
- d. Piers and other facilities - Berths exist to moor and support berthed vessels that are undergoing repair operations. A variety of other shore facilities exist to support and complement the construction, conversion, maintenance and repair of ships. Wastes and hazardous materials staged and transported across piers include spent and virgin abrasive, paint, petroleum products, sanitary waste and general refuse.

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

12. The following discharges at National Steel and Shipbuilding Company are described in the October 17, 1991 permit renewal application, and subsequent letters dated September 25, 1996, and August 6, 1997. Fire protection system discharges (FP 1-5) are continuous and noncontact. Graving dock gate leakage discharge (GL 1) is continuous and non-contact. Hydrostatic testing and deballasting of new vessels (M 3) are noncontact discharges and occur only in the final phase of new construction. Average outfall flow data is based on an average 24-hour (0.5 inch) flow from a 2-year storm. Current Stormwater Diversion Systems in place at NASSCO (SWDS 1-5) collect the "first flush" (0.1 inch) of storm water runoff and is discharged to the San Diego Metropolitan Sewer System.

## Outfalls:

- a. Outfall SW-1 - Storm water runoff: average flow 5,000 gallons per hour (GPH).
- b. Outfall SW-2 - Storm water runoff: average flow 9,467 GPH.
- c. Outfall SW-3 - Storm water runoff: average flow 11,926 GPH.
- d. Outfall SW-5 - Storm water runoff: average flow 5,891 GPH.
- e. Outfall SW-6 - Storm water runoff: average flow 42 GPH.
- f. Outfall SW-7 - Storm water runoff: average flow 1,557 GPH.
- g. Outfall SW-8 - Storm water runoff: average flow 1,005 GPH when Control Valve is open.
- h. Outfall SW-9 - Storm water runoff: average flow 160,000 GPH. This does not include off-site flow from 28th Street and Harbor Drive that enters Outfall SW-9.

## Fire Protection Systems:

- i. FP-1 - Berth II fire protection system discharge - 250 gallons per minute (GPM).
- j. FP-2 - Berth V standby fire protection system - 250 GPM.
- k. FP-3 - Berth X fire protection system - 500 GPM.

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

- l. FP-4 - Ways 3 fire protection system - 450 GPM.
- m. FP-5 - Floating drydock standby fire protection system - 2,340 GPM.

Miscellaneous Discharges:

- n. GL-1 - Graving dock gate leakage - 250 GPH.
- o. M-1 - Floating drydock deballast - 82,080 GPM.
- p. M-2 - Graving dock floodwater - 18,000 GPM.
- q. M-3 - Hydrostatic testing and deballasting of new vessels - 300,000 gallons per day (GPD).
- r. M-4 - U.S. Naval Vessels at dock or pierside - variable amounts of discharge of non-contact cooling water.
- s. M-5 - Ways 3 floodwater - 5,810 GPM.
- t. M-6 - Ways 4 floodwater - 5,810 GPM.
- u. M-7 - Graving Dock hydrostatic relief (under slab dewatering) - 6,175 GPH.
- v. M-8 - Ways 3 hydrostatic relief - 9,000 GPH.
- w. M-9 - Ways 3 hydrostatic relief - 9,000 GPH.

Storm Water Diversion Systems (SWDS):

- x. SWDS-1 - Floating Drydock - 6,545 gallons "first flush" to the San Diego Metropolitan Sewer System under the Metropolitan Industrial Waste Program (MIWP) and NASSCO's Industrial Users Discharge (IUD) Permit No. 11-0051.
- y. SWDS-2 - Ways 4 - 8,976 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.
- z. SWDS-3 - Ways 3 - 11,345 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.

## NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET

- aa. SWDS-4 - On Block Area - 18,763 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.
  - ab. SWDS-5 - Graving Dock - 15,085 gallons "first flush" to the San Diego Sewer System under NASSCO's IUD Permit No. 11-0051.
13. The following discharges occur at NASSCO:
- a. Discharged to San Diego Bay:
    - i. Noncontact fire protection system water
    - ii. Steam condensate water
    - iii. Saltbox discharges
    - iv. Pipe and tank hydrostatic test water
    - v. Condenser and compressor noncontact cooling water
    - vi. Washdown of vessels
    - vii. Stormwater runoff not associated with first flush of storm water from high risk areas
    - viii. Miscellaneous, low volume water
    - ix. Floating drydock submergence/emergence water
    - x. Floating drydock ballast tank water
    - xi. Graving dock flood water
    - xii. Graving dock gate leakage
    - xiii. Hydrostatic relief water from graving dock and shipbuilding ways
    - xiv. Graving dock gate ballast water
    - xv. Shipbuilding ways flood water
    - xvi. Marine fouling organisms from non-painted surfaces
    - xvii. Launch grease (and wax)
    - xv. Keel block sand
    - xvi. Marine fouling organisms from non-painted surfaces
    - xvii. Floating drydock sump water when the drydock is not in use as a work area and the sump has been purged
  - b. Discharged to San Diego Sewer System under NASSCO's Industrial Users Discharge Permit No. 11-0051. (Note that there are other discharges from NASSCO to the San Diego Sewer System that are not listed here):
    - i. Water from oil/water separator
    - ii. Sewage from ships
    - iii. Steamcleaning water
    - iv. Ship bilge/ballast water
    - v. Hydroblast water
    - vi. Graving dock wall leakage

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

- vii. Floating drydock sump water from industrial process water or stormwater that has contacted pollutants
- viii. First flush stormwater from high risk areas
- ix. Shipbuilding ways gate and wall leakage
- x. Tank cleaning water from tank cleaning to remove sludge and/or dirt
- xi. Clarified water from oil/water separation
- xii. Demineralizer/reverse osmosis brine
- xiii. Oily bilge water
- xiv. Contaminated ballast water

**14. Best Management Practices (BMP) Plan<sup>2</sup>**

To ensure protection of the San Diego Bay environment, and in accordance with National Pollutant Discharge Elimination System (NPDES) Permit goals, NASSCO has developed and implemented a Best Management Practices (BMP) Plan, which was last revised on November 6, 1996. The BMP Plan is intended to control potential pollutant discharges to receiving water, specifically those listed as hazardous or toxic by the Clean Water Act of 1977, as amended, in compliance with BAT/BCT as described in Section 301 of the Clean Water Act. The NASSCO BMP Program assists in the control and prevention of potential water pollution in the shipyard environment.

**15. Storm Water Pollution Prevention Plan (SWPPP)<sup>2</sup>**

NASSCO has prepared a Storm Water Pollution Prevention Plan (SWPPP) in accordance with the General Industrial Activities Storm Water Permit No. CAS000001 adopted by the State Water Resources Control Board on November 19, 1991, and amended on September 17, 1992 and April 17, 1997. The SWPPP, which was last revised on August 1, 1997, identifies sources of pollution that affect the quality of industrial storm water discharges, and describes the implementation of BMP's to reduce and prevent pollutants in industrial storm water discharges. Those industrial areas of concern and currently subject to diversion are described on a map from the SWPPP.

**16. Spill Prevention Control and Countermeasure (SPCC) Plan<sup>2</sup>**

NASSCO has developed a Spill Prevention Control and Countermeasure (SPCC) Plan in accordance with the Clean Water Act regulations at 40 CFR Part 112. This SPCC Plan, which was last revised on May 30, 1997, is intended to establish procedures, methods and equipment to prevent the discharge of oil from non-transportation related onshore and offshore facilities into or upon the navigable waters or adjoining shoreline of the San Diego Bay area.

## NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET

17. Environmental Incident Communication (EIC) Procedure<sup>2</sup>

NASSCO has developed an Environmental Incident Communication (EIC) Procedure that outlines communications within NASSCO during Environmental Incident response activities. Adherence to this Procedure enables NASSCO to effectively respond to incidents and to comply with mandatory federal, state and local regulatory reporting requirements. This EIC Procedure is an integral part of NASSCO's BMP Plan, SWPP, and SPCC Plan and is incorporated by reference in those plans.

18. Since the December 13, 1989 NPDES Permit renewal application, NASSCO has made significant facility improvements and operational changes at the facility that have increased pollution prevention efforts and have resulted in the further prevention of any potential pollutant discharges to the Bay. Some of the more important efforts are listed below.<sup>2</sup>

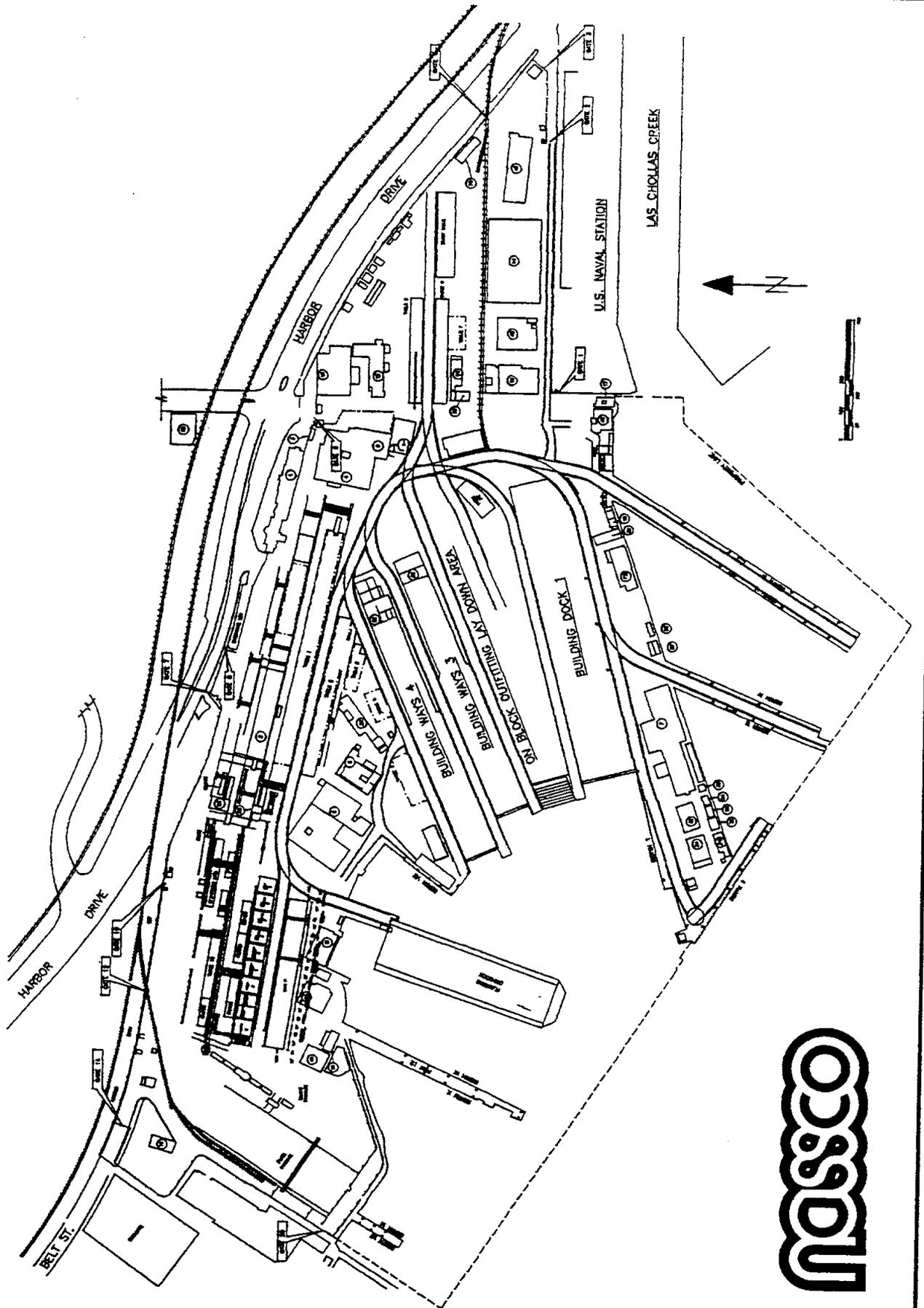
- a. "First flush" (0.1 inch) storm water diversion systems have been installed at the Floating Drydock, Ways 3 & 4, On-Block Area and the Graving Dock (SWDS 1-5). Pursuant to these facility modification, NASSCO captures the "first flush" 0.1 inch of storm water from approximately 45 % of the facility. This "first flush" of potentially contaminated storm water is tested on-site if needed, and discharged to the San Diego Sewer System.
- b. Ways 2 was demolished and the On-Block Area was established. It includes "first flush" diversion (SW-4 was deleted and SWDS-4 added).
- c. Permanent facility modifications were made to Ways 3 & 4 to segregate gate and wall leakage from hydrostatic relief water. Gate and wall leakage are now discharged to the San Diego Sewer System (GL-3 and GL-4 were deleted and M-8 and M-9 were added).
- d. New platen areas are being planned or are currently under construction. These will also include capturing the "first flush" of storm water (0.1 inch) from these areas.
- e. Early in 1994, NASSCO installed a Wastewater Treatment Facility, to treat on-site the "first flush" of storm water as well as oily water and contaminated wastewater from shipyard processes and vessel repair, construction or modification operations.
- f. In 1994 NASSCO replaced its water-based preconstruction primer, which reduced zinc concentrations by four fifths. The primer replacement is largely responsible for the reduction in potential zinc contamination in

**NATIONAL STEEL AND SHIPBUILDING COMPANY FACT SHEET**

storm water and an 80% reduction in zinc air emissions. Use of the new primer has also allowed for several process changes. Blasting requirements have been reduced by 75% because the primer no longer has to be removed prior to final painting, resulting in a reduction of particulate matter emissions of nearly 4 tons per year.

**Endnote**

1. The term "first flush" used in this fact sheet is consistent with the term as used in an August 6, 1997 submittal from NASSCO with corrections to the Fact Sheet. It is not the definition of "first flush" found in the Definitions and Explanatory Notes in Attachment E in NPDES Order No. 97-36.
2. Items 14-18 were taken verbatim from the August 6, 1997 submittal from NASSCO with corrections to the Fact Sheet.



**nasco**

**CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN DIEGO REGION**

**ORDER NO. 97-36  
NPDES PERMIT NO. CAG039001**

**FACT SHEET**

**FOR**

**SOUTHWEST MARINE, INC.  
SAN DIEGO COUNTY**

1. On November 26, 1979, this Regional Board adopted Order No. 79-74, National Pollutant Discharge Elimination System (NPDES) Permit No. CA0107697, Waste Discharge Requirements for Southwest Marine, Inc. Order No. 79-74 regulated the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States.
2. On April 18, 1983, this Regional Board adopted Order No. 83-11, NPDES permit No. CA0107696, Waste Discharge Requirements for Southwest Marine, Inc., which superseded Order No. 79-74. Order No. 83-11 regulates the potential intermittent discharge of pollutants from this ship repair facility to San Diego Bay, a navigable water of the United States. Order No. 83-11 contains an expiration date of April 18, 1988.
3. On July 12, 1988, Southwest Marine Inc. submitted an application for the renewal of Order No. 83-11, dated April 7, 1988, and an NPDES Best Management Practices Plan.
4. On March 26, 1990, this Regional Board adopted Technical Change Order (TCO) No. 1 to Monitoring and Reporting Program (MRP) No. 83-11. This TCO rescinded and replaced MRP No. 83-11. This TCO included semiannual sediment monitoring requirements.
5. On March 5, 1991, this Regional Board adopted TCO No. 2 to MRP No. 83-11. This TCO, and others issued at the same time, revised the MRP for Southwest Marine, Inc. and all commercial ship and boat repair facilities. This TCO also included a new monitoring report schedule, sediment sampling station location

guidelines, reference station guidelines, and requirements for notification of drydock flooding.

6. On September 13, 1991, this Regional Board adopted TCO No. 3 to MRP No. 83-11. This TCO postponed the implementation schedule for shipyards and boatyards in the San Diego Region by 6 months to allow additional time for rebidding, consultant selection, contract preparation, etc. This TCO also updated analytical methods and detection limits.
7. On June 3, 1992, this Regional Board adopted TCO No. 4 to MRP No. 83-11. This TCO revised the monitoring report schedule for all commercial boatyards and shipyards, with submittal of the first Monitoring Report due December 30, 1992. This TCO also deleted approval of the Final Sample Collection Plan prior to implementation.
8. Southwest Marine Inc. is located on the eastern waterfront of central San Diego Bay, on about 7 acres of land and about 15 acres of water, at the foot of Sampson Street, along Belt Street. The San Diego Unified Port District is the lessor to Southwest Marine, Inc. Improvements to the land portion of the lease include production shops, warehouse, and administrative offices. Existing facilities allow the repair and overhaul of vessels 700 feet in length.

Vessels to be repaired at Southwest Marine Inc. are removed from San Diego Bay by one of two floating drydocks; the Pride of San Diego (POSD) - 22,000 tons displacement and the Armed Forces Landing Dock (AFDL) - 4,000 tons displacement; or one of two marine railways. The drydocks are used to conduct repair and maintenance activity which cannot normally be conducted while the vessel is waterborne. These activities generally include exterior hull repair, preservation (abrasive blasting and/or hydroblasting and painting), and repair/replacement of valves and fittings below the waterline. Ship launching and recovery is accomplished by sinking and floating the drydock by means of integral ballast tanks which take in and discharge seawater. Wastes generated during ship repair include spent abrasive, paint, rust, petroleum products, marine growth, and general refuse. Both drydocks are contained to prevent stormwater and wash water from entering San Diego Bay. All industrial waste (including most storm water) is recovered to holding tanks for subsequent disposal to the Metropolitan Sewerage System. Only during periods of non-use shall stormwater be discharge to San Diego Bay from the drydocks.

Marine Railways - There are two marine railways located between piers 1 and 2. These railways are used to dryberth vessels for repair. Activities conducted on dryberthed vessels are similar to those conducted on the drydocks, but of a much smaller scale.

Piers and Wharfs - The facility includes a 40 foot by 637 foot repair pier (Pier 1), a 30 foot by 257 foot service pier (Pier 2), one 66 foot by 700 foot repair pier (Pier 3) serviced by a marine crane rail system, one 30 foot by 475 foot pier (Pier 4), a 30 foot by 350 foot berthing pier (Pier 5), and miscellaneous yard buildings for production, utility, personnel, and administration. The piers are used to support berthed vessels that are undergoing maintenance and repair operations. Wastes staged and transported across piers include spent abrasive, paint, petroleum products, sanitary waste and general refuse. There is an Anchor Chain Barge adjacent to Pier 2 where anchors and chains are abrasive blasted and painted.

On shore facilities include a painting and abrasive blasting area located at the foot of pier number 3, and a paint booth located on the southeast section of the facility. On the northern end of the facility is an area used for steamcleaning/pressure washing of vehicles and equipment. This operation includes a sump where effluents are collected and drained to a three-stage clarifier which is connected to the Metropolitan Sewerage System. The middle area of the shipyard is the gantry tracks area where ship parts are painted and moved.

9. The following discharges at Southwest Marine, Inc. are described in the April 7, 1988 permit application and subsequent documentation and amendments. Most discharges are intermittent and volumes given are during periods of actual discharge.

Stormwater outfalls: Southwest Marine maintains a stormwater diversion system which eliminates the first 0.25 inches of stormwater to San Diego Bay. The following outfalls will only be discharged when the facility has realized rainfall greater than 0.25 inches. A rain gauge is installed to identify and record this condition.

- a. Outfall SW-1, located at the quay wall by the transportation area.
- b. Outfall SW-2, located at the northeast head of Pier 1.
- c. Outfall SW-3, located at the southeast foot of Pier # 2.
- d. Surface runoff to a storm drain at Southwest Marine Inc. is provided for by use of the City of San Diego's existing 54-inch diameter concrete storm drain line, which angles diagonally across Southwest Marine from the Sampson Street entrance to an outfall south of the base of Pier 3. This storm drain outfall is designated as Outfall SW-4.

- e. Outfall SW-5, adjacent to the Abrasive Blasting Building and Hazardous Waste Storage Area.
- f. Outfall SW-6, located southwest of Outfall SW-5.
- g. Outfall SW-7 located at the southeast head of Pier 4.
- h. Outfall SW-8 located at the northeast head of Ways 2.

Fire protection systems:

- a. Fire pumps at pier 1 - 250 gpm
- b. Fire pumps at pier 3 - 250 gpm
- c. Fire pumps on POSD drydock - 250 gpm
- d. Fire pumps on AFDL drydock - 250 gpm
- e. Fire hose testing at pier 5 - 100 gpd
- f. Portable fire pumps installed on vessels during transit to and from the shipyard - 750 gpm each
- g. Freshwater fire protection system testing - 500 gpm

Noncontact cooling saltwater systems:

- a. Heat exchanger for water cooled air compressor (building 13) - 300 gpm
- b. Cooling water from diesel generators and fire pumps on POSD drydock - 500 gpm
- c. Cooling water from diesel generators and fire pumps on AFDL drydock - 250 gpm

Floating drydock ballast water (POSD) per maximum lift - 9,000,000 gallons

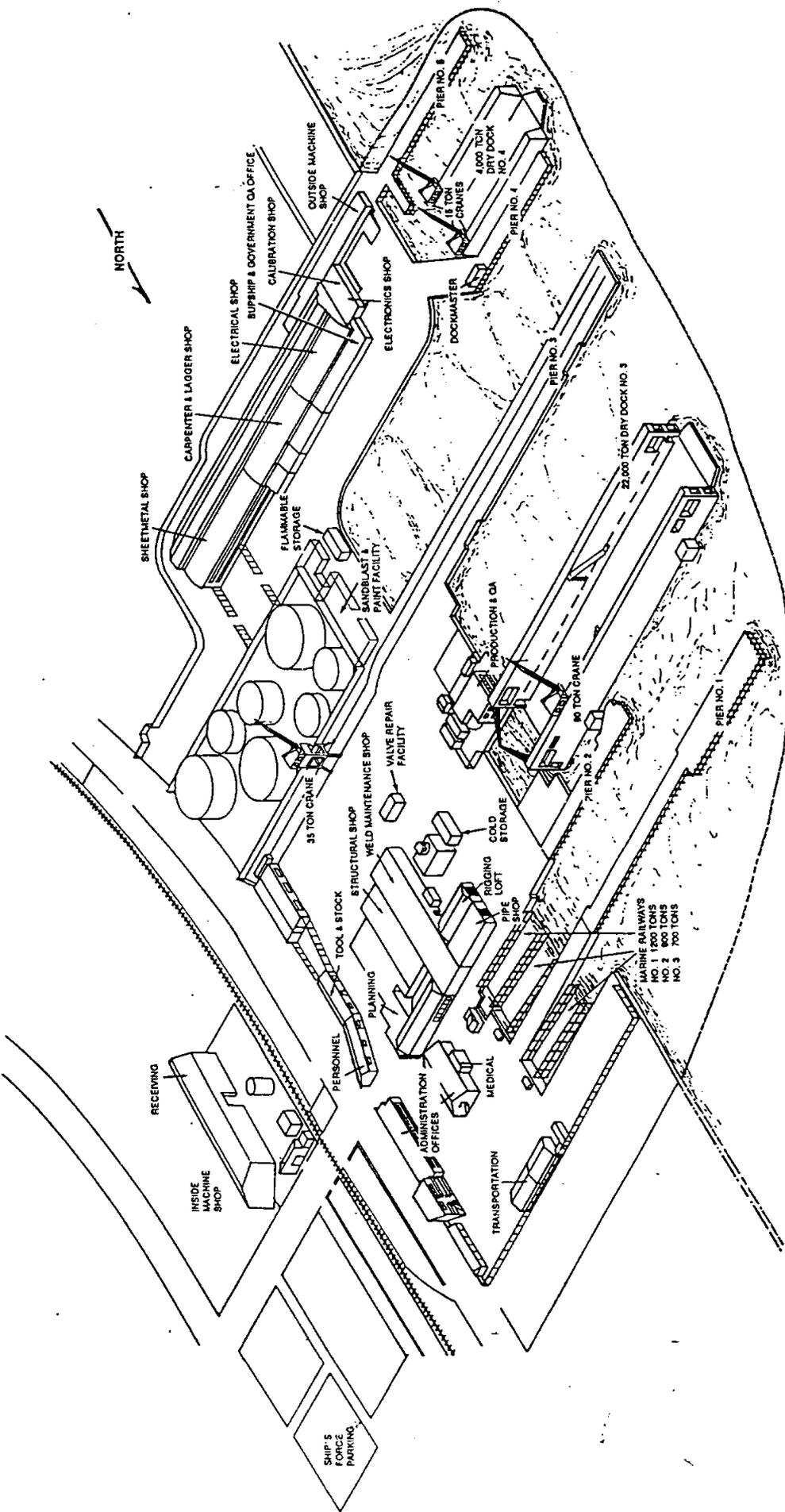
Floating drydock ballast water (AFDL) per maximum lift - 4,488,000 gallons

10. The following discharges occur at Southwest Marine, Inc.:

- a. Discharged to San Diego Bay:

**SOUTHWEST MARINE, INC. FACT SHEET**

- i. Fire protection system water
  - ii. Steam condensate water
  - iii. Pipe and tank hydrostatic test water
  - iv. Condenser and compressor noncontact cooling water
  - v. Machinery noncontact cooling water
  - vi. Stormwater runoff in excess of 0.25 inch diversion
  - vii. Miscellaneous, low volume water
  - viii. Floating drydock submergence/emergence water
  - ix. Floating drydock ballast tank water
  - x. Marine fouling organisms from non-painted surfaces
  - xi. Floating drydock sump water when the drydock is not is use as a work area and the sump has been purged
- b. Not discharged to San Diego Bay:
- i. Clarified water from 3-stage clarifier
  - ii. Sewage from ships
  - iii. Steamcleaning water
  - iv. Ship bilge/ballast water
  - v. Hydroblast water
  - vi. First flush stormwater from high risk areas
  - vii. Floating drydock sump water from industrial process water or storm water that has contacted pollutants



Southwest Marine, Inc.