California Regional Water Quality Control Board

San Diego Region

Over 50 Years Serving San Diego, Orange, and Riverside Counties

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Linda S. Adams
Secretary for Environmental Protection

Arnold Schwarzenegger
Governor

T E N T A T I V E

D R A F T

~~TENTATIVE~~ ORDER NO. R9-2009-0081
NPDES NO. CA0109185

WASTE DISCHARGE REQUIREMENTS
FOR THE
UNITED STATES DEPARTMENT OF THE NAVY
NAVAL BASE CORONADO
SAN DIEGO COUNTY

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 1. Discharger Information

Discharger	United States Department of the Navy
Name of Facility	Naval Base Coronado
Facility Address	937 N. Harbor Drive
	San Diego, CA 92132-0058
	San Diego County
The U.S. Environmental Protection Agency (USEPA) and the Regional Water Quality Control Board have classified this discharge as a major discharge.	

The discharge by the Discharger from the discharge points identified below is subject to waste discharge requirements as set forth in this Order:

Table 2. Discharge Locations

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
SC-001	Steam Condensate	32° 42’ 23”	117° 11’ 23”	San Diego Bay
SC-002	Steam Condensate	32° 42’ 23”	117° 11’ 23”	San Diego Bay
SC-003	Steam Condensate	32° 42’ 22”	117° 11’ 20”	San Diego Bay
SC-004	Steam Condensate	32° 42’ 19”	117° 11’ 10”	San Diego Bay
SC-005	Steam Condensate	32° 42’ 18”	117° 12’ 7”	San Diego Bay
SC-006	Steam Condensate	32° 42’ 17”	117° 11’ 3”	San Diego Bay
SC-007	Steam Condensate	32° 42’ 16”	117° 11’ 0”	San Diego Bay
SC-008	Steam Condensate	32° 42’ 30”	117° 11’ 24”	San Diego Bay
SC-009	Steam Condensate	32° 42’ 28”	117° 11’ 28”	San Diego Bay
SC-010	Steam Condensate	32° 42’ 28”	117° 11’ 30”	San Diego Bay
SC-011	Steam Condensate	32° 42’ 29”	117° 11’ 32”	San Diego Bay

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
SC-012	Steam Condensate	32° 42' 29"	117° 11' 33"	San Diego Bay
SC-013	Steam Condensate	32° 42' 31"	117° 11' 32"	San Diego Bay
SC-014	Steam Condensate	32° 42' 38"	117° 11' 31"	San Diego Bay
SC-015	Steam Condensate	32° 42' 38"	117° 11' 31"	San Diego Bay
SC-016	Steam Condensate	32° 42' 40"	117° 11' 30"	San Diego Bay
SC-017	Steam Condensate	32° 42' 43"	117° 11' 35"	San Diego Bay
SC-018	Steam Condensate	32° 42' 43"	117° 11' 37"	San Diego Bay
SC-019	Steam Condensate	32° 42' 43"	117° 11' 42"	San Diego Bay
SC-020	Steam Condensate	32° 42' 43"	117° 11' 45"	San Diego Bay
SC-021	Steam Condensate	32° 42' 44"	117° 11' 48"	San Diego Bay
SC-022	Steam Condensate	32° 42' 42"	117° 11' 54"	San Diego Bay
SC-023	Steam Condensate	32° 42' 41"	117° 11' 54"	San Diego Bay
SC-024	Steam Condensate	32° 42' 42"	117° 11' 56"	San Diego Bay
SC-025	Steam Condensate	32° 42' 41"	117° 11' 56"	San Diego Bay
SC-026	Steam Condensate	32° 42' 38"	117° 11' 47"	San Diego Bay
SC-027	Steam Condensate	32° 42' 38"	117° 11' 47"	San Diego Bay
SC-028	Steam Condensate	32° 42' 38"	117° 11' 45"	San Diego Bay
SC-029	Steam Condensate	32° 42' 38"	117° 11' 44"	San Diego Bay
SC-030	Steam Condensate	32° 42' 38"	117° 11' 37"	San Diego Bay
SC-031	Steam Condensate	32° 42' 38"	117° 11' 41"	San Diego Bay
SC-032	Steam Condensate	32° 42' 37"	117° 11' 37"	San Diego Bay
SC-033	Steam Condensate	32° 42' 36"	117° 11' 37"	San Diego Bay
SC-034	Steam Condensate	32° 42' 37"	117° 11' 35"	San Diego Bay
SC-035	Steam Condensate	32° 42' 37"	117° 12' 2"	San Diego Bay
SC-036	Steam Condensate	32° 42' 39"	117° 12' 1"	San Diego Bay
SC-037	Steam Condensate	32° 42' 37"	117° 12' 5"	San Diego Bay
SC-038	Steam Condensate	32° 42' 36"	117° 12' 21"	San Diego Bay
SC-039	Steam Condensate	32° 42' 29"	117° 12' 21"	San Diego Bay
SC-040	Steam Condensate	32° 42' 26"	117° 12' 21"	San Diego Bay
SC-041	Steam Condensate	32° 42' 26"	117° 12' 21"	San Diego Bay
SC-042	Steam Condensate	32° 42' 24"	117° 12' 21"	San Diego Bay
SC-043	Steam Condensate	32° 42' 24"	117° 12' 21"	San Diego Bay
SC-044	Steam Condensate	32° 42' 23"	117° 12' 21"	San Diego Bay
SC-045	Steam Condensate	32° 42' 16"	117° 12' 21"	San Diego Bay
SC-046	Steam Condensate	32° 42' 20"	117° 12' 21"	San Diego Bay
SC-047	Steam Condensate	32° 42' 22"	117° 12' 21"	San Diego Bay
SC-048	Steam Condensate	32° 42' 19"	117° 11' 38"	San Diego Bay
SC-049	Steam Condensate	32° 42' 19"	117° 11' 37"	San Diego Bay
SC-050	Steam Condensate	32° 42' 20"	117° 11' 36"	San Diego Bay
SC-051	Steam Condensate	32° 42' 19"	117° 11' 35"	San Diego Bay
SC-052	Steam Condensate	32° 42' 21"	117° 11' 43"	San Diego Bay
SC-053	Steam Condensate	32° 42' 19"	117° 11' 22"	San Diego Bay
SC-054	Steam Condensate	32° 42' 14"	117° 12' 24"	San Diego Bay
SC-055	Steam Condensate	32° 42' 12"	117° 12' 24"	San Diego Bay
SC-056	Steam Condensate	32° 42' 12"	117° 12' 22"	San Diego Bay
SC-057	Steam Condensate	32° 42' 12"	117° 12' 20"	San Diego Bay
SC-058	Steam Condensate	32° 42' 12"	117° 12' 16"	San Diego Bay

TENTATIVE DRAFT

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
SC-059	Steam Condensate	32° 42' 12"	117° 12' 11"	San Diego Bay
SC-060	Steam Condensate	32° 42' 1"	117° 12' 20"	San Diego Bay
SC-061	Steam Condensate	32° 41' 47"	117° 12' 0"	San Diego Bay
SC-062	Steam Condensate	32° 41' 59"	117° 11' 25"	San Diego Bay
SC-063	Steam Condensate	32° 41' 55"	117° 11' 16"	San Diego Bay
SC-064	Steam Condensate	32° 42' 24"	117° 11' 24"	San Diego Bay
SC-065	Steam Condensate	32° 41' 58"	117° 11' 15"	San Diego Bay
SC-066	Steam Condensate	32° 41' 54"	117° 11' 13"	San Diego Bay
CW-001	Diesel Engine Cooling Water	32° 42' 42"	117° 13' 36"	San Diego Bay
CW-002	Diesel Engine Cooling Water	32° 42' 9"	117° 12' 9"	Pacific Ocean
CW-003	Diesel Engine Cooling Water	32° 41' 29"	117° 13' 15"	Pacific Ocean
CW-004	Diesel Engine Cooling Water	32° 41' 48"	117° 13' 15"	San Diego Bay
BW-001[1]	Pier Boom Cleaning	32° 42' 21"	117° 11' 18"	San Diego Bay
UV-001	Utility Vault and Manhole Dewatering	32° 42' 7"	117° 10' 57"	San Diego Bay
UV-002	Utility Vault and Manhole Dewatering	32° 42' 36"	117° 11' 24"	San Diego Bay
UV-003	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 11"	San Diego Bay
UV-004	Utility Vault and Manhole Dewatering	32° 42' 38"	117°11' 24"	San Diego Bay
UV-005	Utility Vault and Manhole Dewatering	32° 41' 42"	117° 12' 13"	San Diego Bay
UV-006	Utility Vault and Manhole Dewatering	32° 41' 26"	117° 11' 39"	San Diego Bay
UV-007	Utility Vault and Manhole Dewatering	32° 41' 20"	117° 11' 27"	San Diego Bay
UV-008	Utility Vault and Manhole Dewatering	32° 41' 2"	117° 11' 25"	San Diego Bay
UV-009	Utility Vault and Manhole Dewatering	32° 41' 16"	117° 11' 56"	San Diego Bay
UV-010	Utility Vault and Manhole Dewaterivng	32° 42' 23"	117° 11' 25"	San Diego Bay
UV-011	Utility Vault and Manhole Dewatering	32° 42' 23"	117° 11' 23"	San Diego Bay
UV-012	Utility Vault and Manhole Dewaterivng	32° 42' 22"	117° 11' 21"	San Diego Bay
UV-013	Utility'Vault and Manhole Dewatering	32° 42' 22"	117° 11' 20"	San Diego Bay
UV-014	Utility Vault and Manhole Dewatering	32° 42' 21"	117° 11' 18"	San Diego Bay
UV-015	Utility Vault and Manhole Dewatering	32° 42' 21"	117° 11' 17"	San Diego Bay
UV-016	Utility Vault and Manhole Dewatering	32° 42' 20"	117° 11' 15"	San Diego Bay
UV-017	Utility Vault and Manhole Dewatering	32° 42' 20"	117° 11' 13"	San Diego Bay

TENTATIVE DRAFT

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
UV-018	Utility Vault and Manhole Dewatering	32° 42' 19"	117° 11' 12"	San Diego Bay
UV-019	Utility Vault and Manhole Dewatering	32° 42' 19"	117° 11' 10"	San Diego Bay
UV-020	Utility Vault and Manhole Dewatering	32° 42' 18"	117° 11' 9"	San Diego Bay
UV-021	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 6"	San Diego Bay
UV-022	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 5"	San Diego Bay
UV-023	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 4"	San Diego Bay
UV-024	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 2"	San Diego Bay
UV-025	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 0"	San Diego Bay
UV-026	Utility Vault and Manhole Dewatering	32° 42' 15"	117° 10' 58"	San Diego Bay
UV-027	Utility Vault and Manhole Dewatering	32° 42' 15"	117° 10' 57"	San Diego Bay
UV-028	Utility Vault and Manhole Dewatering	32° 42' 14"	117° 10' 55"	San Diego Bay
UV-029	Utility Vault and Manhole Dewatering	32° 42' 14"	117° 10' 53"	San Diego Bay
UV-030	Utility Vault and Manhole Dewatering	32° 42' 9"	117° 12' 9"	San Diego Bay
UV-031	Utility Vault and Manhole Dewatering	32° 40' 31"	117° 9' 38"	San Diego Bay
UV-032	Utility Vault and Manhole Dewatering	32° 40' 23"	117° 10' 1"	San Diego Bay
UV-033	Utility Vault and Manhole Dewatering	32° 35' 56"	117° 7' 25"	San Diego Bay
UV-034	Utility Vault and Manhole Dewatering	32° 42' 37"	117° 11' 37"	San Diego Bay
UV-035	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 28"	San Diego Bay
UV-036	Utility Vault and Manhole Dewatering	32° 42' 9"	117° 11' 27"	San Diego Bay
PW-001	Pier Cleaning	32° 41' 43"	117° 13 '36"	San Diego Bay
RO-001[2]	ROWPU Product Water	32° 40' 24"	117° 9' 32"	San Diego Bay or Pacific Ocean
BR-001[3]	Boat Rinsing	32° 40' 47"	117° 9' 31"	San Diego Bay
BR-002[3]	Boat Rinsing	32° 40' 32"	117° 9' 22"	San Diego Bay
SR-001[4]	Swimmer Rinsing	32° 40' 40"	117° 9' 31"	San Diego Bay
SR-002[4]	Swimmer Rinsing	32° 40' 48"	117° 9' 29"	San Diego Bay
ME-001[5]	Marine Mammal Enclosure Cleaning	32° 40' 50"	117° 9' 30"	San Diego Bay
NAS-001	Industrial Storm Water	32° 41' 15"	117° 11' 53"	Pacific Ocean
NAS-002	Industrial Storm Water	32° 41' 16"	117° 12'47"	Pacific Ocean
NAS-003	Industrial Storm Water	32° 41' 11"	117° 13' 1"	Pacific Ocean
NAS-004	Industrial Storm Water	32° 41' 7"	117° 13' 12"	Pacific Ocean
NAS-005	Industrial Storm Water	32° 41' 46"	117° 13' 37"	San Diego Bay

TENTATIVE DRAFT

Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
NAS-006	Industrial Storm Water	32° 42' 9"	117° 13' 27"	San Diego Bay
NAS-007	Industrial Storm Water	32° 42' 18"	117° 13' 22"	San Diego Bay
NAS-008	Industrial Storm Water	32° 42' 24"	117° 13' 16"	San Diego Bay
NAS-009	Industrial Storm Water	32° 42' 30"	117° 13' 10"	San Diego Bay
NAS-010	Industrial Storm Water	32° 42' 46"	117° 12' 38"	San Diego Bay
NAS-011	Industrial Storm Water	32° 42' 48"	117° 12' 35"	San Diego Bay
NAS-012	Industrial Storm Water	32° 42' 50"	117° 12' 25"	San Diego Bay
NAS-013	Industrial Storm Water	32° 42' 53"	117° 12' 6"	San Diego Bay
NAS-014	Industrial Storm Water	32° 42' 38"	117° 11' 20"	San Diego Bay
NAS-015	Industrial Storm Water	32° 42' 35"	117° 11' 22"	San Diego Bay
NAS-016	Industrial Storm Water	32° 42' 35"	117° 11' 21"	San Diego Bay
NAS-017	Industrial Storm Water	32° 42' 32"	117° 11' 23"	San Diego Bay
NAS-018	Industrial Storm Water	32° 42' 34"	117° 11' 26"	San Diego Bay
NAS-019	Industrial Storm Water	32° 42' 30"	117° 11' 23"	San Diego Bay
NAS-020	Industrial Storm Water	32° 42' 25"	117° 11' 26"	San Diego Bay
NAS-021	Industrial Storm Water	32° 42' 24"	117° 11' 26"	San Diego Bay
NAS-022	Industrial Storm Water	32° 42' 23"	117° 11' 25"	San Diego Bay
NAS-023	Industrial Storm Water	32° 42' 23"	117° 11' 24"	San Diego Bay
NAS-024	Industrial Storm Water	32° 42' 22"	117° 11' 19"	San Diego Bay
NAS-025	Industrial Storm Water	32° 42' 21"	117° 11' 17"	San Diego Bay
NAS-026	Industrial Storm Water	32° 42' 21"	117° 11' 16"	San Diego Bay
NAS-027	Industrial Storm Water	32° 42' 20"	117° 11' 15"	San Diego Bay
NAS-028	Industrial Storm Water	32° 42' 20"	117° 11' 14"	San Diego Bay
NAS-029	Industrial Storm Water	32° 42' 19"	117° 11' 11"	San Diego Bay
NAS-030	Industrial Storm Water	32° 42' 18"	117° 11' 7"	San Diego Bay
NAS-031	Industrial Storm Water	32° 42' 17"	117° 11' 4"	San Diego Bay
NAS-032	Industrial Storm Water	32° 42' 16"	117° 11' 0"	San Diego Bay
NAS-033	Industrial Storm Water	32° 42' 15"	117° 10' 57"	San Diego Bay
NAS-034	Industrial Storm Water	32° 42' 14"	117° 10' 54"	San Diego Bay
NAS-035	Industrial Storm Water	32° 42' 13"	117° 10' 52"	San Diego Bay
NAS-036	Industrial Storm Water	32° 41' 24"	117° 12' 24"	Pacific Ocean
NAS-037	Industrial Storm Water	32° 41' 43"	117° 13' 37"	San Diego Bay
~~NAS-038~~	~~Industrial Storm Water~~	~~32° 42' 31"~~	~~117° 13' 31"~~	~~San Diego Bay~~
NAS-039	Industrial Storm Water	32° 42' 41"	117° 12' 53"	San Diego Bay
NAS-040	Industrial Storm Water	32° 42' 53"	117° 12' 10"	San Diego Bay
NAS-041	Industrial Storm Water	32° 42' 53"	117° 11' 56"	San Diego Bay
NAS-042	Industrial Storm Water	32° 42' 52"	117° 11' 41"	San Diego Bay
NAS-043	Industrial Storm Water	32° 42' 52"	117° 11' 37"	San Diego Bay
NAS-044	Industrial Storm Water	32° 42' 51"	117° 11' 37"	San Diego Bay
NAS-045	Industrial Storm Water	32° 42' 49"	117° 11' 33"	San Diego Bay
NAS-046	Industrial Storm Water	32° 42' 49"	117° 11' 29"	San Diego Bay
NAS-047	Industrial Storm Water	32° 42' 41"	117° 11' 18"	San Diego Bay
NAS-048	Industrial Storm Water	32° 42' 36"	117° 11' 20"	San Diego Bay
NAS-049	Industrial Storm Water	32° 42' 52"	117° 11' 43"	San Diego Bay
NAS-050	Industrial Storm Water	32° 42' 39"	117° 11' 19"	San Diego Bay
NAS-051	Industrial Storm Water	32° 42' 33"	117° 11' 22"	San Diego Bay
NAS-052	Industrial Storm Water	32° 42' 40"	117° 11' 18"	San Diego Bay

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Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
NAS-053	Industrial Storm Water	32° 42' 49"	117° 11' 29"	San Diego Bay
NAS-054	Industrial Storm Water	32° 42' 48"	117° 11' 27"	San Diego Bay
NAS-055	Industrial Storm Water	32° 42' 47"	117° 11' 25"	San Diego Bay
NAS-056	Industrial Storm Water	32° 42' 46"	117° 11' 23"	San Diego Bay
NAS-057	Industrial Storm Water	32° 42' 45"	117° 11' 22"	San Diego Bay
NAS-058	Industrial Storm Water	32° 42' 43"	117° 11' 18"	San Diego Bay
NAB-001	Industrial Storm Water	32° 40' 30"	117° 9' 58"	San Diego Bay
NAB-002	Industrial Storm Water	32° 40' 30"	117° 9' 54"	San Diego Bay
NAB-003	Industrial Storm Water	32° 40' 31"	117° 9' 52"	San Diego Bay
NAB-004	Industrial Storm Water	32° 40' 42"	117° 9' 37"	San Diego Bay
NAB-005	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
NAB-006	Industrial Storm Water	32° 40' 49"	117° 9' 28"	San Diego Bay
NAB-007	Industrial Storm Water	32° 40' 33"	117° 9' 18"	San Diego Bay
NAB-008	Industrial Storm Water	32° 40' 32"	117° 9' 19"	San Diego Bay
NAB-009	Industrial Storm Water	32° 40' 32"	117° 9' 20"	San Diego Bay
NAB-010	Industrial Storm Water	32° 40' 16"	117° 9' 37"	San Diego Bay
NAB-011	Industrial Storm Water	32° 40' 30"	117° 10' 1"	San Diego Bay
NAB-012	Industrial Storm Water	32° 40' 34"	117° 9' 47"	San Diego Bay
NAB-013	Industrial Storm Water	32° 40' 36"	117° 9' 45"	San Diego Bay
NAB-014	Industrial Storm Water	32° 40' 40"	117° 9' 39"	San Diego Bay
NAB-015	Industrial Storm Water	32° 40' 41"	117° 9' 38"	San Diego Bay
NAB-016	Industrial Storm Water	32° 40' 30"	117° 9' 56"	San Diego Bay
NAB-017	Industrial Storm Water	32° 40' 49"	117° 9' 26"	San Diego Bay
NAB-018	Industrial Storm Water	32° 40' 49"	117° 9' 26"	San Diego Bay
NAB-019	Industrial Storm Water	32° 40' 47"	117° 9' 24"	San Diego Bay
NAB-020	Industrial Storm Water	32° 40' 45"	117° 9' 21"	San Diego Bay
NAB-021	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
NAB-022	Industrial Storm Water	32° 40' 43"	117° 9' 35"	San Diego Bay
NAB-023	Industrial Storm Water	32° 40' 31"	117° 9' 18"	San Diego Bay
~~NAB-024~~	~~Industrial Storm Water~~	~~32° 40' 33"~~	~~117° 9' 49"~~	~~San Diego Bay~~
NAB-025	Industrial Storm Water	32° 40' 34"	117° 9' 47"	San Diego Bay
NAB-026	Industrial Storm Water	32° 40' 35"	117° 9' 46"	San Diego Bay
NAB-027	Industrial Storm Water	32° 40' 37"	117° 9' 43"	San Diego Bay
NAB-028	Industrial Storm Water	32° 40' 38"	117° 9' 42"	San Diego Bay
NAB-029	Industrial Storm Water	32° 40' 39"	117° 9' 40"	San Diego Bay
NAB-030	Industrial Storm Water	32° 40' 43"	117° 9' 36"	San Diego Bay
NAB-031	Industrial Storm Water	32° 40' 90"	117° 9' 35"	San Diego Bay
NAB-032	Industrial Storm Water	32° 40' 37"	117° 9' 51"	San Diego Bay
NAB-033	Industrial Storm Water	32° 40' 38"	117° 9' 50"	San Diego Bay
NAB-034	Industrial Storm Water	32° 40' 38"	117° 9' 48"	San Diego Bay
NAB-035	Industrial Storm Water	32° 40' 39"	117° 9' 47"	San Diego Bay
NAB-036	Industrial Storm Water	32° 40' 39"	117° 9' 46"	San Diego Bay
NAB-037	Industrial Storm Water	32° 40' 40"	117° 9' 45"	San Diego Bay
NAB-038	Industrial Storm Water	32° 40' 41"	117° 9' 45"	San Diego Bay
NAB-039	Industrial Storm Water	32° 40' 42"	117° 9' 44"	San Diego Bay
NAB-040	Industrial Storm Water	32° 40' 42"	117° 9' 43"	San Diego Bay
NAB-041	Industrial Storm Water	32° 40' 43"	117° 9' 42"	San Diego Bay

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NAB-042	Industrial Storm Water	32° 40' 44"	117° 9' 41"	San Diego Bay
NAB-043	Industrial Storm Water	32° 40' 45"	117° 9' 40"	San Diego Bay
NAB-044	Industrial Storm Water	32° 40' 45"	117° 9' 39"	San Diego Bay
NAB-045	Industrial Storm Water	32° 40' 46"	117° 9' 38"	San Diego Bay
NAB-046	Industrial Storm Water	32° 40' 44"	117° 9' 34"	San Diego Bay
NAB-047	Industrial Storm Water	32° 40' 29"	117° 9' 55"	San Diego Bay
NAB-048	Industrial Storm Water	32° 40' 32"	117° 9' 50"	San Diego Bay
NAB-049	Industrial Storm Water	32° 40' 30"	117° 9' 23"	San Diego Bay
NAB-050	Industrial Storm Water	32° 40' 49"	117° 9' 36"	San Diego Bay
NAB-051	Industrial Storm Water	32° 40 '49"	117° 9' 27"	San Diego Bay
NAB-052	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
NOLF-001	Industrial Storm Water	32° 33' 50"	117° 6' 28"	Tijuana River
NOLF-002	Industrial Storm Water	32° 33' 50"	117° 6' 25"	Tijuana River
NOLF-003	Industrial Storm Water	32° 33' 51"	117° 6' 21"	Tijuana River
NOLF-004	Industrial Storm Water	32° 33' 53"	117° 6' 14"	Tijuana River

[1] Discharge points for boom cleaning are primarily around the quay wall and the other two aircraft carrier piers at Naval Air Station, North Island (NASNI), but pier boom cleaning can occur at any point where pier booms are installed. The discharge point identified in the table represents a point along the quay wall at NASNI in the general area where most of the discharges occur.

[2] Discharges of product water from the Reverse Osmosis Water Purification Unit (ROWPU) training exercises occur along the beaches both bayside and surfside (oceanside). The discharge point identified in the table represents a point along the shoreline on the southeastern side of the Naval Amphibious Base (NAB) peninsula in the general area where the discharges occur.

[3] Discharges from boat rinsing activities may occur at industrial outfalls depending on the actual location of the rinsing activity at NAB. The discharge points identified in the table represent the location of two boat ramps in the general area where most of the discharges occur.

[4] The discharge points identified in the table represent the location of the showers at NAB at Buildings 164 and 215.

[5] The discharge point identified in the table represents the general location of the marine mammal enclosures at NAB.

Table 3. Administrative Information

This Order was adopted by the Regional Water Quality Control Board on:	**June 10, 2009**
This Order shall become effective on:	**June 10, 2009**
This Order shall expire on:	**June 10, 2014**
The Discharger shall file a Report of Waste Discharge in accordance with title 23, California Code of Regulations, as application for issuance of new waste discharge requirements no later than:	**December 12, 2013**

I, John Robertus, Executive Officer, do hereby certify that this Order with all attachments is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Diego Region, on June 10, 2009.

TENTATIVE

John Robertus, Executive Officer

TENTATIVE DRAFT

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I. FACILITY INFORMATION

The following Discharger is subject to waste discharge requirements as set forth in this Order:

Table 4. Facility Information

Discharger	United States Department of the Navy
Name of Facility	Naval Base Coronado
Facility Address	937 N. Harbor Drive
	San Diego, CA 92132-00058
	San Diego County
Facility Contact, Title, and Phone	~~Lou~~Luis Perez, Installation Environmental Program Manager, (619) 545-3429
Mailing Address	Same as Facility Address
Type of Facility	Naval Base
Facility Design Flow	Not Applicable

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II. FINDINGS

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

A. Background. The United States Department of the Navy (hereinafter Discharger) is currently discharging pursuant to Order No. R9-2003-0008 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109185. The Discharger submitted a Report of Waste Discharge, dated November 2007, and applied for a NPDES permit renewal to discharge steam condensate; diesel engine cooling water; pier boom cleaning wastewater; utility vault and manhole dewatering wastewater; pier washing wastewater; Reverse Osmosis Water Purification Unit (ROWPU) product water; boat rinsing wastewater; swimmer rinsing wastewater; marine mammal enclosure cleaning wastewater; miscellaneous wastewater; and industrial storm water at numerous discharge locations from Naval Base Coronado, hereinafter Facility. The application was deemed complete on March 27, 2008.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. Facility Description.

The Discharger manages several naval installations in the San Diego area. These installations are aligned into three major naval bases, including the Facility, Naval Base Point Loma (NBPL), and Naval Base San Diego (NBSD). The Facility is comprised of the following installations: Naval Air Station, North Island (NASNI); Naval Amphibious Base, Coronado (NAB); Naval Outlying Landing Field, Imperial Beach (NOLF); Naval Radio Receiving Facility (NRRF); Naval Auxiliary Landing Field, San Clemente Island (NALF); Survival, Evasion, Resistance, and Escape Training School (SERE); La Posta Mountain Warfare Training Center (La Posta MWTC); and Camp Morena.

Of the eight installations aligned under the Facility, only NASNI, NAB, NOLF, NRRF, and NALF have discharges subject to NPDES permitting. NALF is located in the Los Angeles Regional Water Quality Control Board jurisdictional area and, therefore, is not regulated by this Order.

Wastewater is discharged from Discharge Point Nos. SC-001 through SC-066, CW-001 through CW-004, BW-001, UV-001 through UV-036, PW-001, RO-001, BR-001 and BR-002, SR-001 and SR-002, ME-001, NAS-001 through NAS-58, NAB-001 through NAB-052, and NOLF-001 through NOLF-003 (see table on cover page) to the Pacific Ocean, the San Diego Bay, and the Tijuana River, waters of the United States.

A description of each discharge is provided in section II.A of Attachment F (Fact Sheet) to this Order. Figure B-1 of Attachment B provides a map of the area around the Facility. Attachment C provides flow schematics for the Facility.

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C. Legal Authorities. This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the U.S. Environmental Protection Agency (USEPA) and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this facility to surface waters. This Order also serves as Waste Discharge Requirements (WDRs) pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

D. Background and Rationale for Requirements. The Regional Water Board developed the requirements in this Order based on information submitted as part of the application, through monitoring and reporting programs, and other available information. The Fact Sheet (Attachment F), which contains background information and rationale for Order requirements, is hereby incorporated into this Order and constitutes part of the Findings for this Order. Attachments A through E and G through I are also incorporated into this Order.

E. California Environmental Quality Act (CEQA). Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100-21177.

F. Technology-based Effluent Limitations. Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations[1], require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharge authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with Part 125, section 125.3. A detailed discussion of the technology-based effluent limitations development is included in the Fact Sheet (Attachment F).

G. Water Quality-based Effluent Limitations. Section 301(b) of the CWA and section 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

Section 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, water quality-based effluent limitations (WQBELs) must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state' s narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

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[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

H. Water Quality Control Plans. The Regional Water Board adopted a *Water Quality Control Plan for the San Diego Basin* (hereinafter Basin Plan) on September 8, 1994, and last amended on April 25, 2007, that designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. Beneficial uses applicable to the San Diego Bay are as follows:

Table 5. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
CW-002, CW-003, RO-001, NAS-001 through NAS-004, and NAS-036	Pacific Ocean	Existing: Industrial service supply; navigation; contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; aquaculture; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting
SC-001 through SC-066, CW-001, CW-004, BW-001, UV-001 through UV-036, PW-001, RO-001, BR-001, BR-002, SR-001, SR-002, ME-001, NAS-005 through NAS-035 and NAS-037 through NAS-058, and NAB-001 through NAB-52	San Diego Bay	Existing: Industrial service supply; navigation; contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; estuarine habitat; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting
NOLF-001 through NOLF-003	Tijuana River (within the Tijuana River Estuary)	Existing: Contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; estuarine habitat; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting

Under section 303(d) of the 1972 Clean Water Act, states, territories and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 30, 2006 USEPA gave final approval to California's 2006 section 303(d) List of Water Quality Limited Segments. The San Diego Bay, as a whole, is listed as impaired for polychlorinated biphenyls (PCBs). Additionally, a portion of the San Diego Bay, "San Diego Bay Shoreline, Glorietta Bay," is adjacent to NAB. This portion of the San Diego Bay is listed in the 303(d) list as impaired for copper. No applicable TMDL has been adopted by the Regional Water Board and approved by USEPA.

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The State Water Board adopted the *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975. This plan contains temperature objectives for surface waters.

The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table 6. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water	Beneficial Uses
CW-002, CW-003, RO-001, NAS-001 through NAS-004, and NAS-036	Pacific Ocean	Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation.

The requirements of this Order implement the applicable water quality control plans.

I. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants. These rules include water quality criteria for priority pollutants and are applicable to this discharge.

J. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for

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chronic toxicity control. Requirements of this Order implement the SIP. The SIP is not applicable to the storm water discharges authorized by this Order.

K. Compliance Schedules and Interim Requirements. Section 2.1 of the SIP provides that, based on a Discharger' s request and demonstration that it is infeasible for an existing Discharger to achieve immediate compliance with an effluent limitation derived from a CTR criterion, compliance schedules may be allowed in an NPDES permit. Unless an exception has been granted under section 5.3 of the SIP, a compliance schedule may not exceed 5 years from the date that the permit is issued or reissued, nor may it extend beyond 10 years from the effective date of the SIP (or May 18, 2010) to establish and comply with CTR criterion-based effluent limitations. Where a compliance schedule for a final effluent limitation exceeds 1 year, the Order must include interim numeric limitations for that constituent or parameter. Where allowed by the Basin Plan, compliance schedules and interim effluent limitations or discharge specifications may also be granted to allow time to implement a new or revised water quality objective. This Order includes compliance schedules and interim effluent limitations. A detailed discussion of the basis for the compliance schedule(s) and interim effluent limitation(s) and/or discharge specifications is included in the Fact Sheet.

L. Alaska Rule. On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes. (40 CFR § 131.21; 65 Fed. Reg. 24641 (April 27, 2000).) Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000 may be used for CWA purposes, whether or not approved by USEPA.

M. Stringency of Requirements for Individual Pollutants. This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations applied in the Order consist of restrictions on oil and grease, suspended solids, settleable solids, turbidity, and pH as specified in Table A of the Ocean Plan; a requirement to continue to implement a PLAN for utility vault and manhole dewatering discharges; a requirement to develop and maintain a BMP Plan for discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning; and a requirement to continue to implement a SWPPP for toxic pollutants and hazardous substances in storm water runoff. These restrictions and requirements are discussed in section IV.B.2. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures

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for calculating the individual WQBELs for priority pollutants for discharges to the San Diego Bay are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. The scientific procedures for calculating the individual WQBELs for constituents contained in Table B of the Ocean Plan for discharges to the Pacific Ocean are based on the Ocean Plan, which was approved by the USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "applicable water quality standards for purposes of the CWA" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

N. Antidegradation Policy. Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing quality of waters be maintained unless degradation is justified based on specific findings. The Regional Water Board' s Basin Plan implements, and incorporates by reference, both the state and federal antidegradation policies. As discussed in detail in the Fact Sheet the permitted discharge is consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

O. Anti-Backsliding Requirements. Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require effluent limitations in a reissued permit to be as stringent as those in the previous permit, with some exceptions where limitations may be relaxed. All effluent limitations in this Order are at least as stringent as the effluent limitations in the previous Order.

P. Endangered Species Act. This Order does not authorize any act that results in the taking of a threatened or endangered species or any act that is now prohibited, or becomes prohibited in the future, under either the California Endangered Species Act (Fish and Game Code sections 2050 to 2097) or the Federal Endangered Species Act (16 U.S.C.A. sections 1531 to 1544). This Order requires compliance with effluent limits, receiving water limits, and other requirements to protect the beneficial uses of waters of the state. The Discharger is responsible for meeting all requirements of the applicable Endangered Species Act.

Q. Monitoring and Reporting. Section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program establishes monitoring and reporting requirements to implement federal and State requirements. This Monitoring and Reporting Program is provided in Attachment E.

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R. Standard and Special Provisions. Standard Provisions, which apply to all NPDES permits in accordance with section 122.41, and additional conditions applicable to specified categories of permits in accordance with section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under section 122.42. The Regional Water Board has also included in this Order special provisions applicable to the Discharger. A rationale for the special provisions contained in this Order is provided in the attached Fact Sheet.

S. Provisions and Requirements Implementing State Law. The provisions/requirements in section VI.A.2.l of this Order are included to implement State law only. These provisions/requirements are not required or authorized under the federal CWA; consequently, violations of these provisions/requirements are not subject to the enforcement remedies that are available for NPDES violations.

T. Notification of Interested Parties. The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe Waste Discharge Requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Details of notification are provided in the Fact Sheet of this Order.

U. Consideration of Public Comment. The Regional Water Board, in a public meeting, heard and considered all comments pertaining to the discharge. Details of the Public Hearing are provided in the Fact Sheet of this Order.

V. Atomic Energy Act. Pursuant to the *Atomic Energy Act*, the Regional Water Board does not have jurisdictional authority to regulate the discharge of radioactive wastes. Therefore, this Order does not regulate discharges of radioactive wastes from nuclear propulsion plants or from nuclear support facilities.

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THEREFORE, IT IS HEREBY ORDERED, that this Order supercedes Order No. R9-2003-0008 except for enforcement purposes, and, in order to meet the provisions contained in division 7 of the Water Code (commencing with section 13000) and regulations adopted thereunder, and the provisions of the federal Clean Water Act (CWA) and regulations and guidelines adopted thereunder, the Discharger shall comply with the requirements in this Order.

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III. DISCHARGE PROHIBITIONS

A. Discharge of the following wastes are prohibited:

1. paint chips;
2. blasting materials
3. paint over spray;
4. paint spills;
5. water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
6. hydro-blast water;
7. tank cleaning water from tank cleaning to remove sludge and/or dirt;
8. clarified water from oil and water separator, except for storm water discharges treated by an oil and water separator and reported by the Discharger to the Regional Water Board;
9. steam cleaning water;
10. pipe and tank hydrostatic test water, unless regulated by an NPDES permit;
11. saltbox water;
12. hydraulic oil leaks and spills;
13. fuel leaks and spills;
14. trash;
15. miscellaneous refuse and rubbish;
16. fiberglass dust;
17. swept materials;
18. ship repair and maintenance activity debris;
19. demineralizer and reverse osmosis brine; and
20. oily bilge water.

B. Diesel engine cooling water discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.

C. Boat rinsing and marine mammal enclosure cleaning discharges having a maximum temperature greater than 20°F above the natural receiving water are prohibited.

D. The Discharger shall comply with all requirements of the Basin Plan Waste Discharge Prohibitions which are hereby included in this Order by reference.

E. Discharges of wastes not specifically authorized by this Order or in a manner or location not specifically described in this Order are prohibited unless regulated by applicable WDRs.

F. Except as allowed in ~~section VI.C.3.c~~Attachment G of this Order [Storm Water Pollution Prevention Plan (SWPPP) requirements], non-storm water discharges that discharge either directly or indirectly to waters of the United States are prohibited. Prohibited non-storm water discharges must be either eliminated or permitted by a separate NPDES permit.

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G. Industrial storm water discharges and authorized or permitted non-storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance as defined in CWC Section 13050.

H. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.

I. The discharge of the first ¼ inch (first flush) of storm water runoff from high risk areas[1] is prohibited ~~Except~~, except if the pollutants in the discharge are reduced to the extent and demonstrated through testing that the discharge achieves compliance with the toxicity limitation specified in section IV.A.5 of this Order. The discharge of the remainder of the storm water must also achieve compliance with the toxicity limitation specified in this Order but only needs to be demonstrated twice per year, unless under accelerated testing.

J. The discharge of wastes that cause or contribute to the violation of water quality standards (designated beneficial uses and water quality objectives developed to protect beneficial uses) is prohibited.

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[1] *High risk areas* are areas where wastes or pollutants of significant quantities (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, ~~cleaners~~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, run-on, and/or runoff.

IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

A. Effluent Limitations – Discharge Point Nos. SC-001 through SC-066, CW-001 through CW-004, RO-001, NAS-001 through NAS-058 (except NAS-038), NAB-001 through NAB-052 (except NAB-024), and NOLF-001 through NOLF-~~003~~004

1. Final Effluent Limitations – Discharge Point Nos. SC-001 through SC-066

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. SC-001 through SC-066, with compliance measured at Monitoring Location Nos. SC-001 through SC-066 as described in the attached Monitoring and Reporting Program (MRP):

Table 7. Effluent Limitations For Steam Condensate

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and Grease	mg/L	25	40	--	--	75
pH	pH units	--	--	--	7.0	9.0
Priority Pollutants						
Copper, Total Recoverable	µg/L	2.0	--	5.8	--	--
Lead, Total Recoverable	µg/L	6.3	--	15.5	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	--	2.8×10^{-8}	--	--
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	--	11.8	--	--
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Temperature	°F	--	--	--	--	[1]
Turbidity	NTU	75	100	--	--	225

[1] At no time shall any discharge be greater than 20° F over the natural temperature of the receiving water.

2. Final Effluent Limitations – Discharge Point Nos. CW-001 and CW-004

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. CW-001 and CW-004, with compliance measured at Monitoring Location Nos. CW-001 and CW-004 as described in the attached MRP:

Table 8. Summary of Effluent Limitations for Diesel Engine Cooling Water

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and	mg/L	25	40	--	--	75

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Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Grease						
pH	pH units	--	--	--	7.0	9.0
Priority Pollutants						
Copper, Total Recoverable	µg/L	2.2	--	5.8	--	--
Lead, Total Recoverable	µg/L	5.8	--	15.8	--	--
Mercury, Total Recoverable	µg/L	0.051	--	0.102	--	--
Zinc, Total Recoverable	µg/L	38.4	--	95.1	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	--	2.8×10^{-8}	--	--
4,4-DDE	µg/L	0.00059	--	0.00118	--	--
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225

3. Final Effluent Limitations – Discharge Point Nos. CW-002 and CW-003

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. CW-002 and CW-003, with compliance measured at Monitoring Location Nos. CW-002 and CW-003 as described in the attached MRP:

Table 9. Summary of Effluent Limitations for Diesel Engine Cooling Water

Parameter	Units	Effluent Limitations					
		6-Month Median	Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants							
Oil and Grease	mg/L	--	25	40	--	--	75
pH	pH units	--	--	--	--	7.0	9.0
Ocean Plan Pollutants							
Arsenic, Total Recoverable	µg/L	8	--	--	32	--	80
Cadmium, Total Recoverable	µg/L	1	--	--	4	--	10
Chromium, Total Recoverable	µg/L	2	--	--	8	--	20
Copper, Total Recoverable	µg/L	3	--	--	12	--	30
Lead, Total Recoverable	µg/L	2	--	--	8	--	20
Mercury, Total Recoverable	µg/L	0.04	--	--	0.16	--	0.4
Nickel, Total	µg/L	5	--	--	20	--	50

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Parameter	Units	Effluent Limitations					
		6-Month Median	Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Recoverable							
Zinc, Total Recoverable	µg/L	20	--	--	80	--	200
DDT[1]	µg/L	--	0.00017	--	--	--	--
TCDD-Equivalents	µg/L	--	3.9×10^{-9}	--	--	--	--
Non-Conventional Pollutants							
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0
Turbidity	NTU	--	75	100	--	--	225

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

4. Final Effluent Limitations – Discharge Point No. RO-001

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point No. RO-001, with compliance measured at Monitoring Location No. RO-001 as described in the attached MRP:

Table 10. Summary of Effluent Limitations for ROWPU Product Water

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and Grease	mg/L	25	40	--	--	75
pH	pH units	--	--	--	7.0	9.0
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225

~~5.~~ Final Effluent Limitations – Discharge Point Nos. NAS-001 through NAS-058 (except NAS-038), NAB-001 through NAB-052 (except NAB-024), and NOLF-001 through NOLF-~~003~~

5. 004

Discharges of storm water at Discharge Point Nos. NAS-001 through NAS-058 (except NAS-038), NAB-001 through NAB-052 (except NAB-024), and NOLF-001 through NOLF-~~003~~004 shall achieve a rating of "Pass" for acute toxicity with compliance determined as specified in section VII.H of this Order.

6. Interim Effluent Limitations

a. During the period beginning the effective date of this Order and ending on May 18, 2010, the Discharger shall maintain compliance with the following limitations

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at Discharge Point Nos. SC-001 through SC-066, with compliance measured at Monitoring Location Nos. SC-001 through SC-066 as described in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 11. Interim Effluent Limitations for Steam Condensate

Parameter	Units	Maximum Daily
Copper, Total Recoverable	µg/L	370
Lead, Total Recoverable	µg/L	22.8
TCDD-equivalents	µg/L	5.7×10^{-8}
Bis (2-ethylhexyl) Phthalate	µg/L	11.8

b. During the period beginning the effective date of this Order and ending on May 18, 2010, the Discharger shall maintain compliance with the following limitations at Discharge Point Nos. CW-001 and CW-004, with compliance measured at Monitoring Location Nos. CW-001 and CW-004 as described in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 12. Interim Effluent Limitations for Diesel Engine Cooling Water

Parameter	Units	Maximum Daily
Copper, Total Recoverable	µg/L	97
Lead, Total Recoverable	µg/L	23
Mercury, Total Recoverable	µg/L	0.44
Zinc, Total Recoverable	µg/L	150
TCDD-equivalents	µg/L	7.2×10^{-8}
4,4-DDE	µg/L	0.0126

c. During the period beginning the effective date of this Order and ending on June, 25, 2011, the Discharger shall maintain compliance with the following limitations at Discharge Point Nos. CW-002 and CW-003, with compliance measured at Monitoring Location Nos. CW-002 and CW-003 as described in the attached MRP. These interim effluent limitations shall apply in lieu of the corresponding final effluent limitations specified for the same parameters during the time period indicated in this provision.

Table 13. Interim Effluent Limitations for Diesel Engine Cooling Water

Parameter	Units	Maximum Daily	Instantaneous Maximum
Arsenic, Total Recoverable	µg/L	32	80
Cadmium, Total Recoverable	µg/L	4	10
Chromium, Total Recoverable	µg/L	8	20
Copper, Total Recoverable	µg/L	97	--
Lead, Total Recoverable	µg/L	23	--

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Parameter	Units	Maximum Daily	Instantaneous Maximum
Mercury, Total Recoverable	µg/L	0.44	--
Zinc, Total Recoverable	µg/L	150	200
DDT[1]	µg/L	0.0126	--
TCDD-Equivalents	µg/L	7.15×10^{-8}	--

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

B. Land Discharge Specifications

[Not Applicable]

C. Reclamation Specifications

[Not Applicable]

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V. RECEIVING WATER LIMITATIONS

The discharge of waste shall not cause or contribute to an excursion above the following water quality objectives in the receiving water:

A. Surface Water Limitation

~~The discharge of waste shall not cause or contribute to an exceedance of any applicable water quality objective or standard contained in applicable statewide water quality control plans, the California Toxics Rule, or the San Diego Basin Plan.~~

~~Receiving water limitations are based on water quality objectives contained in the Basin Plan and are a required part of this Order. The discharge shall not cause the following in the receiving water:~~

1. Physical Characteristics

a. Waters shall not contain oils, greases waxes, or other materials in concentrations which result in visible film or coating on the surface of the water or on objects in the water, or which cause nuisance or which otherwise adversely affect beneficial uses.

b. Waters shall not contain floating material, including solids, liquids, foams, and scum in concentrations which cause nuisance or adversely affect beneficial uses.

c. The suspended sediment load and suspended sediment discharge rate of surface waters shall not be altered in such a manner as to cause nuisance or adversely affect beneficial uses.

d. Waters shall not contain suspended and settleable solids in concentrations of solids that cause nuisance or adversely affect beneficial uses.

e. Waters shall not contain taste or odor producing substances at concentrations, which cause a nuisance or adversely affect beneficial uses.

f. Waters shall be free of changes in turbidity that cause nuisance or adversely affect beneficial uses. The transparency of the waters in lagoons and estuaries shall not be less than 50 percent of the depth at locations where measurement is made by means of a standard Secchi disk, except where lesser transparency is caused by rainfall runoff from undisturbed natural areas and dredging projects conducted in conformance with waste discharge requirements of the Regional Water Board. With these two exceptions, increases in turbidity attributable to controllable water quality factors shall not exceed the following limits:

Table 14. Receiving Water Turbidity Objectives

Natural Turbidity	Maximum Increase
0 – 50 NTU	20% over natural turbidity level

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Natural Turbidity	Maximum Increase
50 – 100 NTU	10 NTU
Greater than 100 NTU	10% over natural turbidity level

2. Chemical Characteristics

a. Dissolved oxygen levels shall not be less then 5.0 mg/L in waters of the San Diego Bay. The annual mean dissolved oxygen concentration shall not be less than 7 mg/L.

b. The pH shall not be changed at any time more than 0.2 units from that which occurs naturally. The pH shall not be depressed below 7.0 nor raised above 9.0.

c. Waters of the San Diego Bay shall not contain biostimulatory substances in concentrations that promote aquatic growth to the extent that such growths cause nuisance or adversely affect beneficial uses.

d. The discharge of wastes shall not cause concentrations of un-ionized ammonia (NH_3) to exceed 0.025 mg/L (as N) in the San Diego Bay.

e. No individual pesticide or combination of pesticides shall be present in the water column, sediments or biota at concentration(s) 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.

3. Bacteriological Characteristics

a. In waters designated for contact recreation (REC-1), the fecal coliform concentration based on a minimum of not less than five samples for any 30-day period, shall not exceed a log mean of 200/100 ml, nor shall more than 10 percent of the total samples during any 30-day period exceed 400 per 100 ml.

b. In waters designated for shell fish harvesting (SHELL), the median total coliform concentration throughout the water column for any 30-day period shall not exceed 70/100 ml nor shall more than 10 percent of the samples collected during any 30-day period exceed 230/100 ml for five-tube decimal dilution test or 330/100 ml when a three-tube decimal dilution test is used.

c. In waters designated for contact recreation (REC-1), the enterococci concentration shall not exceed 35/100 ml in all areas, 104/100 ml in designated beach areas, 276/100 ml in moderately or lightly used areas, and 500/100 ml in infrequently used areas.

4. Biological Characteristics

a. Marine communities, including vertebrate, invertebrate, and plant species, shall not be degraded.

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b. The natural taste, odor, and color of fish, shellfish, or other marine resources used for human consumption shall not be altered.

c. The concentration of organic materials in fish, shellfish, or other marine resources used for human consumption shall not bioaccumulate to levels that are harmful to human health.

5. 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.

6. Toxicity

All 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, analyses of species diversity, population density, growth anomalies, bioassays of appropriate duration, or other appropriate methods as specified by the Regional Water Board.

7. Other Water Quality Objectives

a. CTR Priority Pollutants as specified in the Table of Paragraph (b)(1) of 40 CFR 131.38.

b. Ocean Plan Water Quality Objectives as specified in Table B.

B. Groundwater Limitations

[Not Applicable]

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VI. PROVISIONS

A. Standard Provisions

1. **Federal Standard Provisions.** The Discharger shall comply with all Standard Provisions included in Attachment D of this Order.

2. **Regional Water Board Standard Provisions.** The Discharger shall comply with the following provisions:

   a. The Discharger shall comply with all requirements and conditions of this Order. Any permit non-compliance constitutes a violation of the CWA and/or of the CWC and is grounds for enforcement action, permit termination, revocation and reissuance, or modification, or for denial of an application for permit renewal, modification, or reissuance.

   b. The Discharger shall comply with all applicable federal, state, and local laws and regulations for 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.

   c. 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 CWA.

   d. Any noncompliance with this Order is a violation of the CWC and/or the CWA and is grounds for denial of an application for Order renewal or modification.

   e. No discharge of waste into waters of the State, whether or not the discharge is made pursuant to WDRs, shall create a vested right to continue the discharge. All discharges of wastes into waters of the State are privileges, not rights.

   f. For purposes of this Order, the term “permittee” used in parts of 40 CFR incorporated into this Order by reference and/or applicable to this Order shall have the same meaning as the term “Discharger” used elsewhere in this Order.

   g. This Order expires on June ~~25, 2013~~10, 2014, after which, the terms and conditions of this permit are automatically continued pending issuance of a new Order, provided that all requirements of USEPA’ s NPDES regulations at 40 CFR 122.6 and the State’ s regulations at CCR Title 23, section 2235.4 regarding the continuation of expired Orders and waste discharge requirements are met.

   h. 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 office of the Regional Water Board.

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i. A copy of this Order shall be maintained on-site at the Facility, and shall be available to Regional Water Board, State Water Board, and USEPA personnel and/or their authorized representative at all times.

j. The Discharger shall comply with any interim limitations established by addendum, enforcement action, or revised waste discharge requirements that have been or may be adopted by the Regional Water Board.

k. Failure to comply with provisions or requirements of this Order, or violation of other applicable laws or regulations governing discharges from this facility, may subject the Discharger to administrative or civil liabilities, criminal penalties, and/or other enforcement remedies to ensure compliance. Additionally, certain violations may subject the Discharger to civil or criminal enforcement from appropriate local, state, or federal law enforcement entities.

l. In the event the Discharger does not comply or will be unable to comply for any reason, with any prohibition, effluent limitation, discharge specification, or receiving water limitation of this Order, the Discharger shall notify the Regional Water Board by telephone (858) 467-2952 within 24 hours of having knowledge of such noncompliance, and shall confirm this notification in writing within five days, unless the Regional Water Board waives confirmation. The written notification shall state the nature, time, duration, and cause of noncompliance, and shall describe the measures being taken to remedy the current noncompliance and prevent recurrence including, where applicable, a schedule of implementation. Other noncompliance requires written notification as above at the time of the normal monitoring report.

B. Monitoring and Reporting Program (MRP) Requirements

1. The Discharger shall comply with the MRP, and future revisions thereto, in Attachment E of this Order.

2. Reports required to be submitted to this Regional Water Board shall be sent to:

   Executive Officer
   California Regional Water Quality Control Board
   San Diego Region
   9174 Sky Park Court, Suite 100
   San Diego, CA 92123-4340

   Notifications required to be provided to this Regional Water Board shall be made to:

   Telephone – (858) 467-2952
   Facsimile – (858) 571-6972

3. After notification by the State or Regional Water Board, the Discharger may be required to electronically submit self-monitoring reports. Until such time as

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electronic submission of self-monitoring reports is required, the Discharger shall submit discharge monitoring reports (DMRs) in accordance with the requirements described further below.

DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy to:

State Water Resources Control Board, Division of Water Quality
Discharge Monitoring Report Processing Center
Post Office Box 100
Sacramento, CA 95812

All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (USEPA Form 3320-1). Forms that are self generated or modified cannot be accepted.

C. Special Provisions

1. Reopener Provisions

a. This Order may be reopened and modified in accordance with NPDES regulations at 40 CFR Part 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved, new, State water quality objective.

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

i. Violations of any terms or conditions of this Order.

ii. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

b. This Order may be re-opened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

c. This Order may be re-opened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

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d. This Order may be re-opened and modified, to incorporate additional limitations, prohibitions, and requirements, based on the results of additional monitoring required by the MRP.

e. The filing of a request by the Discharger for modifications, 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.

f. **ROWPU Brine and Backwash Water Study**. The discharge of ROWPU brine and backwash water are not authorized by this Order. If the Discharger performs studies to determine the discharges of ROWPU brine and backwash water do not negatively affect/impact the beneficial uses of the receiving water, this Order may be reopened for authorization of ROWPU brine and backwash water and to include appropriate effluent limitations and/or discharge specifications.

g. **Toxicity Reopener.** In accordance with 40 CFR Parts 122 and 124, this permit may be modified to include effluent limitations or permit conditions to address acute toxicity in the effluent or receiving waterbody, as a result of the discharge; or to implement new, revised, or newly interpreted water quality standards applicable to acute or chronic toxicity.

h. **Intake Water Credits.** . The Discharger may submit a report as detailed in section 1.4.4 of the SIP demonstrating that the required conditions are met for intake water credits. Where the conditions are met, the Regional Board may modify effluent limitations allowing the Facility to discharge a mass and concentration of the intake water pollutant that is no greater than the mass and concentration found in the Facility's intake water.

2. Special Studies, Technical Reports and Additional Monitoring Requirements

a. **Toxicity Reduction Requirements**

i. Initial Investigation TRE Workplan

Within 90 days of the permit effective date, the Discharger shall prepare and submit a copy of their Initial Investigation Toxicity Reduction Evaluation (TRE) Workplan (1-2 pages) to the Regional Water Board for review. This plan shall include steps the Discharger intends to follow if the results of acute toxicity testing are "Fail" as determined in section VII.H and should include, at minimum:

(a) A description of the investigation and evaluation techniques that would be used to identify potential causes and sources of toxicity, effluent variability, and treatment system efficiency.

(b) A description of methods for maximizing in-house treatment system efficiency, good housekeeping practices, and a list of all chemicals used in operations at the Facility.

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(c) If a Toxicity Identification Evaluation (TIE) is necessary, an indication of who would conduct the TIEs (i.e., an in-house expert or outside contractor).

(d) The determination of when a TIE is necessary.

ii. Accelerated Toxicity Testing and TRE/TIE Process

(a) If one of the additional toxicity tests (Attachment E, section V.E) is reported as "Fail", then, within 14 days of receipt of this test result, the Discharger shall initiate a TRE using, based on the type of treatment facility, EPA manual *Toxicity Reduction Evaluation Guidance for Municipal Wastewater Treatment Plants* (EPA/833/B-99/002, 1999) or EPA manual *Generalized Methodology for Conducting Industrial Toxicity Reduction Evaluations* (EPA/600/2-88/070, 1989). In conjunction, the Discharger shall develop and implement a detailed TRE Workplan which shall include: further actions undertaken by the Discharger to investigate, identify, and correct the causes of toxicity; actions the Discharger will take to mitigate the impact of the discharge and prevent the recurrence of toxicity; and a schedule for these actions.

(b) The Discharger may initiate a Toxicity Identification Evaluation (TIE) as part of a TRE to identify the causes of toxicity using the same species and test method and, as guidance, EPA test method manuals: *Methods for Aquatic Toxicity Identification Evaluations: Phase I Toxicity Characterization Procedures* (EPA/600/6-91/003, 1991); *Methods for Aquatic Toxicity Identification Evaluations, Phase II Toxicity Identification Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/080, 1993); *Methods for Aquatic Toxicity Identification Evaluations, Phase III Toxicity Confirmation Procedures for Samples Exhibiting Acute and Chronic Toxicity* (EPA/600/R-92/081, 1993); and *Marine Toxicity Identification Evaluation (TIE): Phase I Guidance Document* (EPA/600/R-96-054, 1996).

3. Best Management Practices and Pollution Prevention

a. **Pollution Prevention Plan (PLAN) for Utility Vault and Manhole Dewatering Discharges**

The Discharger shall continue to implement a PLAN for utility vault and manhole dewatering discharges from Discharge Point Nos. UV-001 through UV-036 that prevents the discharge of pollutants into the receiving waters at levels that would contribute to the degradation of the receiving waters or otherwise negatively affect the beneficial uses of the receiving water. At a minimum, the PLAN shall be developed and implemented in accordance with Attachment H to prevent, or minimize the potential for, the release of pollutants to waters of the State and waters of the United States.

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b. **Best Management Practices (BMP) Plan for Pier Boom Cleaning, Pier Cleaning, Boat Rinsing, Swimmer Rinsing, and Marine Mammal Enclosure Cleaning Discharges**

The Discharger shall develop and implement a BMP Plan for discharges from pier boom cleaning (Discharge Point Nos. BW-001), pier cleaning (Discharge Point Nos. PW-001), boat rinsing (Discharge Point Nos. BR-001 and BR-002), swimmer rinsing (Discharge Point Nos. SR-001 and SR-002), and marine mammal enclosure cleaning (ME-001) that prevents the discharge of pollutants into the receiving waters at levels that would contribute to the degradation of the receiving waters or otherwise negatively affect the beneficial uses of the receiving water. At a minimum, the BMP Plan shall be developed and implemented in accordance with Attachment I to prevent, or minimize the potential for, the release of pollutants to waters of the State and waters of the United States.

c. **Storm Water Pollution Prevention Plan (SWPPP)**

i. The Discharger shall continue to implement a SWPPP that prevents the discharge of pollutants into the receiving waters at levels that would contribute to the degradation of the receiving waters or otherwise negatively affect the beneficial uses of the receiving water. At a minimum, the SWPPP shall be developed and implemented in accordance with Attachment G to prevent, or minimize the potential for, the release of pollutants to waters of the State and waters of the United States.

ii. The Discharger shall comply with all receiving water limitations through timely implementation of control measures and other actions to reduce or prevent pollutants in the discharges in accordance with the SWPPP and other requirements of this Order including any modifications. The SWPPP shall be developed and implemented to achieve compliance with all receiving water limitations. If exceedances of water quality objectives or water quality standards persist notwithstanding implementation of the SWPPP and other requirements of this Order, the Discharger shall assure compliance with all receiving water limitations by complying with the following procedure:

a) Within 30 days after a determination by either the Discharger or this Regional Water Board that discharges are causing or contributing to an exceedance of an applicable water quality objective or water quality standard, the Discharger shall submit a report to this Regional Water Board that describes the BMPs that are currently being implemented and the additional BMPs that will be implemented to prevent or reduce any pollutants that are causing or contributing to the exceedance. The report shall include an implementation schedule. This Regional Water Board may direct an earlier report submittal or may require modifications to the report.

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b) Submit any modifications to the report required by this Regional Water Board within 30 days of notification.

c) Within 30 days following submittal of the modifications required above, the Discharger shall revise the SWPPP and monitoring program to incorporate the required modified BMPs that have been and will be implemented, implementation schedule, and any additional monitoring required.

d) Implement the revised SWPPP and monitoring program in accordance with the required schedule.

If the Discharger has complied with the above procedures and is implementing the revised SWPPP, the Discharger does not have to repeat the same procedure for continuing or recurring exceedances of the same receiving water limitations unless directed by this Regional Water Board to develop additional BMPs.

d. **Benchmark Values**

Whenever the analysis of an industrial storm water discharge from any industrial activity contains a copper concentration greater than 63.6 µg/L or a zinc concentration greater than 117 µg/L, the Discharger shall perform the following tasks:

i. Review and modify the SWPPP as necessary to reduce the concentrations of copper and zinc;
ii. After modifying the SWPPP, sample and analyze the next two storm water runoff events; and
iii. Document the review and the modifications to the SWPPP, and document the sampling analysis.

e. **Evaluation and Minimization Plan for Copper and Zinc in Storm Water.** The Discharger shall prepare an evaluation and minimization plan to address sources of copper and zinc in storm water from the Facility. The plan shall be completed and submitted to the Regional Water Board within **9 months of the adoption date** of this Order for the approval by the Executive Officer.

4. Construction, Operation and Maintenance Specifications

c. All waste treatment, containment, and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County Flood Control Agency.

d. All waste treatment, containment, and disposal facilities shall be protected against erosion, overland runoff, and other impacts resulting from a 100-year frequency 24-hour storm.

e. The Facility shall be operated and maintained in a manner consistent with the SWPPP as specified in section VI.C.3.c of this Order.

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5. Special Provisions for Municipal Facilities (POTWs Only)

[Not Applicable]

6. Other Special Provisions

a. Collected screenings, sludges, and other solids removed from liquid wastes shall be disposed of in compliance with appropriate local, regional, state, and federal regulations or statutes.

7. Compliance Schedules

a. **Compliance Schedules for Final Effluent Limitations for Steam Condensate Discharges of Copper, Lead, TCDD-Equivalents, and Bis (2-Ethylhexyl) Phthalate**

i. By May 18, 2010, the Discharger shall comply with the final effluent limitations at Discharge Point Nos. SC-001 through SC-066 for copper, lead, TCDD-equivalents, and bis (2-ethylhexyl) phthalate. Data submitted by the Discharger over the term of Order No. R9-2003-0008 indicates that the Discharger cannot immediately meet applicable water quality criteria.

1. By July 10, 2009, and by the end of every other subsequent month, the Discharger shall submit a progress report on achieving compliance with the final effluent limits.

ii. **Pollution Prevention Plan.** The Discharger shall prepare and implement a pollution prevention plan for steam condensate discharges for copper, lead, TCDD-equivalents, and bis (2-ethylhexyl) phthalate, in accordance with CWC section 13263.3(d)(2). The minimum requirements for the pollution prevention plan are outlined in the Fact Sheet, Attachment F, section VII.B.3.f. A work plan and time schedule for preparation of the pollution prevention plan shall be completed and submitted to the Regional Water Board **within 3 months of the effective date of this Order**. The Pollution Prevention Plan shall be completed and submitted to the Regional Water Board **within nine (9) months of the effective date of this Order**.

b. **Compliance Schedules for Final Effluent Limitations for Diesel Engine Cooling Water Discharges of Copper, Lead, Mercury, Zinc, TCDD-Equivalents, and 4,4-DDE**

i. By May 18, 2010, the Discharger shall comply with the final effluent limitations at Discharge Point Nos. CW-001 and CW-004 for copper, lead, mercury, zinc, TCDD-equivalents, and 4,4-DDE. Data submitted by the Discharger over the term of Order No. R9-2003-0008 indicates that the Discharger cannot immediately meet applicable water quality criteria.

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1. By July 10, 2009, and by the end of every other subsequent month, the Discharger shall submit a progress report on achieving compliance with the final effluent limits.

ii. **Pollution Prevention Plan.** The Discharger shall prepare and implement a pollution prevention plan for diesel engine cooling water discharges for copper, lead, mercury, zinc, TCDD-equivalents, and 4,4-DDE, in accordance with CWC section 13263.3(d)(2). The minimum requirements for the pollution prevention plan are outlined in the Fact Sheet, Attachment F, section VII.B.3.f. A work plan and time schedule for preparation of the pollution prevention plan shall be completed and submitted to the Regional Water Board **within 3 months of the effective date of this Order**. The Pollution Prevention Plan shall be completed and submitted to the Regional Water Board **within nine (9) months of the effective date of this Order**.

c. **Compliance Schedules for Final Effluent Limitations for Diesel Engine Cooling Water Discharges of Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Zinc, DDT, and TCDD-Equivalents**

i. By June 10, 2012, the Discharger shall comply with the final effluent limitations at Discharge Point Nos. CW-002 and CW-003 for arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents. Data submitted by the Discharger over the term of Order No. R9-2003-0008 indicates that the Discharger cannot immediately meet applicable water quality criteria.

1. By July 10, 2009, and by the end of every other subsequent month, the Discharger shall submit a progress report on achieving compliance with the final effluent limits.

ii. **Pollution Prevention Plan.** The Discharger shall prepare and implement a pollution prevention plan for diesel engine cooling water discharges for arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents, in accordance with CWC section 13263.3(d)(2). The minimum requirements for the pollution prevention plan are outlined in the Fact Sheet, Attachment F, section VII.B.3.f. A work plan and time schedule for preparation of the pollution prevention plan shall be completed and submitted to the Regional Water Board **within 3 months of the effective date of this Order**. The Pollution Prevention Plan shall be completed and submitted to the Regional Water Board **within nine (9) months of the effective date of this Order**.

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VII. COMPLIANCE DETERMINATION

Compliance with the effluent limitations contained in section IV of this Order will be determined as specified below:

A. General.

Compliance with effluent limitation shall be determined using sample reporting protocols defined in the MRP and Attachment A of this Order. For purpose of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the constituent in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL) or lowest quantifiable level.

B. Multiple Sample Data.

When determining compliance with an average monthly effluent limitation (AMEL) or maximum daily effluent limitation (MDEL) and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determination of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

1. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, following by quantified values (if any). The order of individual ND or DNQ determinations is unimportant.

2. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

C. Average Monthly Effluent Limitation (AMEL).

If the average (or when applicable, the median determined by subsection B above for multiple sample data) of daily discharges over a calendar month exceeds the AMEL for a given parameter, this will represent a single violation, though the Discharger will be considered out of compliance for each discharge day of that month for that parameter (e.g., resulting in 31 days of non-compliance in a 31-day month). If only a single sample is taken during the calendar month and the analytical result for that sample exceeds the AMEL, the Discharger will be considered out of compliance for days when the discharge occurs. For any one calendar month during which no sample (daily discharge) is taken, no compliance determination can be made for that calendar month.

D. Maximum Daily Effluent Limitation (MDEL)

If a daily discharge (or when applicable, the median determined by subsection B above for multiple sample data of a daily discharge) exceeds the MDEL for a given parameter, the Discharger will be considered out of compliance for that parameter for

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that 1 day only within the reporting period. For any 1 day during which no sample is taken, no compliance determination can be made for that day.

E. Instantaneous Minimum Effluent Limitation.

If the analytical result of a single grab sample is lower than the instantaneous minimum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both are lower than the instantaneous minimum effluent limitation would result in two instances of non-compliance with the instantaneous minimum effluent limitation).

F. Instantaneous Maximum Effluent Limitation.

If the analytical result of a single grab sample is higher than the instantaneous maximum effluent limitation for a parameter, the Discharger will be considered out of compliance for that parameter for that single sample. Non-compliance for each sample will be considered separately (e.g., the results of two grab samples taken within a calendar day that both exceed the instantaneous maximum effluent limitation would result in two instances of non-compliance with the instantaneous maximum effluent limitation).

G. Ocean Plan Tables A and B Constituents.

1. Sufficient sampling and analysis shall be required to determine compliance with the effluent limitation.

   a. Compliance with Single-Constituent Effluent Limitations

      The Discharger shall be deemed out of compliance with an effluent limitation or discharge specification if the concentration of the constituent in the monitoring sample is greater than the effluent limitation or discharge specification and greater than or equal to the ML.

   b. Compliance with Effluent Limitations expressed as a Sum of Several Constituents

      Dischargers are out of compliance with an effluent limitation that applies to the sum of a group of chemicals (e.g., PCB's) if the sum of the individual pollutant concentrations is greater than the effluent limitation. Individual pollutants of the group will be considered to have a concentration of zero if the constituent is reported as ND or DNQ.

   c. Multiple Sample Data Reduction

      The concentration of the pollutant in the effluent may be estimated from the result of a single sample analysis or by a measure of central tendency (arithmetic mean, geometric mean, median, etc.) of multiple sample analyses when all

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sample results are quantifiable (i.e., greater than or equal to the reported ML). When one or more sample results are reported as ND or DNQ, the central tendency concentration of the pollutant shall be the median (middle) value of the multiple samples. If, in an even number of samples, one or both of the middle values is ND or DNQ, the median will be the lower of the two middle values.

H. Acute Toxicity

The effluent limitation for acute toxicity of discharges of industrial storm water is "Pass" for any one test result. For this Order, the determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test is determined using a one-tailed hypothesis test called a t-test. The objective of a Pass or Fail test is to determine if survival in the single treatment (100% effluent) is significantly different from survival in the control (0% effluent). Following section 11.3 in the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002), the t statistic for the single-effluent concentration acute toxicity test shall be calculated and compared with the critical t set at the 5% level of significance. If the calculated t does not exceed the critical t, then the mean responses for the single treatment and control are declared "not statistically different" and the Discharger shall report "Pass" on the DMR form. If the calculated t does exceed the critical t, then the mean responses for the single treatment and control are declared "statistically different" and the Discharger shall report "Fail" on the DMR form. This Order requires additional toxicity testing if the effluent limitation for acute toxicity is reported as "Fail" as specified in the Monitoring and Reporting Program.

TENTATIVE DRAFT

ATTACHMENT A – DEFINITIONS

Arithmetic Mean (μ)
Also called the average, is the sum of measured values divided by the number of samples. For ambient water concentrations, the arithmetic mean is calculated as follows:

Arithmetic mean = $\mu = \Sigma x / n$ where: Σx is the sum of the measured ambient water concentrations, and n is the number of samples.

Average Monthly Effluent Limitation (AMEL)
The highest allowable average of daily discharges over a calendar month, calculated as the sum of all daily discharges measured during a calendar month divided by the number of daily discharges measured during that month.

Average Weekly Effluent Limitation (AWEL)
The highest allowable average of daily discharges over a calendar week (Sunday through Saturday), calculated as the sum of all daily discharges measured during a calendar week divided by the number of daily discharges measured during that week.

Bioaccumulative
Those substances taken up by an organism from its surrounding medium through gill membranes, epithelial tissue, or from food and subsequently concentrated and retained in the body of the organism.

Best Management Practices (BMPs)
Schedules of activities, prohibitions of practices, maintenance procedures, and other management practices to prevent or reduce the pollution of waters of the United States. The BMPs also include treatment measures, operating procedures, and practices to control facility site runoff, spillage or leaks, sludge or waste disposal, or drainage from raw material storage. The BMPs may include any type of pollution prevention and pollution control measure necessary to achieve compliance with this Order.

Carcinogenic
Pollutants are substances that are known to cause cancer in living organisms.

Clean Water Act (CWA)
The Federal Water Pollution Control Act enacted by Public Law 92-500 as amended by Public Laws 95-217, 95-576, 96-483, and 97-117; 33 USC 1251 et seq.

Coefficient of Variation (CV)
CV is a measure of the data variability and is calculated as the estimated standard deviation divided by the arithmetic mean of the observed values.

Daily Discharge
Daily Discharge is defined as either: (1) the total mass of the constituent discharged over the calendar day (12:00 am through 11:59 pm) or any 24-hour period that reasonably represents a calendar day for purposes of sampling (as specified in the permit), for a constituent with

limitations expressed in units of mass or; (2) the unweighted arithmetic mean measurement of the constituent over the day for a constituent with limitations expressed in other units of measurement (e.g., concentration).

The daily discharge may be determined by the analytical results of a composite sample taken over the course of one day (a calendar day or other 24-hour period defined as a day) or by the arithmetic mean of analytical results from one or more grab samples taken over the course of the day.

For composite sampling, if 1 day is defined as a 24-hour period other than a calendar day, the analytical result for the 24-hour period will be considered as the result for the calendar day in which the 24-hour period ends.

Detected, but Not Quantified (DNQ)
DNQ are those sample results less than the RL, but greater than or equal to the laboratory' s MDL.

Dilution Credit
Dilution Credit is the amount of dilution granted to a discharge in the calculation of a water quality-based effluent limitation, based on the allowance of a specified mixing zone. It is calculated from the dilution ratio or determined through conducting a mixing zone study or modeling of the discharge and receiving water.

Effluent Concentration Allowance (ECA)
ECA is a value derived from the water quality criterion/objective, dilution credit, and ambient background concentration that is used, in conjunction with the coefficient of variation for the effluent monitoring data, to calculate a long-term average (LTA) discharge concentration. The ECA has the same meaning as waste load allocation (WLA) as used in USEPA guidance (Technical Support Document For Water Quality-based Toxics Control, March 1991, second printing, EPA/505/2-90-001).

Enclosed Bays
Enclosed Bays means indentations along the coast that enclose an area of oceanic water within distinct headlands or harbor works. Enclosed bays include all bays where the narrowest distance between the headlands or outermost harbor works is less than 75 percent of the greatest dimension of the enclosed portion of the bay. Enclosed bays include, but are not limited to, Humboldt Bay, Bodega Harbor, Tomales Bay, Drake' s Estero, San Francisco Bay, Morro Bay, Los Angeles-Long Beach Harbor, Upper and Lower Newport Bay, Mission Bay, and San Diego Bay. Enclosed bays do not include inland surface waters or ocean waters.

Estimated Chemical Concentration
The estimated chemical concentration that results from the confirmed detection of the substance by the analytical method below the ML value.

Estuaries
Estuaries means waters, including coastal lagoons, located at the mouths of streams that serve as areas of mixing for fresh and ocean waters. Coastal lagoons and mouths of streams that are temporarily separated from the ocean by sandbars shall be considered estuaries. Estuarine waters shall be considered to extend from a bay or the open ocean to a point

upstream where there is no significant mixing of fresh water and seawater. Estuarine waters included, but are not limited to, the Sacramento-San Joaquin Delta, as defined in Water Code section 12220, Suisun Bay, Carquinez Strait downstream to the Carquinez Bridge, and appropriate areas of the Smith, Mad, Eel, Noyo, Russian, Klamath, San Diego, and Otay rivers. Estuaries do not include inland surface waters or ocean waters.

Facility
As used in the Storm Water Pollution Prevention Plan contained in Attachment G, a collection of industrial processes discharging storm water associated with industrial activity within the property boundary or operational unit.

First Flush
Storm water runoff that occurs between the time a storm event begins and when a minimum of 1 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 that is preceded by at least seven days without rainfall.

High Risk Areas
Areas where wastes or pollutants of significant quantities ~~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 precipitation, run-on, and/or runoff.

Inland Surface Waters
All surface waters of the State that do not include the ocean, enclosed bays, or estuaries.

Instantaneous Maximum Effluent Limitation
The highest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous maximum limitation).

Instantaneous Minimum Effluent Limitation
The lowest allowable value for any single grab sample or aliquot (i.e., each grab sample or aliquot is independently compared to the instantaneous minimum limitation).

Maximum Daily Effluent Limitation (MDEL)
The highest allowable daily discharge of a pollutant, over a calendar day (or 24-hour period). For pollutants with limitations expressed in units of mass, the daily discharge is calculated as the total mass of the pollutant discharged over the day. For pollutants with limitations expressed in other units of measurement, the daily discharge is calculated as the arithmetic mean measurement of the pollutant over the day.

Median
The middle measurement in a set of data. The median of a set of data is found by first arranging the measurements in order of magnitude (either increasing or decreasing order). If the number of measurements (n) is odd, then the median = $X_{(n+1)/2}$. If n is even, then the median = $(X_{n/2} + X_{(n/2)+1})/2$ (i.e., the midpoint between the $n/2$ and $n/2+1$).

Method Detection Limit (MDL)

MDL is the minimum concentration of a substance that can be measured and reported with 99 percent confidence that the analyte concentration is greater than zero, as defined in title 40 of the Code of Federal Regulations, Part 136, Attachment B, revised as of July 3, 1999.

Minimum Level (ML)
ML is the concentration at which the entire analytical system must give a recognizable signal and acceptable calibration point. The ML is the concentration in a sample that is equivalent to the concentration of the lowest calibration standard analyzed by a specific analytical procedure, assuming that all the method specified sample weights, volumes, and processing steps have been followed.

Mixing Zone
Mixing Zone is a limited volume of receiving water that is allocated for mixing with a wastewater discharge where water quality criteria can be exceeded without causing adverse effects to the overall water body.

Non-Storm Water Discharge
Any discharge to storm sewer systems that is not composed entirely of storm water.

Not Detected (ND)
Sample results which are less than the laboratory's MDL.

Ocean Waters
The territorial marine waters of the State as defined by California law to the extent these waters are outside of enclosed bays, estuaries, and coastal lagoons. Discharges to ocean waters are regulated in accordance with the State Water Board' s California Ocean Plan.

Persistent Pollutants
Persistent pollutants are substances for which degradation or decomposition in the environment is nonexistent or very slow.

Pollutant Minimization Program (PMP)
PMP means waste minimization and pollution prevention actions that include, but are not limited to, product substitution, waste stream recycling, alternative waste management methods, and education of the public and businesses. The goal of the PMP shall be to reduce all potential sources of a priority pollutant(s) through pollutant minimization (control) strategies, including pollution prevention measures as appropriate, to maintain the effluent concentration at or below the water quality-based effluent limitation. Pollution prevention measures may be particularly appropriate for persistent bioaccumulative priority pollutants where there is evidence that beneficial uses are being impacted. The Regional Water Board may consider cost effectiveness when establishing the requirements of a PMP. The completion and implementation of a Pollution Prevention Plan, if required pursuant to Water Code section 13263.3(d), shall be considered to fulfill the PMP requirements.

Pollution Prevention
Pollution Prevention means any action that causes a net reduction in the use or generation of a hazardous substance or other pollutant that is discharged into water and includes, but is not limited to, input change, operational improvement, production process change, and product reformulation (as defined in Water Code section 13263.3). Pollution prevention does not

include actions that merely shift a pollutant in wastewater from one environmental medium to another environmental medium, unless clear environmental benefits of such an approach are identified to the satisfaction of the State or Regional Water Board.

Reporting Level (RL)
RL is the ML (and its associated analytical method) chosen by the Discharger for reporting and compliance determination from the MLs included in this Order. The MLs included in this Order correspond to approved analytical methods for reporting a sample result that are selected by the Regional Water Board either from Appendix 4 of the SIP in accordance with section 2.4.2 of the SIP or established in accordance with section 2.4.3 of the SIP. The ML is based on the proper application of method-based analytical procedures for sample preparation and the absence of any matrix interferences. Other factors may be applied to the ML depending on the specific sample preparation steps employed. For example, the treatment typically applied in cases where there are matrix-effects is to dilute the sample or sample aliquot by a factor of ten. In such cases, this additional factor must be applied to the ML in the computation of the RL.

Satellite Collection System
The portion, if any, of a sanitary sewer system owned or operated by a different public agency than the agency that owns and operates the wastewater treatment facility that a sanitary sewer system is tributary to.

Significant Materials
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); and 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
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.

Significant Spills
Include, but are not limited to, releases of oil or hazardous substances in excess of reportable quantities under section 311 of the CWA (see 40 CFR 110.10 and 117.21) or section 102 of CERCLA (see 40 CFR 302.4).

Source of Drinking Water
Any water designated as municipal or domestic supply (MUN) in a Regional Water Board Basin Plan.

Standard Deviation (σ)
Standard Deviation is a measure of variability that is calculated as follows:

$$\sigma = (\sum[(x - \mu)^2]/(n - 1))^{0.5}$$

where:

x is the observed value;

μ is the arithmetic mean of the observed values; and

n is the number of samples.

Storm Water

Includes storm water runoff, snowmelt runoff, and storm water surface runoff and drainage. It excludes infiltration and runoff from agricultural land.

Storm Water Discharge Associated with Industrial Activity

The discharge from any conveyance that is used for collecting and conveying storm water and that is directly related to manufacturing, processing or raw materials storage areas at an industrial plan. The term does not include discharges from facilities or activities excluded from the NPDES program under 40 CFR Part 122. For the facilities identified in the Fact Sheet of this Order, the term includes, but is not limited to, storm water discharges from industrial plant yards; immediate access roads and rail lines used or traveled by carriers of raw materials, manufactured products, waste material, or by-products used or created by the facility; material handling sites; refuse sites; sites used for the application or disposal of process waste waters; sites used for residual treatment, storage areas (including tank farms) for raw materials, and intermediate and final products; and areas where industrial activity has taken place in the past and significant materials remain and are exposed to storm water. For the purposes of this paragraph, material handling activities include storage, loading and unloading, transportation, or conveyance of any raw material, intermediate product, final product, by-product, or waste product. The term excludes areas located on plant lands separate from the plant's industrial activities, such as office buildings and accompanying parking lots as long as the drainage from the excluded areas is not mixed with storm water drained from the above described areas. Industrial facilities (including industrial facilities that are federally, State, or municipally owned or operated that meet the description of the facilities referenced in this paragraph) include those facilities designated under 40 CFR 122.26(a)(1)(v).

Toxicity Reduction Evaluation (TRE)

TRE is a study conducted in a step-wise process designed to identify the causative agents of effluent or ambient toxicity, isolate the sources of toxicity, evaluate the effectiveness of toxicity control options, and then confirm the reduction in toxicity. The first steps of the TRE consist of the collection of data relevant to the toxicity, including additional toxicity testing, and an evaluation of facility operations and maintenance practices, and best management practices. A Toxicity Identification Evaluation (TIE) may be required as part of the TRE, if appropriate. (A TIE is a set of procedures to identify the specific chemical(s) responsible for toxicity. These procedures are performed in three phases (characterization, identification, and confirmation) using aquatic organism toxicity tests.)

ATTACHMENT B – MAPS

Figure B-1. Facility Map

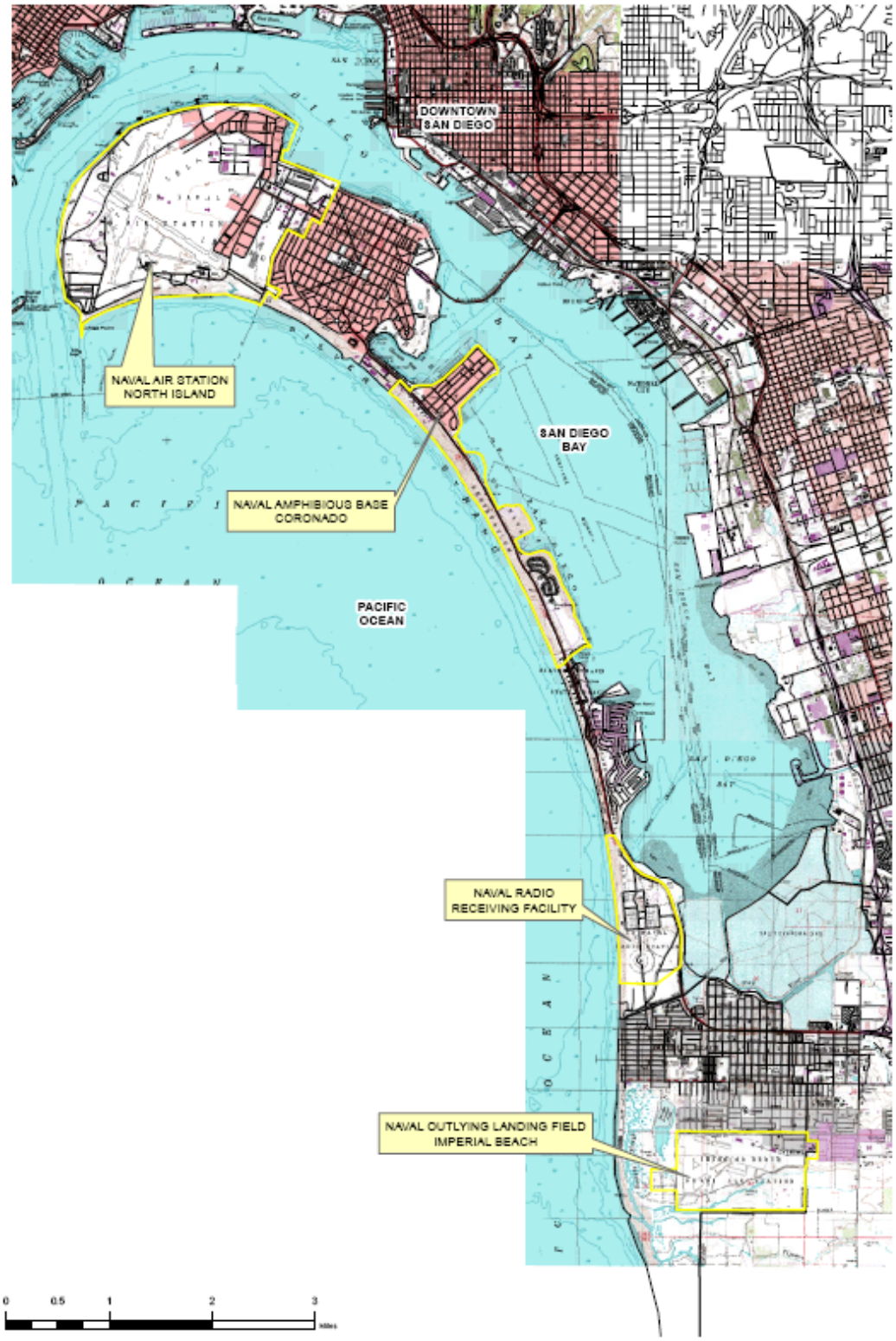


Figure B-2. Industrial Storm Water Discharges at NASNI

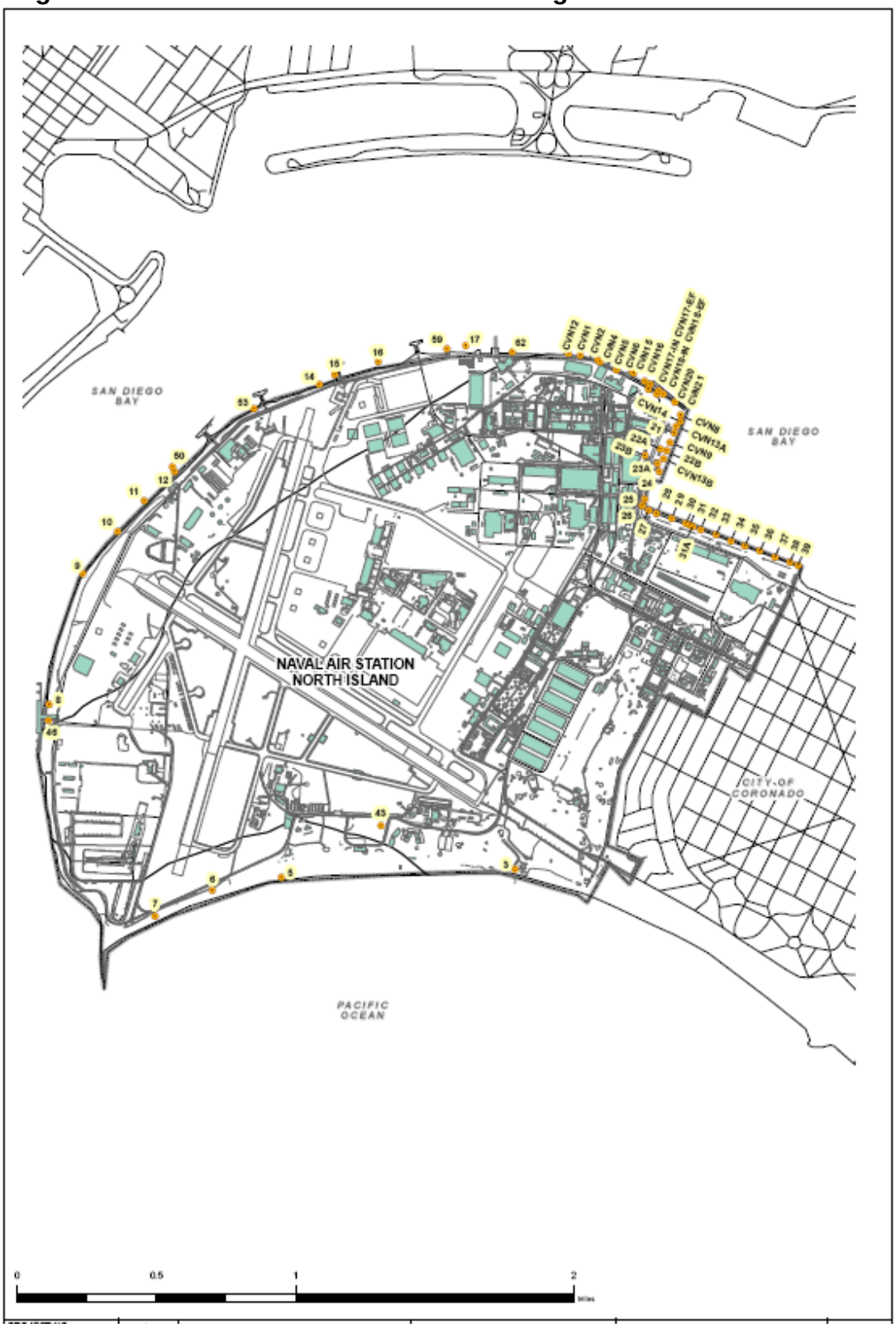


Figure B-3. Industrial Storm Water Discharges at NAB

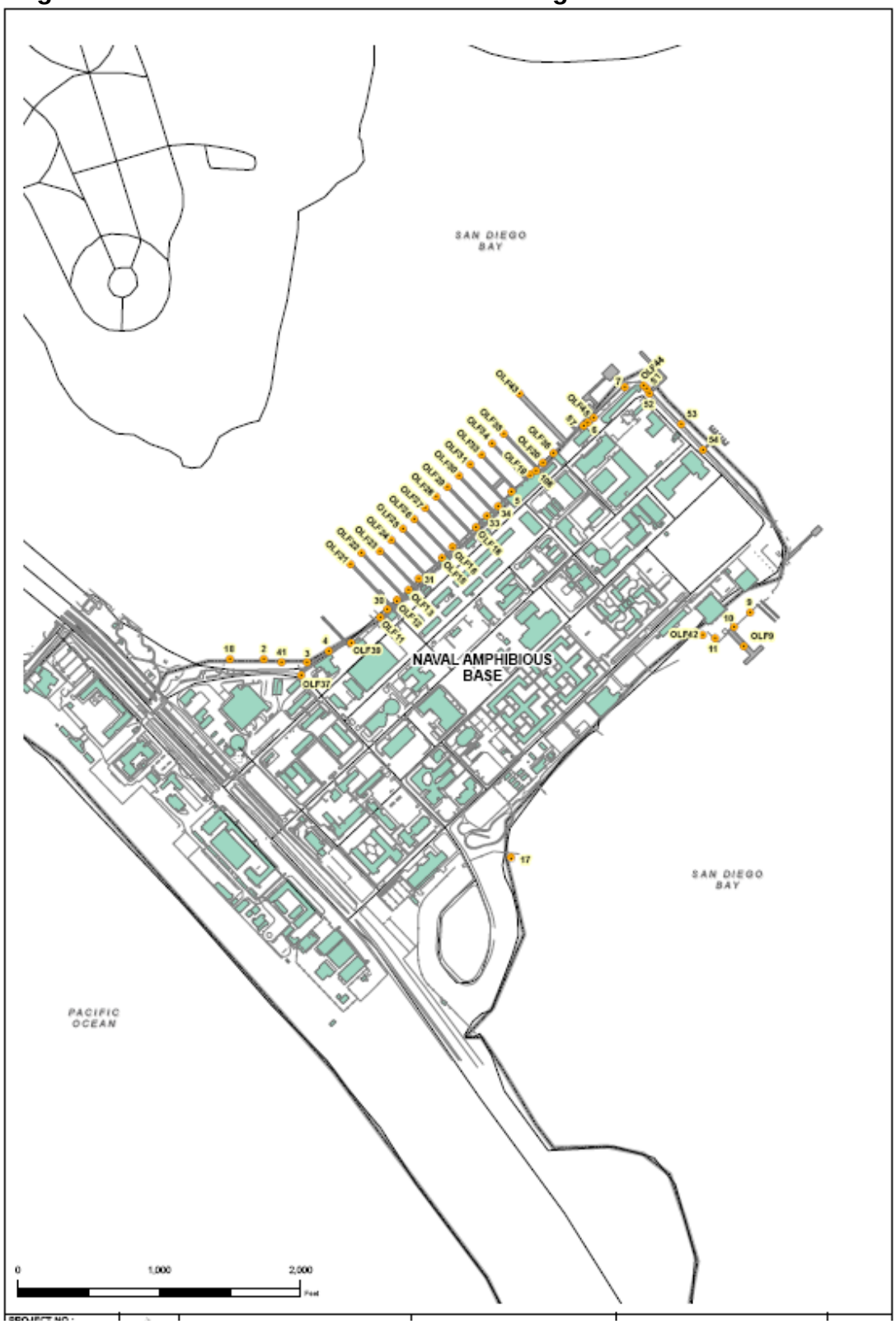
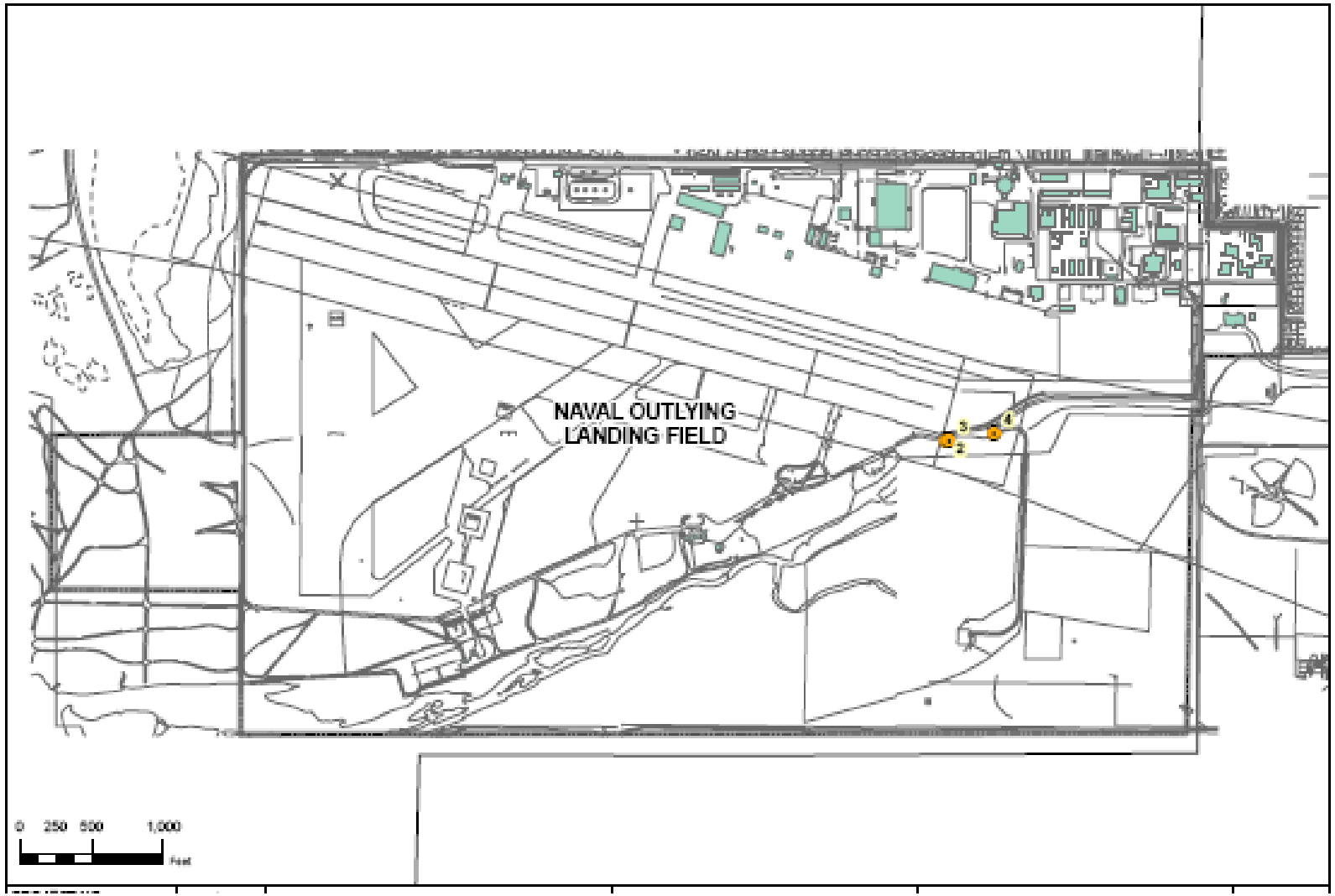


Figure B-4. Industrial Storm Water Discharges at NOLF



TENTATIVE DRAFT

Figure B-5. Steam Condensate Discharges at NASNI

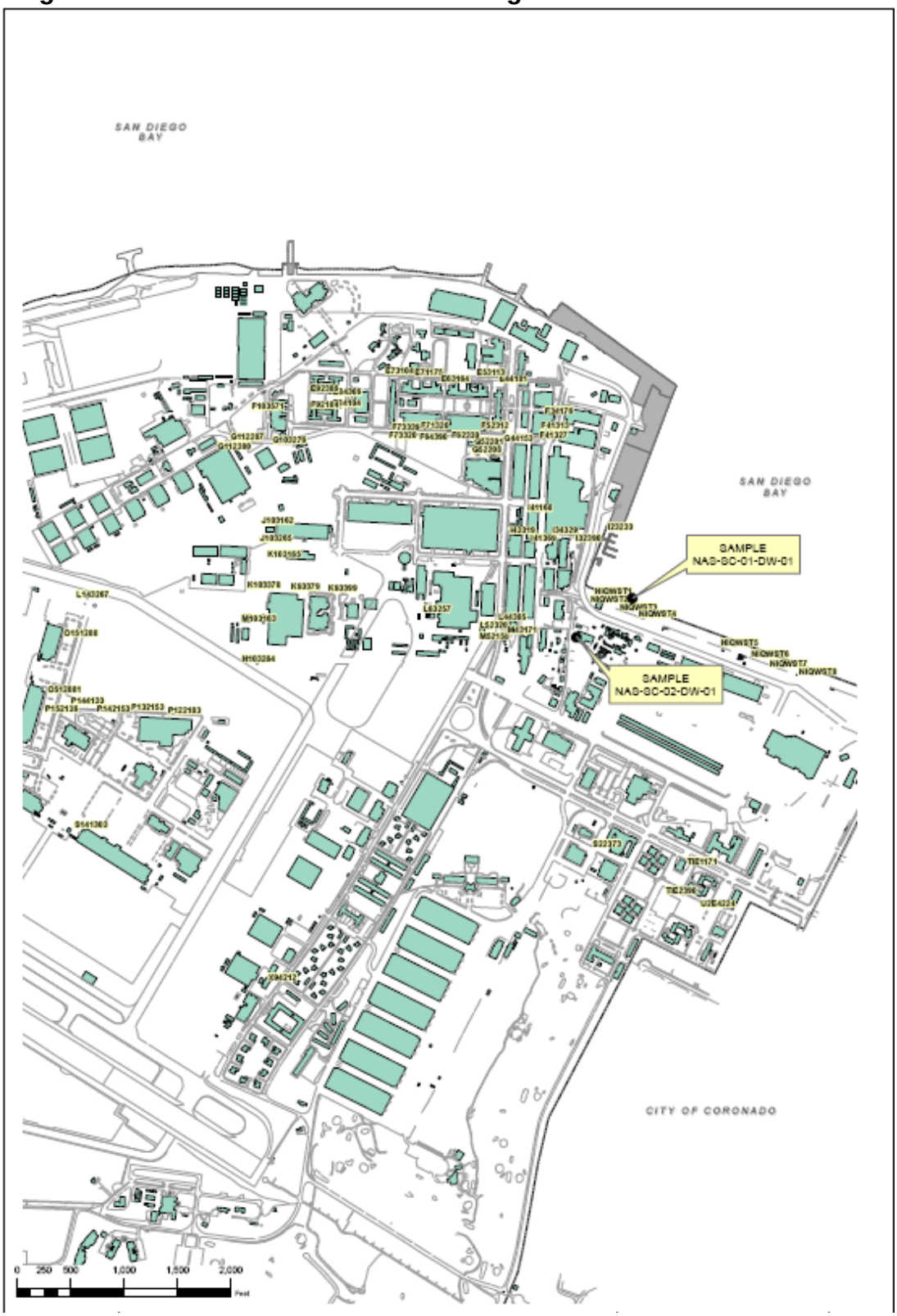
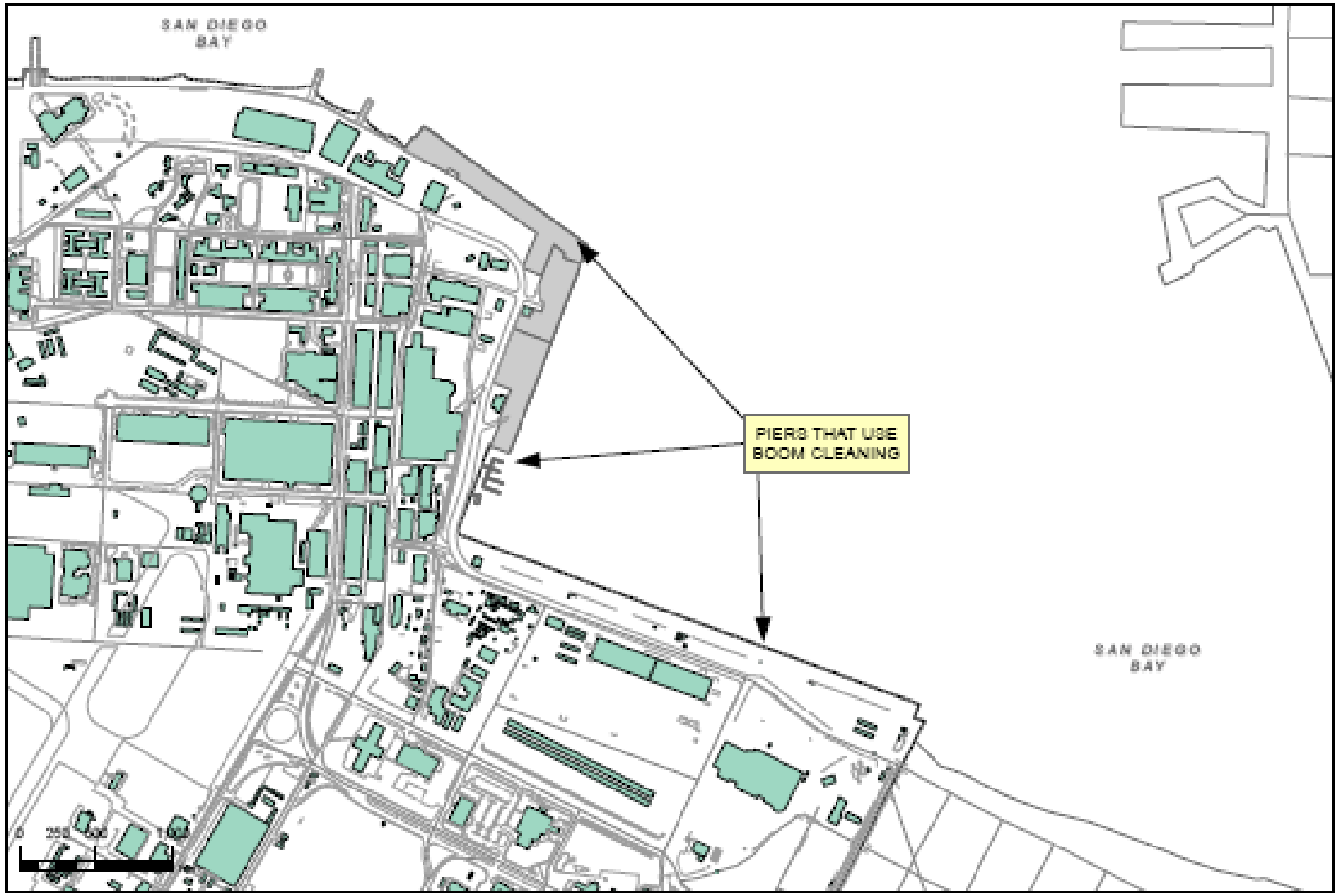


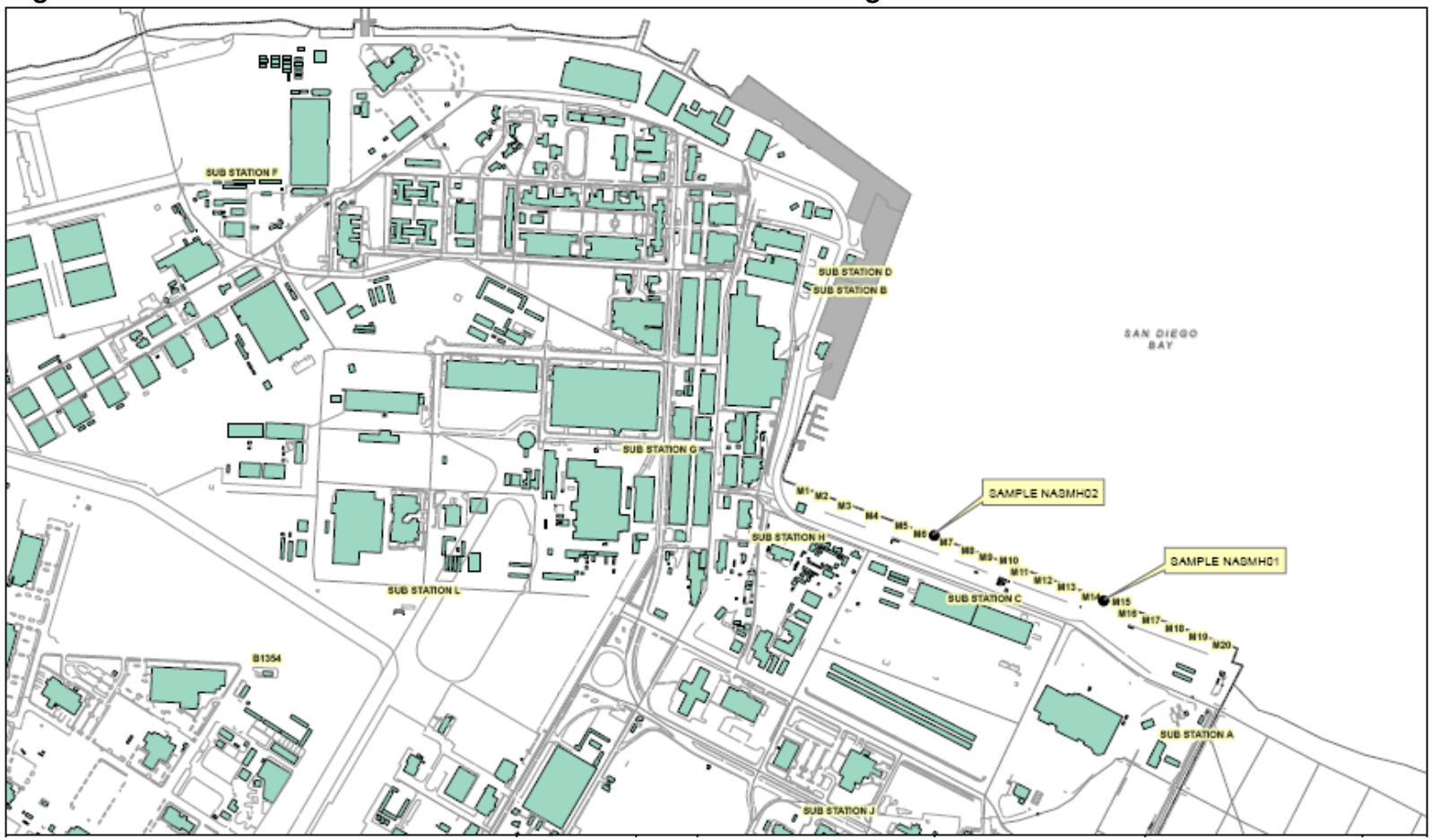
Figure B-6. Diesel Engine Cooling Water Discharges at NASNI

Figure B-7. Pier Boom Cleaning Discharges at NASNI



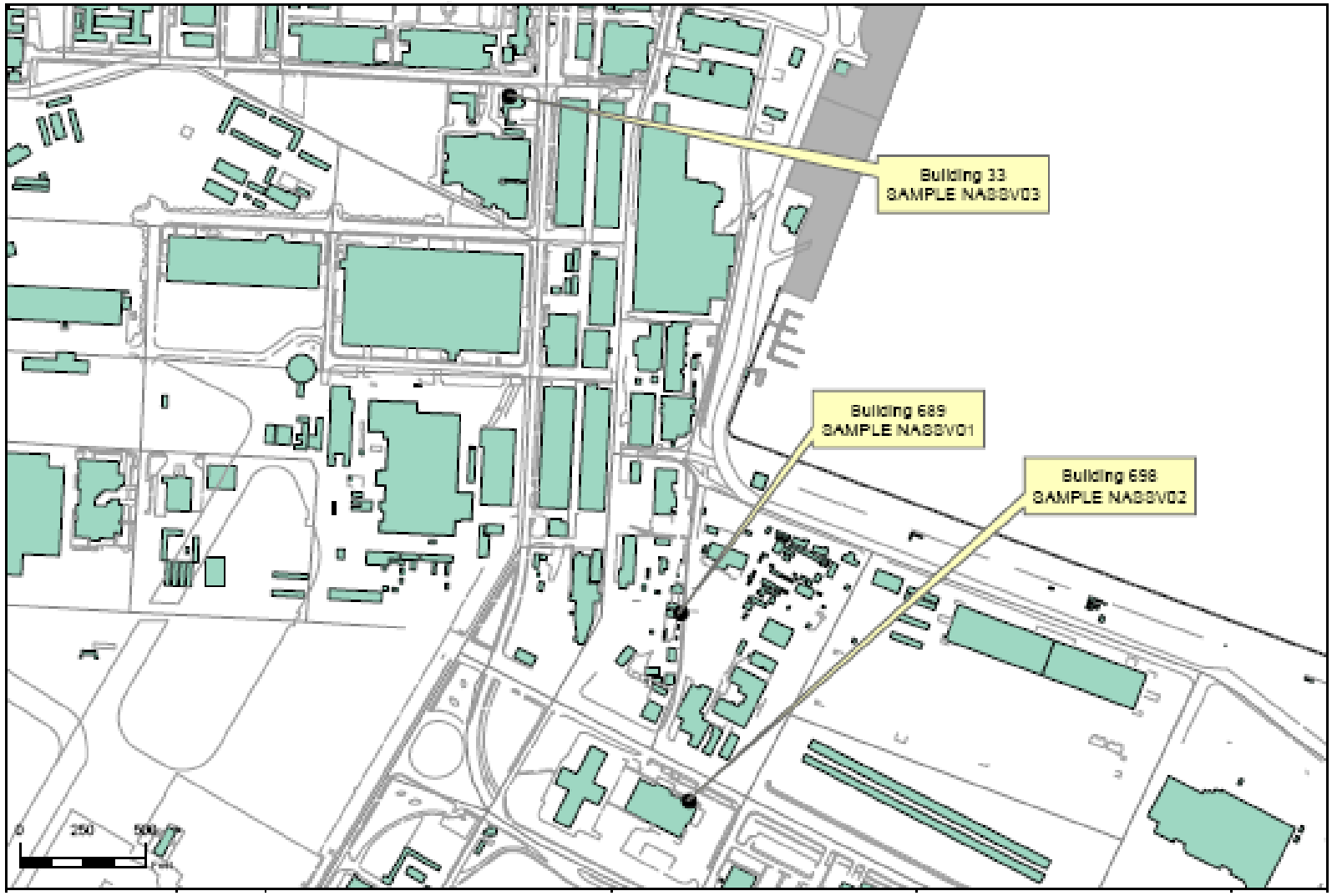
T E N T A T I V E D R A F T

Figure B-8. Electrical Manhole and Sub/Switch Station Discharges at NASNI



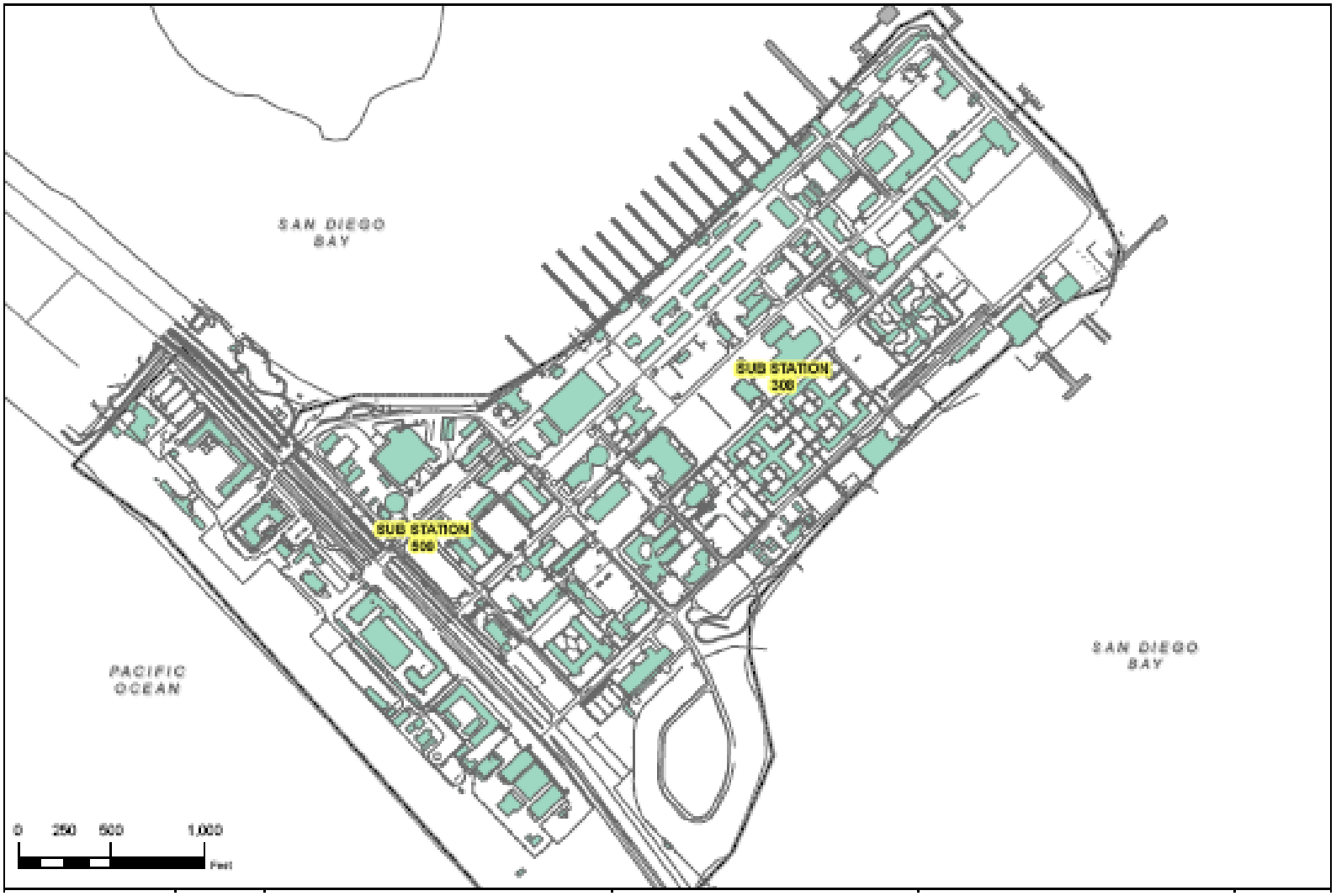
TENTATIVE DRAFT

Figure B-9. Steam Vault Locations at NASNI



TENTATIVE DRAFT

Figure B-10. Electrical Sub/Switch Station Discharges at NAB



T E N T A T I V E

D R A F T

Figure B-11. Electrical Sub/Switch Station Discharge at NRRF

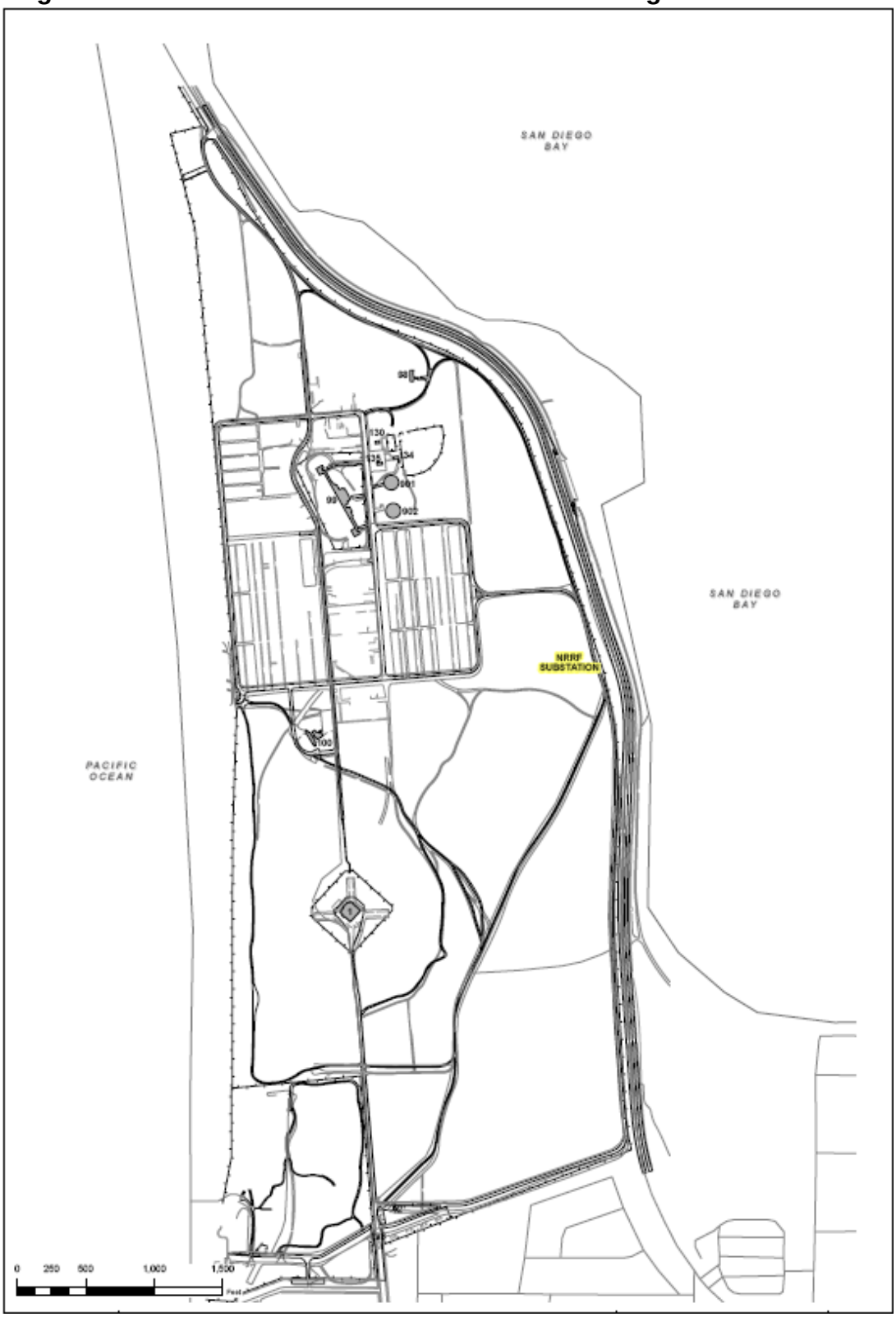
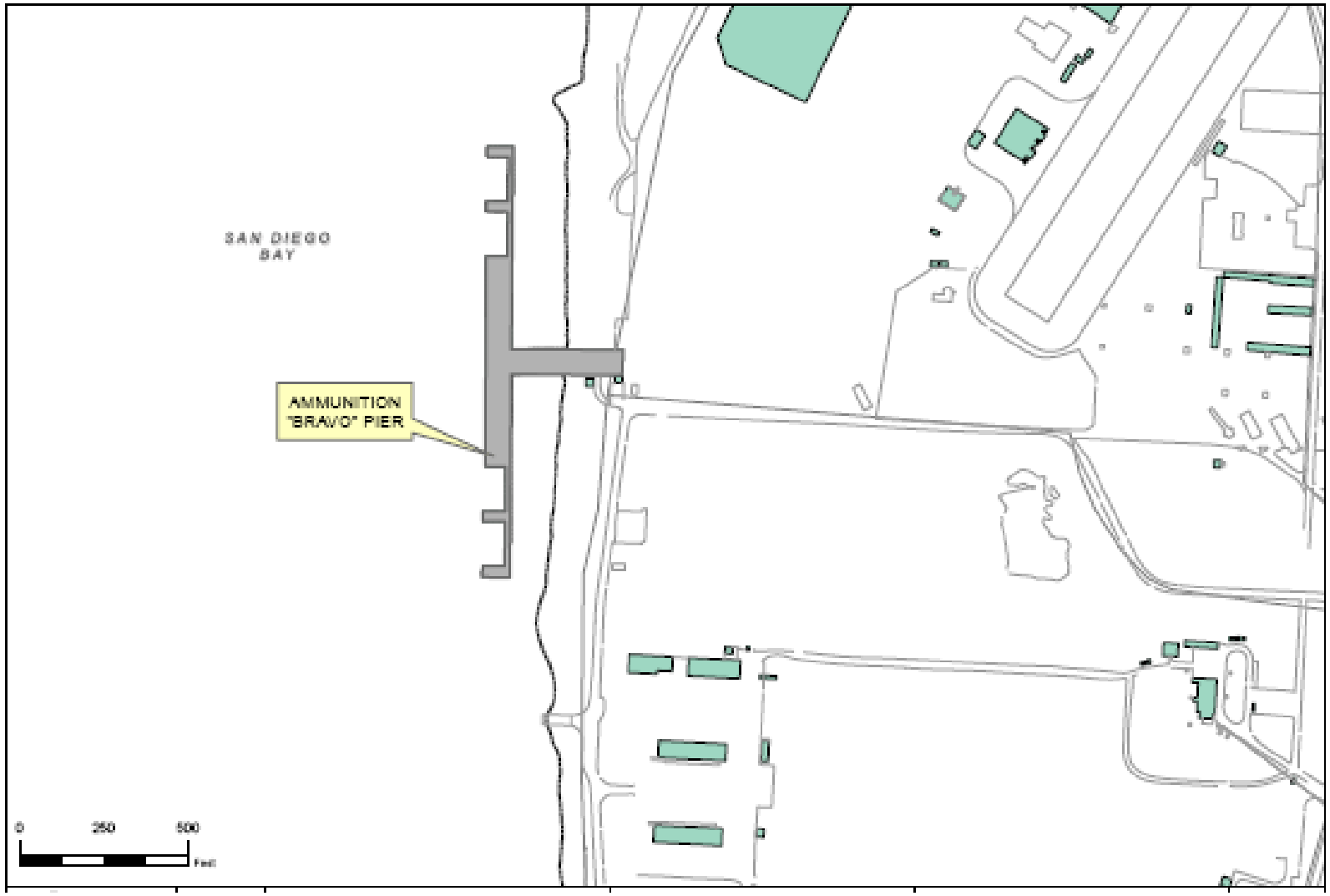
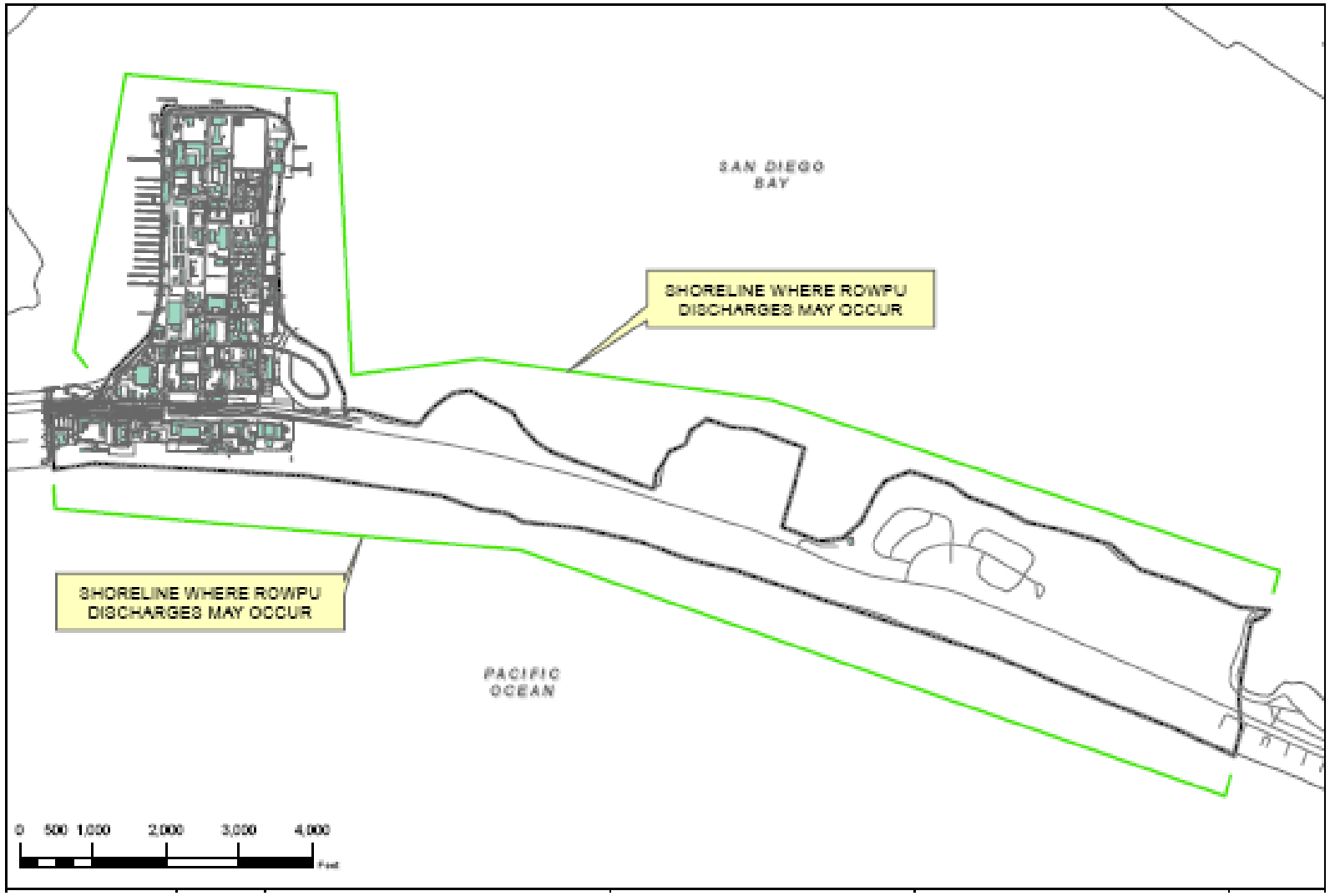


Figure B-12. Pier Cleaning Discharge at NASNI



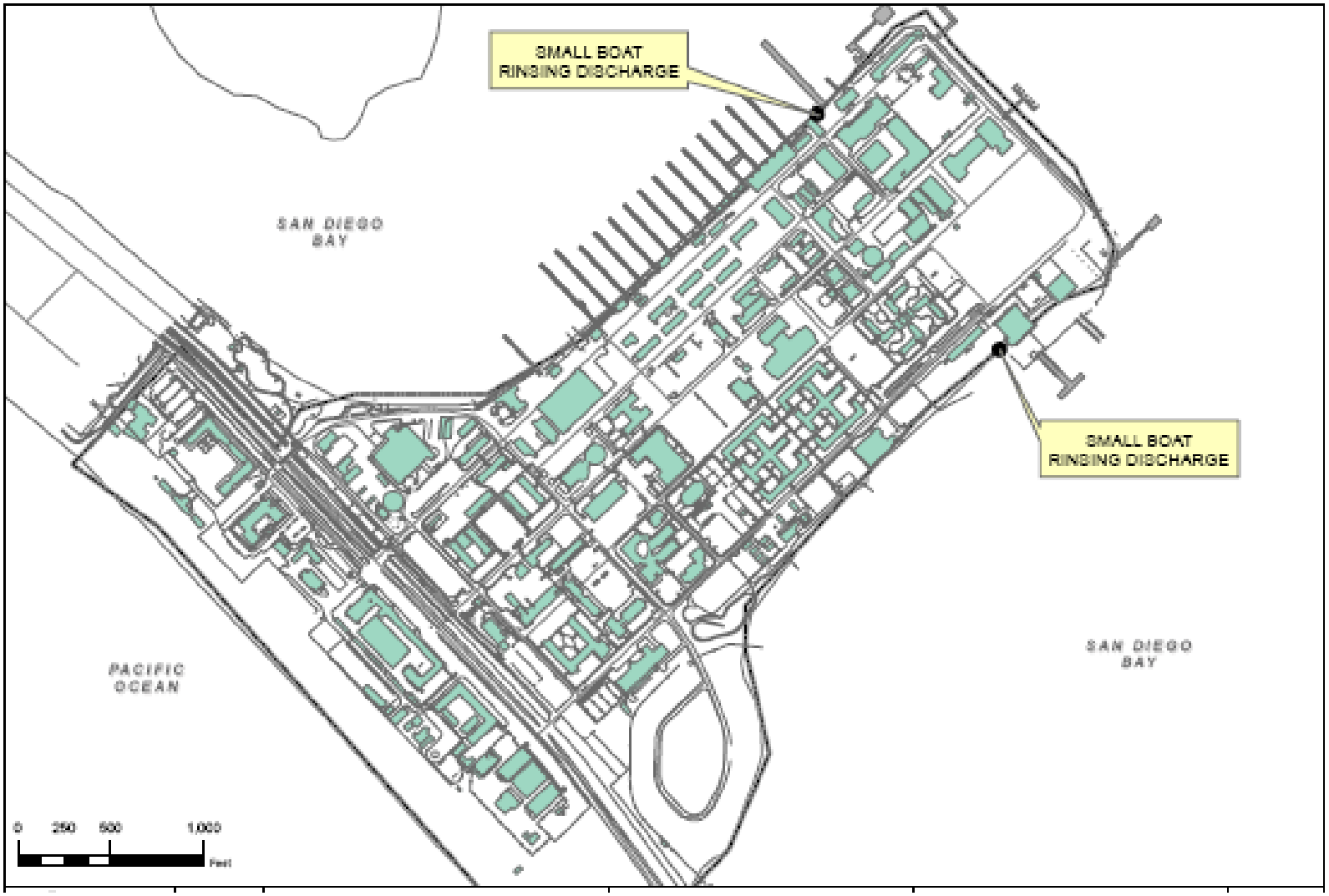
TENTATIVE DRAFT

Figure B-13. ROWPU Product Water Discharges at NAB



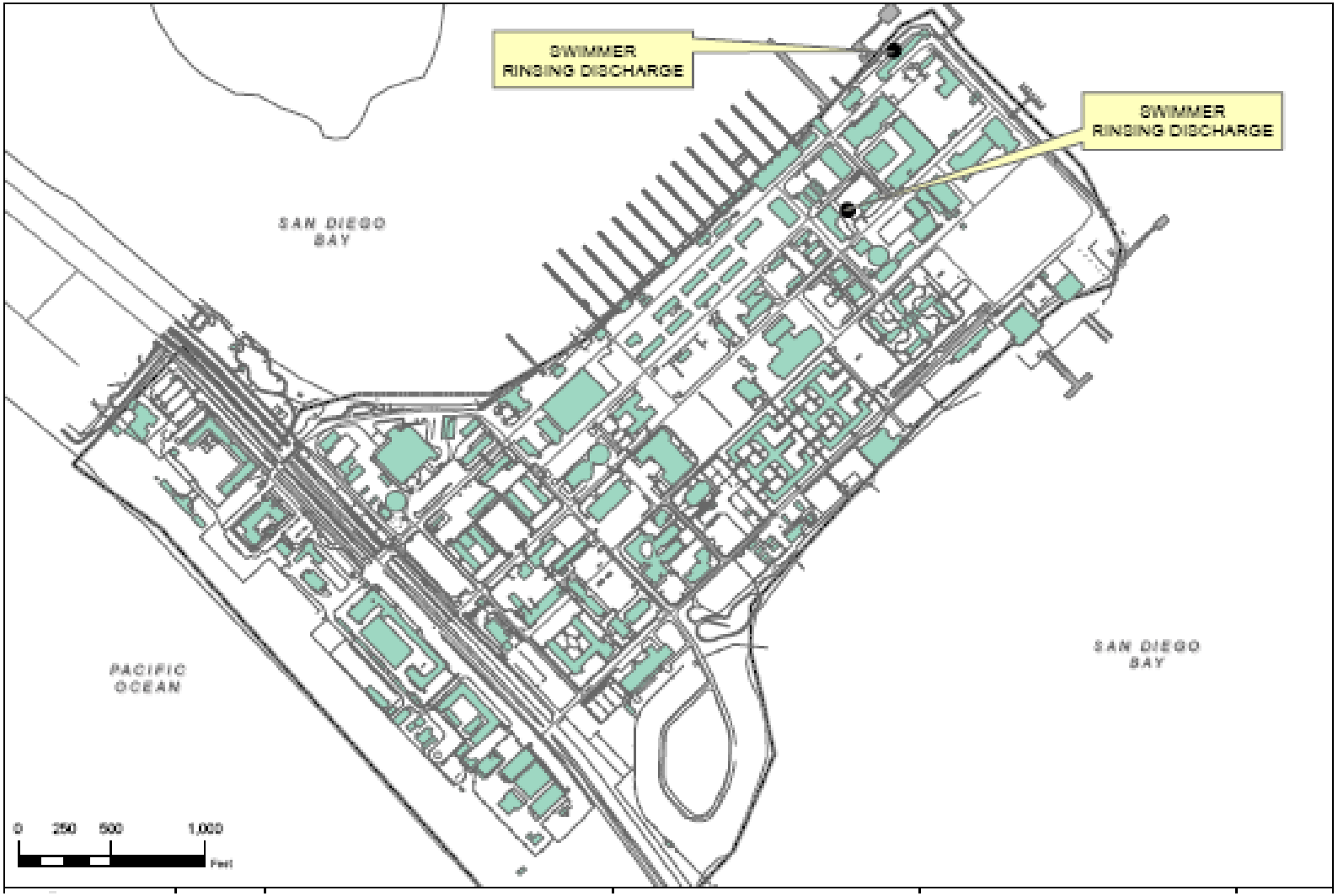
TENTATIVE DRAFT

Figure B-14. Boat Rinsing Discharges at NAB



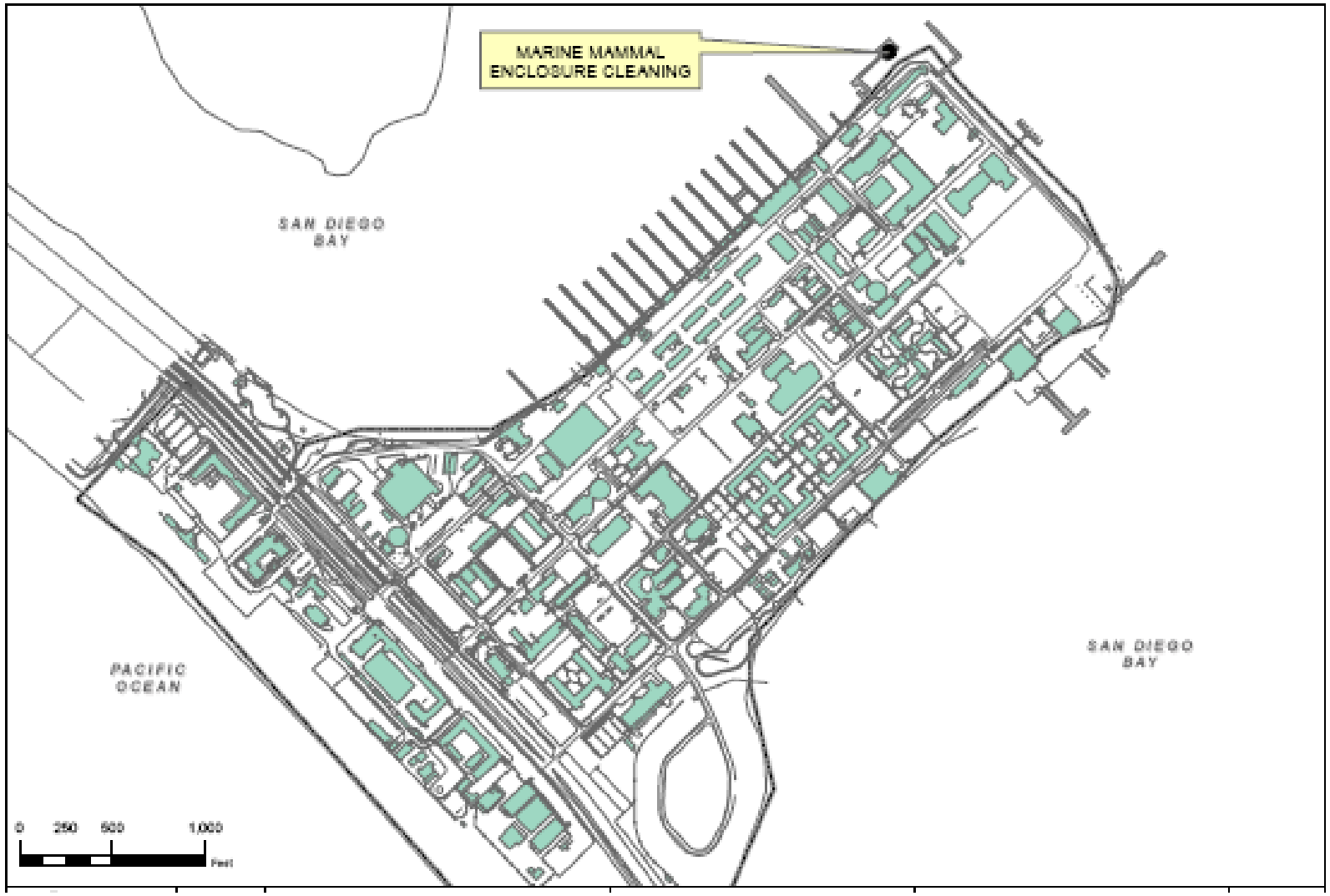
TENTATIVE DRAFT

Figure B-15. Swimmer Rinsing Discharges at NAB



TENTATIVE DRAFT

Figure B-16. Marine Mammal Enclosure Cleaning Discharges at NAB



TENTATIVE DRAFT

ATTACHMENT C – FLOW SCHEMATIC

Figure C-1. Steam Condensate Discharge Line Drawing

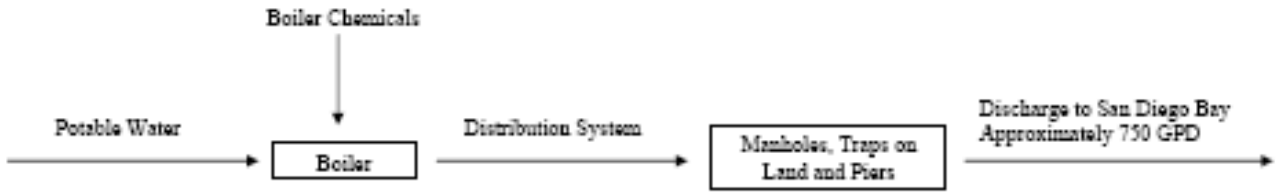


Figure C-2. Diesel Engine Cooling Water Building 812 Line Drawing

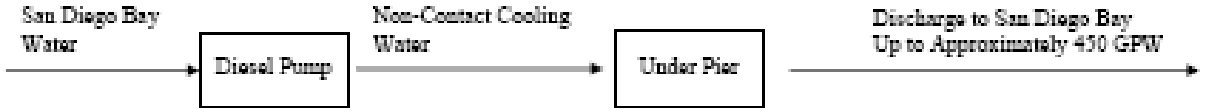


Figure C-3. Diesel Engine Cooling Water Building 1357 Line Drawing

TENTATIVE DRAFT

Figure C-4. Diesel Engine Cooling Water Building 1362 Line Drawing

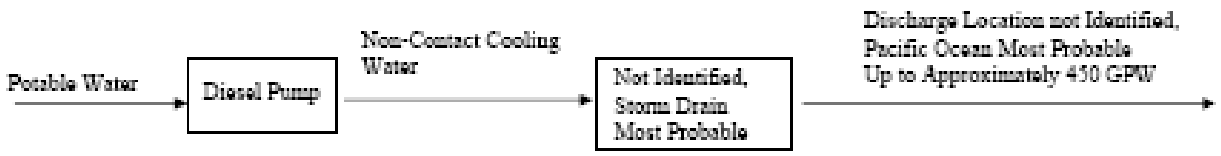
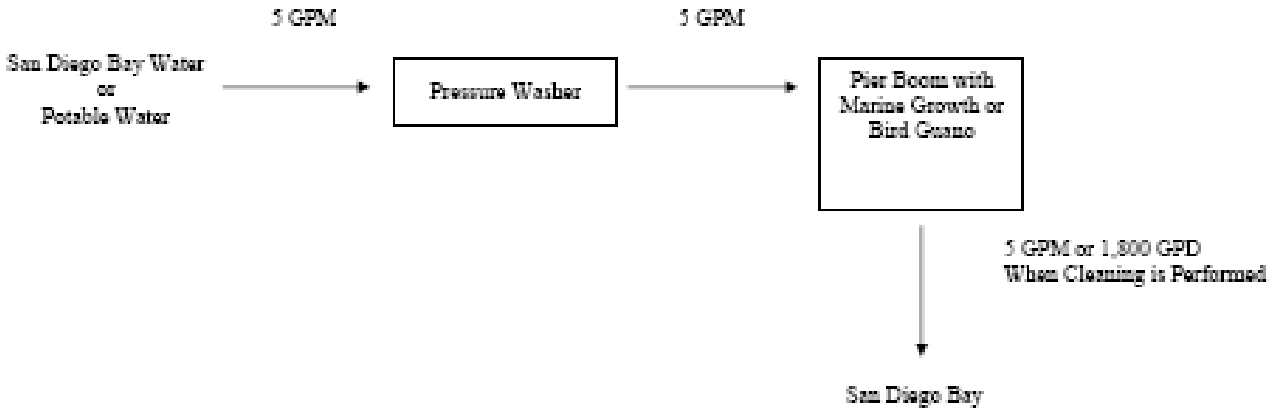


Figure C-5. Diesel Engine Cooling Water Building 1440 Line Drawing

Figure C-6. Pier Boom Cleaning Line Drawing



TENTATIVE DRAFT

Figure C-7. Utility Vault Line Drawing

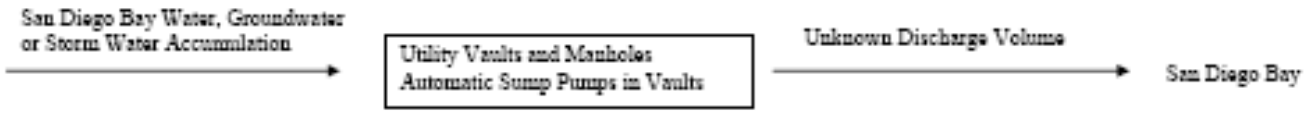


Figure C-8. Pier Cleaning Line Drawing

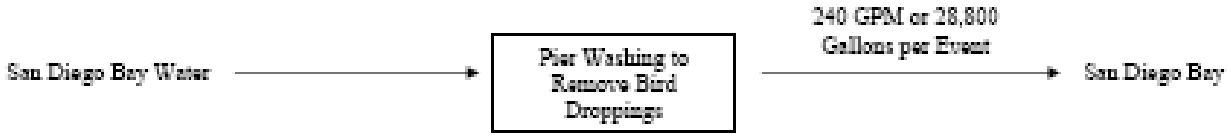
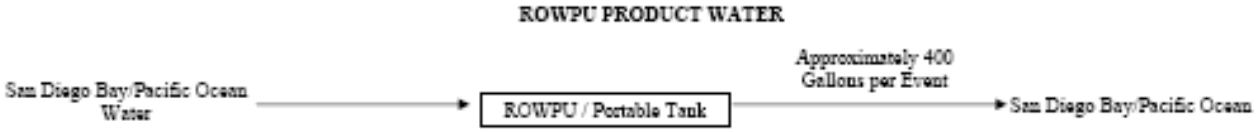


Figure C-9. ROWPU Product Water Line Drawing



TENTATIVE DRAFT

Figure C-10. Boat Rinsing Line Drawing

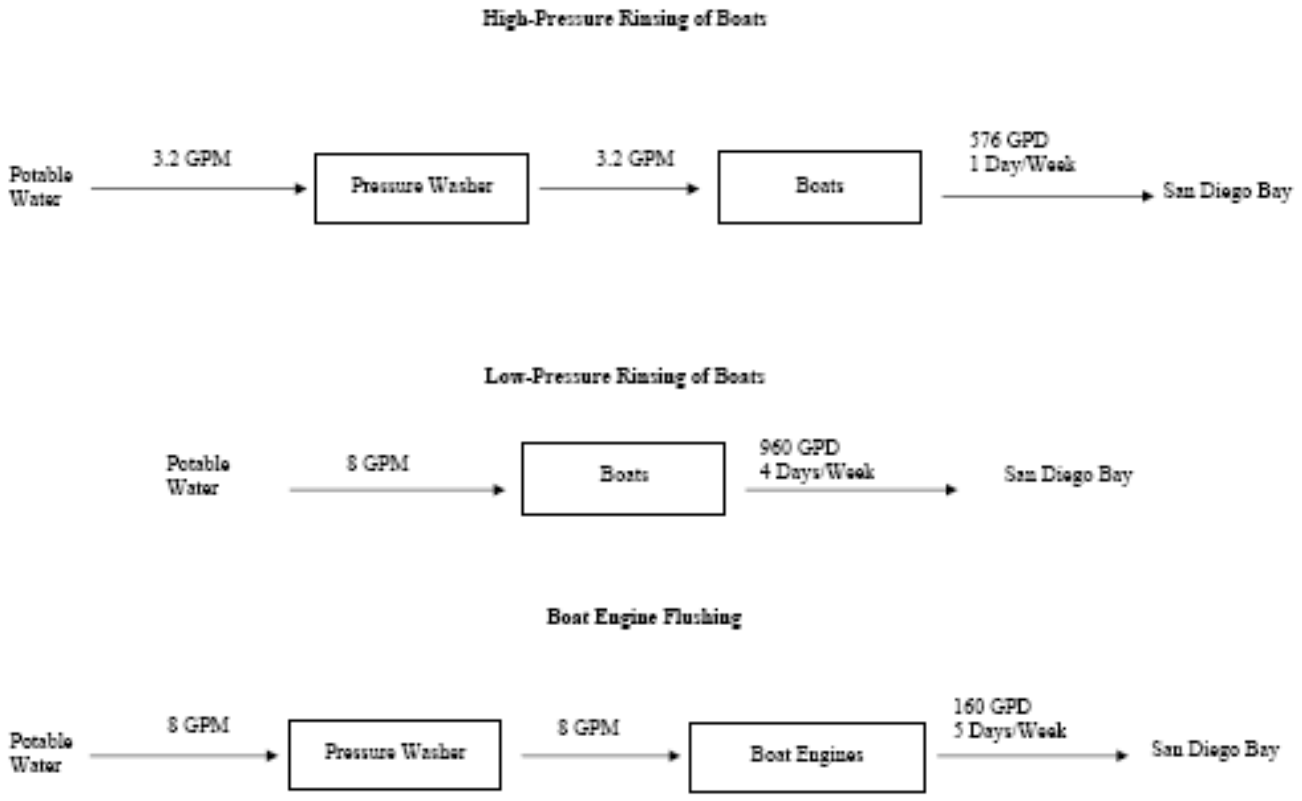
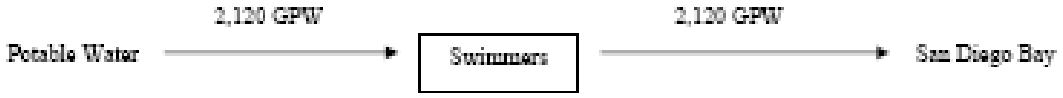
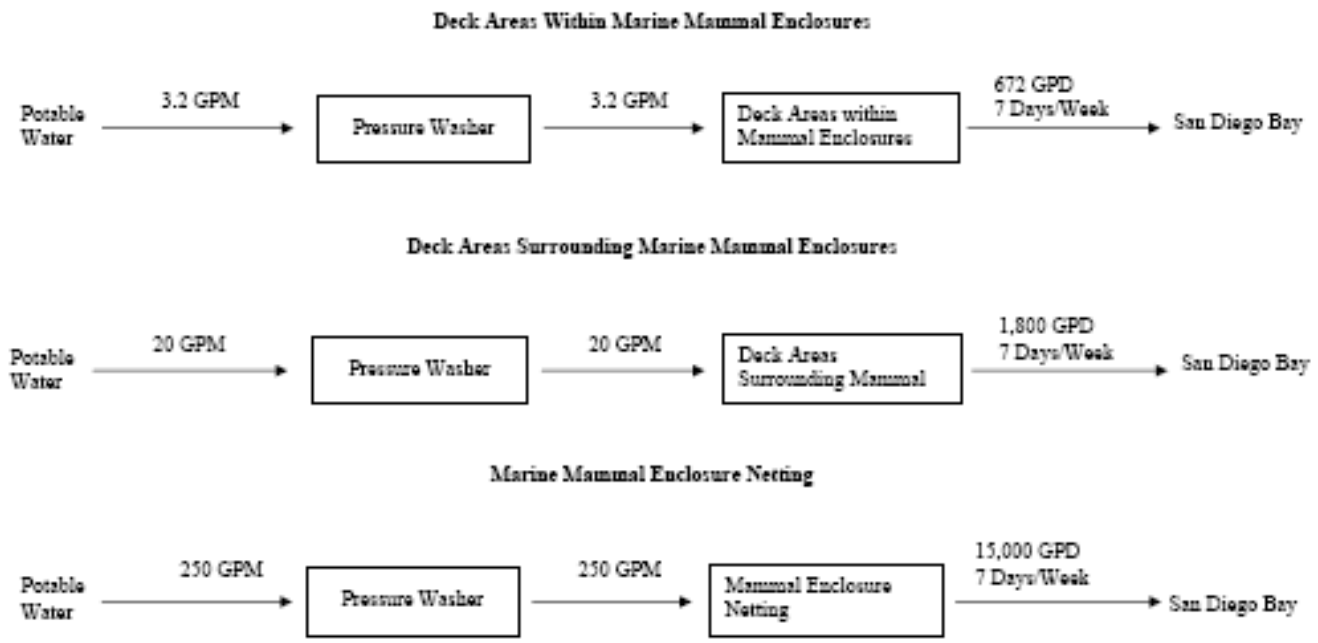


Figure C-11. Swimmer Rinsing Line Drawing



TENTATIVE DRAFT

Figure C-12. Marine Mammal Enclosure Cleaning Line Drawing



TENTATIVE DRAFT

ATTACHMENT D – STANDARD PROVISIONS

I. STANDARD PROVISIONS – PERMIT COMPLIANCE

A. Duty to Comply

1. The Discharger must comply with all of the conditions of this Order. Any noncompliance constitutes a violation of the Clean Water Act (CWA) and the California Water Code 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).)

2. The Discharger shall comply with effluent standards or prohibitions established under section 307(a) of the CWA for 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, even if this Order has not yet been modified to incorporate the requirement. (40 CFR § 122.41(a)(1).)

B. Need to Halt or Reduce Activity Not a Defense

It shall not be a defense for a Discharger 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 Order. (40 CFR § 122.41(c).)

C. Duty to Mitigate

The Discharger shall take all reasonable steps to minimize or prevent any discharge or sludge use or disposal in violation of this Order that has a reasonable likelihood of adversely affecting human health or the environment. (40 CFR § 122.41(d).)

D. Proper Operation and Maintenance

The Discharger 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 Discharger to achieve compliance with the conditions of this Order. Proper operation and maintenance also includes adequate laboratory controls and appropriate quality assurance procedures. This provision requires the operation of backup or auxiliary facilities or similar systems that are installed by a Discharger only when necessary to achieve compliance with the conditions of this Order. (40 CFR § 122.41(e).)

E. Property Rights

1. This Order does not convey any property rights of any sort or any exclusive privileges. (40 CFR § 122.41(g).)

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2. The issuance of this Order 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 § 122.5(c).)

F. Inspection and Entry

The Discharger shall allow the Regional Water Board, State Water Board, United States Environmental Protection Agency (USEPA), and/or their authorized representatives (including an authorized contractor acting as their representative), upon the presentation of credentials and other documents, as may be required by law, to (40 CFR § 122.41(i); Wat. Code, § 13383):

1. Enter upon the Discharger' s premises where a regulated facility or activity is located or conducted, or where records are kept under the conditions of this Order (40 CFR § 122.41(i)(1));

2. Have access to and copy, at reasonable times, any records that must be kept under the conditions of this Order (40 CFR § 122.41(i)(2));

3. Inspect and photograph, at reasonable times, any facilities, equipment (including monitoring and control equipment), practices, or operations regulated or required under this Order (40 CFR § 122.41(i)(3)); and

4. Sample or monitor, at reasonable times, for the purposes of assuring Order compliance or as otherwise authorized by the CWA or the Water Code, any substances or parameters at any location. (40 CFR § 122.41(i)(4).)

G. Bypass

1. Definitions

   a. "Bypass" means the intentional diversion of waste streams from any portion of a treatment facility. (40 CFR § 122.41(m)(1)(i).)

   b. "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 that 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)(1)(ii).)

2. Bypass not exceeding limitations. The Discharger may allow any bypass to occur which does not cause exceedances of effluent limitations, but only if it is for essential maintenance to assure efficient operation. These bypasses are not subject to the provisions listed in Standard Provisions – Permit Compliance I.G.3, I.G.4, and I.G.5 below. (40 CFR § 122.41(m)(2).)

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3. Prohibition of bypass. Bypass is prohibited, and the Regional Water Board may take enforcement action against a Discharger for bypass, unless (40 CFR § 122.41(m)(4)(i)):

a. Bypass was unavoidable to prevent loss of life, personal injury, or severe property damage (40 CFR § 122.41(m)(4)(i)(A));

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 that occurred during normal periods of equipment downtime or preventive maintenance (40 CFR § 122.41(m)(4)(i)(B)); and

c. The Discharger submitted notice to the Regional Water Board as required under Standard Provisions – Permit Compliance I.G.5 below. (40 CFR § 122.41(m)(4)(i)(C).)

4. The Regional Water Board may approve an anticipated bypass, after considering its adverse effects, if the Regional Water Board determines that it will meet the three conditions listed in Standard Provisions – Permit Compliance I.G.3 above. (40 CFR § 122.41(m)(4)(ii).)

5. Notice

a. Anticipated bypass. If the Discharger knows in advance of the need for a bypass, it shall submit a notice, if possible at least 10 days before the date of the bypass. (40 CFR § 122.41(m)(3)(i).)

b. Unanticipated bypass. The Discharger shall submit notice of an unanticipated bypass as required in Standard Provisions - Reporting V.E below (24-hour notice). (40 CFR § 122.41(m)(3)(ii).)

H. Upset

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 Discharger. 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)(1).)

1. 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 Standard Provisions – Permit Compliance I.H.2 below 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)(2).)

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2. Conditions necessary for a demonstration of upset. A Discharger 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)):

   a. An upset occurred and that the Discharger can identify the cause(s) of the upset (40 CFR § 122.41(n)(3)(i));

   b. The permitted facility was, at the time, being properly operated (40 CFR § 122.41(n)(3)(ii));

   c. The Discharger submitted notice of the upset as required in Standard Provisions – Reporting V.E.2.b below (24-hour notice) (40 CFR § 122.41(n)(3)(iii)); and

   d. The Discharger complied with any remedial measures required under Standard Provisions – Permit Compliance I.C above. (40 CFR § 122.41(n)(3)(iv).)

3. Burden of proof. In any enforcement proceeding, the Discharger seeking to establish the occurrence of an upset has the burden of proof. (40 CFR § 122.41(n)(4).)

II. STANDARD PROVISIONS – PERMIT ACTION

A. General

This Order may be modified, revoked and reissued, or terminated for cause. The filing of a request by the Discharger for modification, revocation and reissuance, or termination, or a notification of planned changes or anticipated noncompliance does not stay any Order condition. (40 CFR § 122.41(f).)

B. Duty to Reapply

If the Discharger wishes to continue an activity regulated by this Order after the expiration date of this Order, the Discharger must apply for and obtain a new permit. (40 CFR § 122.41(b).)

C. Transfers

This Order is not transferable to any person except after notice to the Regional Water Board. The Regional Water Board may require modification or revocation and reissuance of the Order to change the name of the Discharger and incorporate such other requirements as may be necessary under the CWA and the Water Code. (40 CFR § 122.41(l)(3); § 122.61.)

III. STANDARD PROVISIONS – MONITORING

A. Samples and measurements taken for the purpose of monitoring shall be representative of the monitored activity. (40 CFR § 122.41(j)(1).)

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B. Monitoring results must be conducted according to test procedures under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503 unless other test procedures have been specified in this Order. (40 CFR § 122.41(j)(4); § 122.44(i)(1)(iv).)

IV. STANDARD PROVISIONS – RECORDS

A. Except for records of monitoring information required by this Order related to the Discharger' s sewage sludge use and disposal activities, which shall be retained for a period of at least five years (or longer as required by Part 503), 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 this Order, and records of all data used to complete the application for this Order, for a period of at least three (3) years from the date of the sample, measurement, report or application. This period may be extended by request of the Regional Water Board Executive Officer at any time. (40 CFR § 122.41(j)(2).)

B. Records of monitoring information shall include:

1. The date, exact place, and time of sampling or measurements (40 CFR § 122.41(j)(3)(i));

2. The individual(s) who performed the sampling or measurements (40 CFR § 122.41(j)(3)(ii));

3. The date(s) analyses were performed (40 CFR § 122.41(j)(3)(iii));

4. The individual(s) who performed the analyses (40 CFR § 122.41(j)(3)(iv));

5. The analytical techniques or methods used (40 CFR § 122.41(j)(3)(v)); and

6. The results of such analyses. (40 CFR § 122.41(j)(3)(vi).)

C. Claims of confidentiality for the following information will be denied (40 CFR § 122.7(b)):

1. The name and address of any permit applicant or Discharger (40 CFR § 122.7(b)(1)); and

2. Permit applications and attachments, permits and effluent data. (40 CFR § 122.7(b)(2).)

V. STANDARD PROVISIONS – REPORTING

A. Duty to Provide Information

The Discharger shall furnish to the Regional Water Board, State Water Board, or USEPA within a reasonable time, any information which the Regional Water Board, State Water Board, or USEPA may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Order or to determine compliance

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with this Order. Upon request, the Discharger shall also furnish to the Regional Water Board, State Water Board, or USEPA copies of records required to be kept by this Order. (40 CFR § 122.41(h); Wat. Code, § 13267.)

B. Signatory and Certification Requirements

1. All applications, reports, or information submitted to the Regional Water Board, State Water Board, and/or USEPA shall be signed and certified in accordance with Standard Provisions – Reporting V.B.2, V.B.3, V.B.4, and V.B.5 below. (40 CFR § 122.41(k).)

2. All permit applications shall be signed by either a principal executive officer or ranking elected official. For purposes of this provision, 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 USEPA). (40 CFR §122.22(a)(3).).

3. All reports required by this Order and other information requested by the Regional Water Board, State Water Board, or USEPA shall be signed by a person described in Standard Provisions – Reporting V.B.2 above, or by a duly authorized representative of that person. A person is a duly authorized representative only if:

a. The authorization is made in writing by a person described in Standard Provisions – Reporting V.B.2 above (40 CFR § 122.22(b)(1));

b. 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.) (40 CFR § 122.22(b)(2)); and

c. The written authorization is submitted to the Regional Water Board and State Water Board. (40 CFR § 122.22(b)(3).)

4. If an authorization under Standard Provisions – Reporting V.B.3 above 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 Standard Provisions – Reporting V.B.3 above must be submitted to the Regional Water Board and State Water Board prior to or together with any reports, information, or applications, to be signed by an authorized representative. (40 CFR § 122.22(c).)

5. Any person signing a document under Standard Provisions – Reporting V.B.2 or V.B.3 above 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

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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." (40 CFR § 122.22(d).)

C. Monitoring Reports

1. Monitoring results shall be reported at the intervals specified in the Monitoring and Reporting Program (Attachment E) in this Order. (40 CFR § 122.22(l)(4).)

2. Monitoring results must be reported on a Discharge Monitoring Report (DMR) form or forms provided or specified by the Regional Water Board or State Water Board for reporting results of monitoring of sludge use or disposal practices. (40 CFR § 122.41(l)(4)(i).)

3. If the Discharger monitors any pollutant more frequently than required by this Order using test procedures approved under Part 136 or, in the case of sludge use or disposal, approved under Part 136 unless otherwise specified in Part 503, or as specified in this Order, 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 Regional Water Board. (40 CFR § 122.41(l)(4)(ii).)

4. Calculations for all limitations, which require averaging of measurements, shall utilize an arithmetic mean unless otherwise specified in this Order. (40 CFR § 122.41(l)(4)(iii).)

D. Compliance Schedules

Reports of compliance or noncompliance with, or any progress reports on, interim and final requirements contained in any compliance schedule of this Order, shall be submitted no later than 14 days following each schedule date. (40 CFR § 122.41(l)(5).)

E. Twenty-Four Hour Reporting

1. The Discharger shall report any noncompliance that may endanger health or the environment. Any information shall be provided orally within 24 hours from the time the Discharger becomes aware of the circumstances. A written submission shall also be provided within five (5) days of the time the Discharger 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)(i).)

2. The following shall be included as information that must be reported within 24 hours under this paragraph (40 CFR § 122.41(l)(6)(ii)):

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a. Any unanticipated bypass that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(A).)

b. Any upset that exceeds any effluent limitation in this Order. (40 CFR § 122.41(l)(6)(ii)(B).)

3. The Regional Water Board may waive the above-required written report under this provision on a case-by-case basis if an oral report has been received within 24 hours. (40 CFR § 122.41(l)(6)(iii).)

F. Planned Changes

The Discharger shall give notice to the Regional Water Board as soon as possible of any planned physical alterations or additions to the permitted facility. Notice is required under this provision only when (40 CFR § 122.41(l)(1)):

1. The alteration or addition to a permitted facility may meet one of the criteria for determining whether a facility is a new source in section 122.29(b) (40 CFR § 122.41(l)(1)(i)); or

2. The alteration or addition could significantly change the nature or increase the quantity of pollutants discharged. This notification applies to pollutants that are not subject to effluent limitations in this Order. (40 CFR § 122.41(l)(1)(ii).)

3. The alteration or addition results in a significant change in the Discharger'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)(1)(iii).)

G. Anticipated Noncompliance

The Discharger shall give advance notice to the Regional Water Board or State Water Board of any planned changes in the permitted facility or activity that may result in noncompliance with General Order requirements. (40 CFR § 122.41(l)(2).)

H. Other Noncompliance

The Discharger shall report all instances of noncompliance not reported under Standard Provisions – Reporting V.C, V.D, and V.E above at the time monitoring reports are submitted. The reports shall contain the information listed in Standard Provision – Reporting V.E above. (40 CFR § 122.41(l)(7).)

I. Other Information

When the Discharger 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

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report to the Regional Water Board, State Water Board, or USEPA, the Discharger shall promptly submit such facts or information. (40 CFR § 122.41(l)(8).)

VI. STANDARD PROVISIONS – ENFORCEMENT

A. The Regional Water Board is authorized to enforce the terms of this permit under several provisions of the Water Code, including, but not limited to, sections 13385, 13386, and 13387

VII. ADDITIONAL PROVISIONS – NOTIFICATION LEVELS

A. Non-Municipal Facilities

Existing manufacturing, commercial, mining, and silvicultural Dischargers shall notify the Regional Water Board as soon as they know or have reason to believe (40 CFR § 122.42(a)):

1. That any activity has occurred or will occur that would result in the discharge, on a routine or frequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following "notification levels" (40 CFR § 122.42(a)(1)):

a. 100 micrograms per liter (µg/L) (40 CFR § 122.42(a)(1)(i));

b. 200 µg/L for acrolein and acrylonitrile; 500 µg/L for 2,4-dinitrophenol and 2-methyl-4,6-dinitrophenol; and 1 milligram per liter (mg/L) for antimony (40 CFR § 122.42(a)(1)(ii));

c. Five (5) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR § 122.42(a)(1)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 CFR § 122.42(a)(1)(iv).)

2. That any activity has occurred or will occur that would result in the discharge, on a non-routine or infrequent basis, of any toxic pollutant that is not limited in this Order, if that discharge will exceed the highest of the following “notification levels" (40 CFR § 122.42(a)(2)):

a. 500 micrograms per liter (µg/L) (40 CFR § 122.42(a)(2)(i));

b. 1 milligram per liter (mg/L) for antimony (40 CFR § 122.42(a)(2)(ii));

c. Ten (10) times the maximum concentration value reported for that pollutant in the Report of Waste Discharge (40 CFR § 122.42(a)(2)(iii)); or

d. The level established by the Regional Water Board in accordance with section 122.44(f). (40 CFR § 122.42(a)(2)(iv).)

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM

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ATTACHMENT E – MONITORING AND REPORTING PROGRAM (MRP)

The Code of Federal Regulations section 122.48 requires that all NPDES permits specify monitoring and reporting requirements. Water Code sections 13267 and 13383 also authorize the Regional Water Quality Control Board (Regional Water Board) to require technical and monitoring reports. This MRP establishes monitoring and reporting requirements, which implement the federal and California regulations.

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I. GENERAL MONITORING PROVISIONS

A. Samples and measurements taken as required herein shall be representative of the volume and nature of the monitored discharge. All samples shall be taken at the monitoring locations specified below and, unless otherwise specified, before the monitoring flow joins or is diluted by any other waste stream, body of water, or substance. Monitoring locations shall not be changed without notification to and the approval of this Regional Water Board.

B. Monitoring must be conducted according to USEPA test procedures approved at 40 CFR 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act as amended, unless other test procedures are specified in this Order and/or this MRP and/or this Regional Water Board

C. A copy of the monitoring and reports signed, and certified as required by Attachment D, Standard Provisions V.B, of this Order, shall be submitted to the Regional Water Board at the address listed in section X.B.7.c this MRP.

D. 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 this Order and this MRP, and records of all data used to complete the application for this Order. Records shall be maintained for a minimum of five years from the date of sample, measurement, report, or application. This period may be extended by request of this Regional Water Board or by the USEPA at any time.

E. All analyses shall be performed in a laboratory certified to perform such analyses by the California Department of Health Services or by a laboratory approved by the Regional Water Board.

F. The Discharger shall report in its cover letter all instances of noncompliance not reported under Attachment D, section V.H of this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Attachment D, section V.E of this Order.

G. 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 to ensure continued accuracy of the devices.

H. Monitoring results shall be reported at intervals and in a manner specified in this Order or in this Monitoring and Reporting Program.

I. This Monitoring and Reporting Program may be modified by this Regional Water Board as appropriate.

J. This Order may be modified by the Regional Board and EPA to enable the discharger to participate in comprehensive regional monitoring activities conducted in the Regional Harbor Monitoring Program. Minor changes may be made without further public notice.

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II. MONITORING LOCATIONS

The Discharger shall establish the following monitoring locations to demonstrate compliance with the effluent limitations, discharge specifications, and other requirements in this Order:

Table E-1. Monitoring Station Locations

Discharge Location No.	Monitoring Location Name	Monitoring Location Description
SC-001 through SC-066	SC-001 through SC-066	A location where a representative sample of the steam condensate discharge can be obtained.
CW-001 through CW-004	CW-001 through CW-004	A location where a representative sample of the diesel engine cooling water discharge can be obtained.
BW-001	BW-001	A location where a representative sample of the pier boom cleaning discharge can be obtained.
UV-001 through UV-036	UV-001 through UV-036	A location where a representative sample of the utility vault and manhole dewatering discharge can be obtained.
PW-001	PW-001	A location where a representative sample of the pier washing discharge can be obtained.
RO-001	RO-001	A location where a representative sample of the Reverse Osmosis Water Purification Unit (ROWPU) product water discharge can be obtained.
BR-001 and BR-002	BR-001 and BR-002	A location where a representative sample of the boat rinsing discharge can be obtained.
SR-001 and SR-002	SR-001 and SR-002	A location where a representative sample of the swimmer rinsing discharge can be obtained.
ME-001	ME-001	A location where a representative sample of the marine mammal enclosure cleaning discharge can be obtained.
MISC-001	MISC-001	A location where a representative sample of the fire suppression sprinkler system flushing discharge can be obtained.
MISC-002	MISC-002	A location where a representative sample of the emergency eye wash/shower maintenance discharge can be obtained.
MISC-003	MISC-003	A location where a representative sample of the air conditioner condensate discharge can be obtained.
MISC-004	MISC-004	A location where a representative sample of the landscape water discharge can be obtained.

Discharge Location No.	Monitoring Location Name	Monitoring Location Description
NAS-001 through NAS-058 Except NAS-038	NAS-001 through NAS-058 Except NAS-038	A location where a representative sample of the industrial storm water discharge from NASNI can be obtained.
NAB-001 through NAB-052 Except NAB-024	NAB-001 through NAB-052 Except NAB-024	A location where a representative sample of the industrial storm water discharge from NAB can be obtained.
NOLF-001 through NOLF-~~003~~004	NOLF-001 through NOLF-~~003~~004	A location where a representative sample of the industrial storm water discharge from NOLF can be obtained.
--	RSW-001	A location where a representative sample of the San Diego Bay can be obtained, outside the influence of ALL Facility discharges.
--	RSW-002	A location where a representative sample of the Pacific Ocean can be obtained, outside the influence of ALL Facility discharges.

III. INFLUENT MONITORING REQUIREMENTS

[Not Applicable]

IV. EFFLUENT MONITORING REQUIREMENTS

A. Monitoring Locations SC-001 through SC-066

1. The Discharger shall monitor discharges of steam condensate at a minimum of three representative monitoring locations from Monitoring Location Nos. SC-001 through SC-066 as follows:

Table E-2. Effluent Monitoring for Steam Condensate

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Month	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Total Suspended Solids	mg/L	Grab	1/Quarter	[1]
Priority Pollutants				
Bis (2-ethylhexyl) Phthalate	µg/L	Grab	1/Month	[1]
Copper, Total Recoverable	µg/L	Grab	1/Month	[1,2]
Lead, Total Recoverable	µg/L	Grab	1/Month	[1]
TCDD-Equivalents[3]	µg/L	Grab	1/Month	[1]
Remaining CTR Priority Pollutants	µg/L	Grab	~~1~~1 in Year One 1 in Year Five	[1]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Temperature	°F	Grab	1/Quarter	[1]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.

[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a list of the chemicals added to the steam boiler.

B. Monitoring Locations CW-001 through CW-004

1. The Discharger shall monitor discharges of diesel engine cooling water at Monitoring Location Nos. CW-001 through CW-004 as follows:

Table E-3. Effluent Monitoring for Diesel Engine Cooling Water

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Total Suspended Solids	mg/L	Grab	1/Month	[1]
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Month	[1]
Cadmium, Total Recoverable	µg/L	Grab	1/Month	[1]
Chromium, Total Recoverable	µg/L	Grab	1/Month	[1]
Copper, Total Recoverable	µg/L	Grab	1/Month	[1,2]
DDT[3]	µg/L	Grab	1/Month	[1]
Lead, Total Recoverable	µg/L	Grab	1/Month	[1]
Mercury, Total Recoverable	µg/L	Grab	1/Month	[1]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Nickel, Total Recoverable	µg/L	Grab	1/Month	[1]
TCDD-Equivalents[4]	µg/L	Grab	1/Month	[1]
Zinc, Total Recoverable	µg/L	Grab	1/Month	[1]
Remaining Priority Pollutants	µg/L	Grab	1/Year	[1]
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	µg/L	Grab	1/Year	[1]
Chlorine, Total Residual	µg/L	Grab	1/Year	[1]
Chlorinated Phenolics	µg/L	Grab	1/Year	[1]
Phenolic Compounds	µg/L	Grab	1/Year	[1]
Salinity	ppt	Grab	1/Month	[1]
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Temperature	°F	Grab	1/Quarter	[1]
Total Petroleum Hydrocarbons (Diesel Range)	mg/L	Grab	1/Month	[1]
Tributyltin	µg/L	Grab	1/Year	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
[3] DDT shall include 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.
[4] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Semi-annually, the Discharger shall submit a log of the diesel engine cooling water discharges describing the duration, volume, flow rate, date, and a summary of visual observations of the discharges.

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C. Monitoring Location BW-001

1. The Discharger shall monitor the discharge from pier boom cleaning at Monitoring Location No. BW-001 as follows:

Table E-4. Effluent Monitoring for Pier Boom Cleaning

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Priority Pollutants				
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	[1]
Benzo (k) Fluoranthene	µg/L	Grab	1/Quarter	[1]
Chrysene	µg/L	Grab	1/Quarter	[1]
Copper, Total Recoverable	µg/L	Grab	1/Quarter	[1,2]
TCDD-Equivalents[3]	µg/L	Grab	1/Quarter	[1]
Remaining CTR Priority Pollutants	µg/L	Grab	1in Year One 1 in Year Five	[1]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.

[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the pier boom cleaning discharges describing the duration, volume, flow rate, date, and a summary of visual observations of the discharges.

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D. Monitoring Locations UV-001 through UV-036

1. The Discharger shall monitor the discharge from utility vault and manhole dewatering at a minimum of three representative monitoring locations, including at least one electrical vault discharge, manhole discharge, and steam vault discharge, from Monitoring Location Nos. UV-001 through UV-036 as follows:

Table E-5. Effluent Monitoring for Utility Vault and Manhole Dewatering

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Total Suspended Solids	mg/L	Grab	1/Quarter	[1]
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Benzo (a) Anthracene	µg/L	Grab	1/Quarter	[1]
Benzo (a) Pyrene	µg/L	Grab	1/Quarter	[1]
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	[1]
Benzo (k) Fluoranthene	µg/L	Grab	1/Quarter	[1]
Chrysene	µg/L	Grab	1/Quarter	[1]
Copper, Total Recoverable	µg/L	Grab	1/Quarter	[1,2]
Dibenzo (a,h) Anthracene	µg/L	Grab	1/Quarter	[1]
Indeno (1,2,3-cd) Pyrene	µg/L	Grab	1/Quarter	[1]
Lead, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Silver, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	[1]
TCDD-Equivalents[3]	µg/L	Grab	1/Year	[1]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Remaining Priority Pollutants	µg/L	Grab	1/Year	[1]
Non-Conventional Pollutants				
Electrical Conductivity	µmhos/cm	Grab	1/Quarter	[1]
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Total Petroleum Hydrocarbons	mg/L	Grab	1/Quarter	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the utility vault and manhole dewatering discharges describing the volume, flow rate, location of the discharge, date, and receiving water body.

E. Monitoring Location PW-001

1. The Discharger shall monitor the discharge from pier washing at Monitoring Location No. PW-001 as follows:

Table E-6. Effluent Monitoring for Pier Washing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	
Priority Pollutants				
Arsenic, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Copper, Total Recoverable	µg/L	Grab	1/Quarter	[1,2]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	[1]
TCDD-Equivalents[3]	µg/L	Grab	1/Year	[1]
Remaining Priority Pollutants	µg/L	Grab	1/Year	[1]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the pier washing discharges describing the duration, personnel in charge of cleaning, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

F. Monitoring Location RO-001

1. The Discharger shall monitor the discharge of ROWPU product water at Monitoring Location No. RO-001 as follows:

Table E-7. Effluent Monitoring for ROWPU Product Water

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Priority Pollutants				

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
TCDD-Equivalents[2]	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	[1,3]
Non-Conventional Pollutants				
Ammonia Nitrogen, Total (as N)	µg/L	Grab	1/Year	[1]
Chlorine, Total Residual	µg/L	Grab	1/Year	[1]
Chlorinated Phenolics	µg/L	Grab	1/Year	[1]
Phenolic Compounds	µg/L	Grab	1/Year	[1]
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Tributyltin	µg/L	Grab	1/Year	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
[3] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

2. Annually, the Discharger shall submit a log of the ROWPU product water discharges describing the duration, the date, the quantity of product water generated, and a summary of the visual observations of the discharges.

G. Monitoring Locations BR-001 and BR-002

1. The Discharger shall monitor the discharge from boat rinsing at Monitoring Location Nos. BR-001 and BR-002 as follows:

Table E-8. Effluent Monitoring for Boat Rinsing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Priority Pollutants				
Benzo (a) Anthracene	µg/L	Grab	1/Quarter	[1]
Benzo (a) Pyrene	µg/L	Grab	1/Quarter	[1]
Benzo (b) Fluoranthene	µg/L	Grab	1/Quarter	[1]
Bis (2-ethylhexyl) Phthalate	µg/L	Grab	1/Quarter	[1]
Chrysene	µg/L	Grab	1/Quarter	[1]
Copper, Total Recoverable	µg/L	Grab	1/Quarter	[1,2]
Dibenzo (a,h) Anthracene	µg/L	Grab	1/Quarter	[1]
Indeno (1,2,3-cd) Pyrene	µg/L	Grab	1/Quarter	[1]
Lead, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Mercury, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Nickel, Total Recoverable	µg/L	Grab	1/Quarter	[1]
Zinc, Total Recoverable	µg/L	Grab	1/Quarter	[1]
TCDD-Equivalents[3]	µg/L	Grab	1/Year	[1]
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Temperature	°F	Grab	1/Quarter	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

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Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method

[1] As specified in 40 CFR 136.
[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the boat rinsing discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

H. Monitoring Locations SR-001 and SR-002

1. The Discharger shall monitor the discharge from swimmer rinsing at Monitoring Location Nos. SR-001 and SR-002 as follows:

Table E-9. Effluent Monitoring for Swimmer Rinsing

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Quarter	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/Quarter	[1]
pH	standard units	Grab	1/Quarter	[1]
Priority Pollutants				
TCDD-Equivalents[2]	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	[1,3]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/Quarter	[1]
Turbidity	NTU	Grab	1/Quarter	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
[3] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

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2. Annually, the Discharger shall submit a log of the marine mammal enclosure cleaning discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

I. Monitoring Location ME-001

1. The Discharger shall monitor the discharge from marine mammal enclosure cleaning at Monitoring Location No. ME-001 as follows:

Table E-10. Effluent Monitoring for Marine Mammal Enclosure Cleaning

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/year	Meter
Conventional Pollutants				
Oil and Grease	mg/L	Grab	1/year	[1]
pH	standard units	Grab	1/year	[1]
Priority Pollutants				
Copper, Total Recoverable	µg/L	Grab	1/year	[1,2]
TCDD-Equivalents[3]	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Remaining Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Non-Conventional Pollutants				
Settleable Solids	mL/L	Grab	1/year	[1]
Turbidity	NTU	Grab	1/year	[1]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.
[3] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.

2. Annually, the Discharger shall submit a log of the marine mammal enclosure cleaning discharges describing the duration, the date, the quantity of waste generated, and a summary of the visual observations of the discharges.

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J. Monitoring Locations MISC-001 through MISC-004

1. The Discharger shall monitor the miscellaneous discharges at Monitoring Location Nos. MISC-001 through MISC-004 as follows:

Table E-11. Effluent Monitoring for Miscellaneous Discharges

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Flow	GPD	Estimate	1/Year	Meter
Priority Pollutants				
TCDD-Equivalents[2]	µg/L	Grab	1 in Year One 1 in Year Five	[1]
Priority Pollutants	µg/L	Grab	1 in Year One 1 in Year Five	[1,3]
Acute Toxicity	Pass/Fail	Grab	1/five year permit cycle	[1]
Chronic Toxicity	TUc	Grab	1/five year permit cycle	[1]

[1] As specified in 40 CFR 136.
[2] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
[3] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

2. Annually, the Discharger shall submit a log identifying any significant changes in the operation of the miscellaneous discharges.

V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

A. Acute Toxicity

1. Monitoring Frequency

The Discharger shall analyze a representative sample of the discharge for acute toxicity using a grab effluent sample.

The Discharger must analyze a representative sample from each area at the Facility at which industrial activities are conducted for acute toxicity during at least two storm water discharge events annually on grab effluent samples. If a single representative sample for an industrial area is not feasible, monitoring of individual discharge points for that area is required.

Once each year (July-June), at a different time of year from the previous years, the Discharger shall split a single storm water and a single non-storm water effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species; the

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Discharger shall then continue to conduct routine toxicity testing using the single, most sensitive species, including testing for accelerated monitoring, until the next sensitivity testing the following year. The split sample from a storm water location and from a non-storm water location must be from a sample ~~locations~~ location which most expected toxicity and, if possible, at a different location from previous years.

During years 1 and 5 of the Order, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program. For storm water sampling, sampling shall occur during storm events or if collected, prior to release to receiving water. If there are no storm events in the first year then sampling shall occur as soon as possible, likewise for the fifth year, if conditions for administrative extension are met.

2. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the acute toxicity of NPDES effluents are found in the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002; Table IA, 40 CFR Part 136). In a 96-hour static renewal test, the renewal shall be made at 48-hours using the original effluent sample. The Discharger shall conduct 96-hour static renewal toxicity tests with the following vertebrate species:

- The topsmelt, Atherinops affinis ~~[~~(Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (i.e., 96-hour Pass-Fail test)] in the first edition of 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, 1995) (specific to Pacific Coast waters));
- The Inland silverside, Menidia beryllina, only if Atherinops affinis is not available. (Acute Toxicity Test Method 2006.0)

And the following invertebrate species:

- The West Coast mysid, Holmesimysis costata (Table 19 in the acute test methods manual) (specific to Pacific Coast waters);
- The mysid, Americamysis bahia, only if Holmesimysis costata is not available. (Acute Toxicity Test Method 2007.0).

3. Compliance determination

The determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test shall be determined using a one-tailed hypothesis test (t-test). As specified in Section 11.3 of the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002), the t statistic for the single-effluent concentration acute toxicity test shall be calculated and compared with the critical t set at the 5% level of significance. If the

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calculated t does not exceed the critical t, then the mean responses for the single treatment and control are declared "not statistically different" and the Discharger shall report "Pass" on the DMR form. If the calculated t does exceed the critical t, then the mean responses for the single treatment and control are declared "statistically different" and the Discharger shall report "Fail" on the DMR form. This Order requires additional toxicity testing if the effluent limitation for acute toxicity is reported as "Fail".

4. Quality Assurance

a. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.

b. This discharge is subject to a determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test using a one-tailed hypothesis test called a t-test. The acute instream waste concentration (IWC) for this discharge is 100% effluent. The 100% effluent concentration and a control shall be tested.

c. Control water shall be prepared and used as specified in the test methods manual Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002); and/or, for Atherinops affinis, 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, 1995). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.

d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

e. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the Discharger must resample and retest at the next storm event.

f. Not Applicable - Following Paragraph 12.2.6.2 of the test methods manual, all acute toxicity test results from the multi-concentration tests required by this permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration-response relationships found in Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136) (EPA/821/B-00/004, 2000).

g. Within-test variability of individual toxicity tests should be reviewed for acceptability and variability criteria (upper and lower PMSD bounds) should be applied, as directed under Section 12.2.8 - Test Variability of the test methods

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manual, Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms. Under Section 12.2.8, the calculated percent minimum significant difference (PMSD) for both reference toxicant test and effluent toxicity test results must be compared with the upper and lower PMSD bounds variability criteria specified in Table 3-6 - Range of Relative Variability for Endpoints of Promulgated WET Methods, Defined by the 10th and 90th Percentiles from the Data Set of Reference Toxicant Tests, taken from Understanding and Accounting for Method Variability in Whole Effluent Toxicity Applications Under the National Pollutant Discharge Elimination System Program (EPA/833/R-00/003, 2000), following the review criteria in Paragraphs 12.2.8.2.1 and 12.2.8.2 of the test methods manual. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the Discharger must resample and retest within 14 days.

5. Accelerated Toxicity Testing and TRE/TIE Process

a. If the results of acute toxicity monitoring are reported as “Fail” and the likely source of toxicity is known (e.g., a temporary plant upset), then the Discharger shall conduct one additional toxicity test using the same species and test method. This test shall begin at the next storm event. If the additional toxicity test does not result in a determination of “Fail”, then the Discharger may return to their regular testing frequency. The determination of the likely source of toxicity must be demonstrated by implementing the first two parts of the TRE workplan (VI.C.2.a.i. (a) and (b) of this Order.

b. If the results of acute toxicity monitoring are reported as “Fail” and the source of toxicity is not known, then the Discharger shall conduct accelerated toxicity testing using the same species and test method. The accelerated toxicity monitoring shall include monitoring of the next 4 storm events. This testing shall begin at the next storm event. If none of the additional toxicity tests result in a determination of “Fail”, then the Discharger may return to the regular testing frequency.

c. If one of the additional toxicity tests (in section V.E.1 or V.E.2) are reported as “Fail” for acute toxicity, then, ~~at the next storm event~~within 14 days of receipt of this test result, the Discharger shall initiate a TRE as specified in section VI.C.2.a.ii of the Order.

d. Any TIE conducted as a part of the TRE as specified in section VI.C.2.a of this Order shall be based on the same sample that exhibited toxicity and from samples collected during subsequent storm events. Therefore, the discharger shall collect additional sample volume, sufficient for a TIE, when in an accelerated testing phase.

6. Reporting of Acute Toxicity Monitoring Results

a. A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also

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include: the toxicity test results—for determination of Pass/Fail; ~~LC50; TUa = 100/LC50; NOAEC; TUa = 100/NOAEC~~ reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

b. The Discharger shall notify the Regional Water Board in writing within 14 days of an acute toxicity test resulting in a determination of "Fail". This notification shall describe actions the Discharger has taken or will take to investigate, identify, and correct the causes of toxicity; the status of actions required by this Order; and schedule for actions not yet completed; or reason(s) that no action has been taken.

B. Chronic Toxicity

1. Monitoring Frequency

The permittee shall conduct annual chronic toxicity tests on effluent grab samples. Each year (July-June), at a different time of year from the previous years, the permittee shall split an effluent sample and concurrently conduct two toxicity tests using a fish and an invertebrate species; the permittee shall then continue to conduct routine toxicity testing using the single, most sensitive species, until the next sensitivity testing the following year.

Chronic toxicity test samples shall be collected for each point of discharge at the designated NPDES sampling station for the effluent (i.e., downstream from the last treatment process and any in-plant return flows where a representative effluent sample can be obtained). During years 1 and 5 of the permit, a split of each sample shall be analyzed for all other monitored parameters at the minimum frequency of analysis specified by the effluent monitoring program.

2. Marine and Estuarine Species and Test Methods

Species and short-term test methods for estimating the chronic toxicity of NPDES effluents are found in the first edition of *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, 1995) and applicable water quality standards; also see 40 CFR Parts 122.41(j)(4) and 122.44(d)(1)(iv) and 40 CFR Part 122.21(j)(5)(viii) for POTWs. The permittee shall conduct a static renewal toxicity test with the topsmelt, *Atherinops affinis* (Larval Survival and Growth Test Method 1006.0 (Daily observations for mortality make it possible to calculate acute toxicity for desired exposure periods (i.e., 7-day LC50, 96-hour LC50, etc.)); a static nonrenewal toxicity test with the giant kelp, *Macrocystis pyrifera* (Germination and Growth Test Method 1009.0); and a toxicity test with one of the following invertebrate species:

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- Static renewal toxicity test with the mysid, *Holmesimysis costata* (Survival and Growth Test Method 1007.01);
- Static non-renewal toxicity test with the Pacific oyster, *Crassostrea gigas*, or the mussel, *Mytilus* spp., (Embryo-larval Shell Development Test Method 1005.0);
- Static non-renewal toxicity test with the red abalone, *Haliotis rufescens* (Larval Shell Development Test Method);
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dentraster excentricus* (Embryo-larval Development Test Method); or
- Static non-renewal toxicity test with the purple sea urchin, *Strongylocentrotus purpuratus*, or the sand dollar, *Dendraster excentricus* (Fertilization Test Method 1008.0).

If laboratory-held cultures of the topsmelt, *Atherinops affinis*, are not available for testing, then the permittee shall conduct a static renewal toxicity test with the inland silverside, *Menidia beryllina* (Larval Survival and Growth Test Method 1006.0), found in the third edition of *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002; Table IA, 40 CFR Part 136).

3. Quality Assurance

a. Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.

b. For this discharge, a mixing zone or dilution allowance is not authorized. The chronic instream waste concentrations (IWCs) for this discharge are 100% effluent and 62.5% effluent. A series of at least five effluent dilutions and a control shall be tested. At minimum, the dilution series shall include the IWCs and three dilutions below the IWCs (e.g., 100%, 62.5%, 50%, 25% and 12.5%).

c. Effluent dilution water and control water should be prepared and used as specified in the test methods manual *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, 1995) and/or *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Marine and Estuarine Organisms* (EPA/821/R-02/014, 2002). If the dilution water is different from test organism culture water, then a second control using culture water shall also be used. If the use of artificial sea salts is considered provisional in the test method, then artificial sea salts shall not be used to increase the salinity of the effluent sample prior to toxicity testing without written approval by the permitting authority.

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d. If organisms are not cultured in-house, then concurrent testing with a reference toxicant shall be conducted. If organisms are cultured in-house, then monthly reference toxicant testing is sufficient. Reference toxicant tests and effluent toxicity tests shall be conducted using the same test conditions (e.g., same test duration, etc.).

e. If either the reference toxicant or effluent toxicity tests do not meet all test acceptability criteria in the test methods manual, then the permittee must resample and retest during the next rain event.

f. Following Paragraph 10.2.6.2 of the freshwater test methods manual, all chronic toxicity test results from the multi-concentration tests required by this permit must be reviewed and reported according to USEPA guidance on the evaluation of concentration response relationships found in *Method Guidance and Recommendations for Whole Effluent Toxicity (WET) Testing (40 CFR 136)* (EPA/821/B-00-004, 2000).

g. Because this permit requires sublethal hypothesis testing endpoints from test methods in *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, 1995), within-test variability must be reviewed for acceptability and a variability criterion (upper %MSD bound) must be applied, as directed under each test method. Based on this review, only accepted effluent toxicity test results shall be reported on the DMR form. If excessive within-test variability invalidates a test result, then the permittee must resample and retest within 14 days.

h. If the discharged effluent is chlorinated, then chlorine shall not be removed from the effluent sample prior to toxicity testing without written approval by the permitting authority.

i. pH drift during the toxicity test may contribute to artifactual toxicity when pH-dependent toxicants (e.g., ammonia, metals) are present in an effluent. To determine whether or not pH drift during the toxicity test is contributing to artifactual toxicity, the permittee shall conduct three sets of parallel toxicity tests, in which the pH of one treatment is controlled at the pH of the effluent and the pH of the other treatment is not controlled, as described in Section 11.3.6.1 of the test methods manual, *Short-term Methods for Estimating the Chronic Toxicity of Effluents and Receiving Waters to Freshwater Organisms* (EPA/821/R-02/013, 2002). Toxicity is confirmed to be artifactual and due to pH drift when no toxicity above the chronic WET permit limit or trigger is observed in the treatments controlled at the pH of the effluent. If toxicity is confirmed to be artifactual and due to pH drift, then, following written approval by the permitting authority, the permittee may use the procedures outlined in Section 11.3.6.2 of the test methods manual to control sample pH during the toxicity test.

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4. Reporting of Chronic Toxicity Monitoring Results

a. A full laboratory report for all toxicity testing shall be submitted as an attachment to the DMR for the month in which the toxicity test was conducted and shall also include: the toxicity test results—in NOEC; TUc = 100/NOEC; EC25 (or IC25); and TUc = 100/EC25 (or IC25)—reported according to the test methods manual chapter on report preparation and test review; the dates of sample collection and initiation of each toxicity test; all results for effluent parameters monitored concurrently with the toxicity test(s); and progress reports on TRE/TIE investigations.

VI. LAND DISCHARGE MONITORING REQUIREMENTS

[Not Applicable]

VII. RECLAMATION MONITORING REQUIREMENTS

[Not Applicable]

VIII. RECEIVING WATER MONITORING REQUIREMENTS – SURFACE WATER

A. Monitoring Location RSW-001 and RSW-002

1. The Discharger shall monitor the San Diego Bay at RSW-001 and the Pacific Ocean at RSW-002 as follows:

Table E-12. Receiving Water Monitoring Requirements

Parameter	Units	Sample Type	Minimum Sampling Frequency	Required Analytical Test Method
Priority Pollutants				
TCDD-Equivalents[1]	µg/L	Grab	1/Year	[2]
Priority Pollutants[3]	µg/L	Grab	1/Year	[2]
Non-Conventional Pollutants				
Temperature	°F	Grab	1/~~Month~~Quarter	[2]

[1] TCDD-Equivalents shall include all 17 of the 2,3,7,8-TCDD dioxin congeners as listed in section 3 of the SIP.
[2] As specified in 40 CFR 136.
[3] Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

IX. OTHER MONITORING REQUIREMENTS

A. Storm Water

1. Non-Storm Water Discharge Visual Observations

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a. The Discharger shall visually observe each drainage area for the presence of, or for indications of prior unauthorized non-storm water discharges and their sources.

b. The Discharger shall visually observe the Facility's authorized non-storm water discharges and their sources.

c. One visual observation shall be conducted quarterly in each of the following periods:

   i. January – March,
   ii. April – June,
   iii. July – September, and
   iv. October – December.

d. The quarterly visual observations shall be conducted no less than 8 weeks apart and no more than 16 weeks apart. Visual observations are only required during daylight hours, on days without precipitation, and during scheduled Facility operating hours[1].

e. Visual observations shall document the presence of, or the indication of any non-storm water discharge, pollutant characteristics (floating and suspended material, oil and grease, discoloration, turbidity, odor, etc.), and source. The Discharger shall maintain records of the personnel performing the visual observations, the dates and approximate time each drainage area and non-storm water discharge was observed, and the response taken to eliminate unauthorized non-storm water discharges and to reduce or prevent pollutants from contacting non-storm water discharges. The SWPPP shall be revised, as necessary, and implemented in accordance with Attachment G of this Order.

2. Storm Water Discharge and Other Visual Observations

a. The Discharger shall visually observe storm water discharges from the first qualifying storm event in each month of the wet season (October 1 through May 31). These visual observations shall occur at all discharge locations during the first hour of discharge. The first qualifying storm event is one that begins producing storm water discharge during daylight scheduled Facility operating hours, and is preceded by at least 7 days without a storm water discharge.

b. The Discharger shall visually observe the discharge of stored or contained storm water at the time of discharge during daylight scheduled Facility operating hours. Stored or contained storm water that will likely discharge after daylight scheduled Facility operating hours due to anticipated precipitation shall be observed prior to the discharge during scheduled Facility operating hours.

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[1] *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.

c. For the visual observations described in sections IX.A.1 and IX.A.2, the Discharger shall observe the presence or absence of floating and suspended materials, oil and grease, discoloration, turbidity, odors, and source of any observed pollutants.

d. Monthly, the Discharger shall visually observe storm water storage and containment areas to detect leaks and ensure maintenance of adequate freeboard.

e. The Discharger shall record all storm events that occur during daylight scheduled Facility operating hours that do no produce a discharge.

f. The Discharger shall maintain records of all visual observations, personnel performing the observations, observation dates, observed locations, and corrective actions taken in response to the observations. The SWPPP shall be revised, as necessary, in accordance with Attachment G of this Order.

3. Sampling and Analysis

a. The Discharger shall collect storm water samples during the first hour of discharge from the first two qualifying storm events of the wet season. All storm water discharge locations shall be sampled. Sampling of stored or contained storm water shall occur at the time the stored or contained storm water is discharged. If samples are not collected from either or both the first two qualifying storm events of the wet season, the Discharger shall collect samples from the next qualifying storm events of the wet season and shall explain in the annual report why either or both of the first two qualifying storm events were not sampled.

b. Sample collection of storm water discharges is required only during scheduled Facility operating hours and only when the storm water discharge is preceded by at least 7 days without a storm water discharge.

c. The industrial storm water discharges from Discharge Point Nos. NAS-001 through NAS-058 (except NAS-038), NAB-001 through NAB-052 (except NAB-024), and NOLF-001 through NOLF-~~003~~004 shall be sampled and analyzed as follows:

Table E-13. Monitoring Requirements for Industrial Storm Water Discharges

Parameter	Unit	Sample Type	Minimum Frequency*	Required Analytical Test Method
Discharge Volume	gallons	Estimate[1]	2 storms per year	Estimate
Conventional Pollutants				
Oil and Grease	mg/L	Grab	2 storms per year	[2]
pH	pH Units	Grab	2 storms per year	[2]
Total Suspended Solids	mg/L	Grab	2 storms per year	[2]

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Parameter	Unit	Sample Type	Minimum Frequency*	Required Analytical Test Method
Priority Pollutants				
Copper, Total Recoverable	µg/L	Grab	2 storms per year	[2,3]
Zinc, Total Recoverable	µg/L	Grab	2 storms per year	[2]
Non-Conventional Pollutants				
Acute Toxicity[4]	Pass or Fail	Grab	2 storms per year	[2]
Electrical Conductivity	µmho/cm	Measurement	2 storms per year	[2]
Settleable Solids	ml/L	Grab	2 storms per year	[2]
Total Organic Carbon	mg/L	Grab	2 storms per year	[2]
Total Petroleum Hydrocarbons	mg/L	Grab	2 storms per year	[2]
Other ~~Pollutants[5]~~ Pollutants[4]	µg/L	Grab	2 storms per year	[2]
Remaining Priority Pollutants				
Remaining CTR Priority ~~Pollutants[6]~~ Pollutants[5]	µg/L	Grab	2 storms in year one 2 storms in year five	[2]

* Sampling shall occur during ~~strom~~storm events, or if collected, prior to release to receiving water. If there are no ~~strom~~storm events during the year, then sampling shall occur as soon as possible. If there are no storm events during the fifth year and conditions for administrative extension are met, then sampling shall occur as soon as possible.

1 The volume of storm water 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.

2 As specified in 40 CFR 136.3.

3 Effluent samples shall be analyzed for copper according to method 1638 or 1640. The commonly used methods 6010B (Inorganics by ICP-Atomic Emission Spectroscopy) and 200.7 (Trace Elements-ICP) have been found to give inaccurate copper readings in saline-matrix samples due to interference with the sodium-argon complex, which has a molecular weight similar to copper. Method 1638 (ICP/MS) or 1640 (On-Line Chelation) will eliminate the sodium-argon complex before the sample is tested for copper. No inaccurate readings for other metals in a saline-matrix sample is analyzed by methods 6010B or 200.7 are known.

4 ~~The presence of acute toxicity in the storm water shall be determined as specified in section V of this MRP.~~

~~5~~ Pollutants that are likely to be present in storm water discharges in significant quantities shall be sampled. The pollutants shall be selected based upon the pollutant source assessment required in section VII of the SWPPP requirements contained in Attachment G, visual observations, and inspection records. If these pollutants are not detected in significant quantities after two consecutive sampling events, the Discharger may eliminate the pollutant from future analysis until the pollutant is likely to be present again. The Discharger shall select appropriate analytical test methods that indicate the presence of pollutants in storm water discharges in significant quantities.

~~6~~ 5 As specified in the Table of Paragraph (b)(1) of 40 CFR 131.38.

d. When sampling results indicate the presence of significant quantities of

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pollutants in storm water discharges, the Discharger shall implement corrective actions that include:

i. A site evaluation to determine the pollutant source(s);
ii. An assessment of the Facility's SWPPP to identify additional BMPs to prevent or reduce pollutants in storm water discharges; and
iii. A certification that the SWPPP has been revised to include the additional BMPs identified above.

4. Storm Water Discharge Sample Locations

a. The Discharger shall visually observe and collect samples of storm water discharges from all drainage areas. The storm water discharge collected and observed shall be representative of the storm water discharge in each drainage area.

b. The Discharger shall identify alternate visual observation and sample collection locations if the Facility's drainage areas are affected by storm water run-on from surrounding areas. The storm water discharge collected and observed shall be representative of the Facility's storm water discharge in each drainage area.

c. If visual observation and sample collection locations are difficult to observe or sample (e.g., sheet flow and submerged discharge outlets), the Discharger may identify other alternative locations representative of the Facility's storm water discharges.

d. If the Discharger determines and documents within its annual report that the industrial activities and BMPs within two or more drainage areas are substantially identical, the Discharger may either:

i. Collect samples from a reduced number of substantially identical drainage areas; or
ii. Collect samples from each substantially identical drainage area and analyze a combined sample. The combined sample shall consist of equal volumes of sample collected from each substantially identical drainage area.

5. Visual Observation and Sample Collection Exceptions

The Discharger shall be prepared to collect samples and conduct visual observations at the beginning of the wet season (October 1 through May 31) and throughout the wet season until the minimum requirements of sections IX.A.2 and IX.A.3. of this MRP are completed with the following exception:

a. The Discharger is not required to collect samples or conduct visual observations under the following conditions:

i. During dangerous weather conditions such as flooding and electrical storms;
ii. Oustide of scheduled Facility operating hours; or

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iii. When a storm event in the proceeding 7 days produced a storm water discharge.

b. If the Discharger does not collect the required samples or conduct the visual observations during a wet season due to these exceptions, then the Discharger shall include an explanation in the annual report why the sampling or visual observations were not conducted.

c. The Discharger may conduct visual observations and sample collection more than 1 hour after discharge begins if the Discharger determines that the storm water discharge will be more representative of the Facility's storm water discharge. The Discharger shall include a technical justification in the annual report explaining why the visual observations and sample collection should be conducted after the first hour of discharge.

6. Storm Water Annual Report

The Discharger shall submit a Storm Water Annual Report by September 1 of each year to this Regional Water Board. The report shall include the following:

a. Identification of high-risk areas at NASNI and NAB;

b. A summary of visual observations and sampling and analysis results;

c. An evaluation of the visual observation and sampling and analysis results;

d. Annual Comprehensive Site Compliance Evaluation Report as required by section IX of the SWPPP requirements contained in Attachment G;

e. Laboratory reports;

f. Records specified in section IX.A of this MRP.

The Discharger shall prepare and submit the Storm Water Annual Report 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.

7. Monitoring Methods

a. The SWPPP shall include a description of the following items:

i. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.
ii. Sampling locations and sample collection procedures. This shall include procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained.
iii. Identification of the analytical methods and related method detection limits (if

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applicable) used to detect pollutants in storm water discharges, including a justification that the method detection limits are adequate.

X. REPORTING REQUIREMENTS

A. General Monitoring and Reporting Requirements

1. The Discharger shall comply with all Standard Provisions (Attachment D) related to monitoring, reporting, and recordkeeping.

B. Self Monitoring Reports (SMRs)

1. At any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit Self-Monitoring Reports (SMRs) using the State Water Board' s California Integrated Water Quality System (CIWQS) Program Web site (http://www.waterboards.ca.gov/ciwqs/index.html). Until such notification is given, the Discharger shall submit hard copy SMRs. The CIWQS Web site will provide additional directions for SMR submittal in the event there will be service interruption for electronic submittal.

2. The Discharger shall report in the SMR the results for all monitoring specified in this MRP under sections III through IX. The Discharger shall submit monthly SMRs including the results of all required monitoring using USEPA-approved test methods or other test methods specified in this Order. If the Discharger monitors any pollutant more frequently than required by this Order, the results of this monitoring shall be included in the calculations and reporting of the data submitted in the SMR.

3. Monitoring periods and reporting for all required monitoring shall be completed according to the following schedule:

Table E-14. Monitoring Periods and Reporting Schedule

Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
1/Month	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	First day of calendar month through last day of calendar month	~~30 days following the end of the monitoring period~~ Quarterly on: May 1 August 1 November 1 February 1
1/Quarter	Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date	January 1 through March 31 April 1 through June 30 July 1 through September 30 October 1 through December 31	May 1 August 1 November 1 February 1
2/Year	Closest of January 1 or July 1 following (or on) permit effective date	January 1 through June 30 July 1 through December 31	August 1 February 1
1/Year	Permit Effective Date	July 1 through June 30	September 1

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Sampling Frequency	Monitoring Period Begins On…	Monitoring Period	SMR Due Date
Annual Storm Water Report (IX.A.6 of this MRP)	First day of calendar month following permit effective date or on permit effective date if that date is first day of the month	July 1 through June 30	September 1 Separate report submitted with Annual Report

4. **Reporting Protocols.** The Discharger shall report with each sample result the applicable reported Minimum Level (ML) and the current Method Detection Limit (MDL), as determined by the procedure in 40 CFR Part 136.

   The Discharger shall report the results of analytical determinations for the presence of chemical constituents in a sample using the following reporting protocols:

   a. Sample results greater than or equal to the reported ML shall be reported as measured by the laboratory (i.e., the measured chemical concentration in the sample).

   b. Sample results less than the RL, but greater than or equal to the laboratory' s MDL, shall be reported as "Detected, but Not Quantified," or DNQ. The estimated chemical concentration of the sample shall also be reported.

      For the purposes of data collection, the laboratory shall write the estimated chemical concentration next to DNQ as well as the words "Estimated Concentration" (may be shortened to "Est. Conc."). The laboratory may, if such information is available, include numerical estimates of the data quality for the reported result. Numerical estimates of data quality may be percent accuracy (+ a percentage of the reported value), numerical ranges (low to high), or any other means considered appropriate by the laboratory.

   c. Sample results less than the laboratory' s MDL shall be reported as "Not Detected," or ND.

   d. Dischargers are to instruct laboratories to establish calibration standards so that the ML value (or its equivalent if there is differential treatment of samples relative to calibration standards) is the lowest calibration standard. At no time is the Discharger to use analytical data derived from extrapolation beyond the lowest point of the calibration curve.

5. **Compliance Determination.** Compliance with effluent limitations for priority pollutants shall be determined using sample reporting protocols defined above and Attachment A of this Order. For purposes of reporting and administrative enforcement by the Regional and State Water Boards, the Discharger shall be deemed out of compliance with effluent limitations if the concentration of the priority pollutant in the monitoring sample is greater than the effluent limitation and greater than or equal to the reporting level (RL).

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6. **Multiple Sample Data.** When determining compliance with an AMEL or MDEL for priority pollutants and more than one sample result is available, the Discharger shall compute the arithmetic mean unless the data set contains one or more reported determinations of "Detected, but Not Quantified" (DNQ) or "Not Detected" (ND). In those cases, the Discharger shall compute the median in place of the arithmetic mean in accordance with the following procedure:

   a. The data set shall be ranked from low to high, ranking the reported ND determinations lowest, DNQ determinations next, followed by quantified values (if any). The order of the individual ND or DNQ determinations is unimportant.

   b. The median value of the data set shall be determined. If the data set has an odd number of data points, then the median is the middle value. If the data set has an even number of data points, then the median is the average of the two values around the middle unless one or both of the points are ND or DNQ, in which case the median value shall be the lower of the two data points where DNQ is lower than a value and ND is lower than DNQ.

7. The Discharger shall submit SMRs in accordance with the following requirements:

   a. The Discharger shall arrange all reported data in a tabular format. The data shall be summarized to clearly illustrate whether the Facility is operating in compliance with interim and/or final effluent limitations. The Discharger is not required to duplicate the submittal of data that is entered in a tabular format within CIWQS. When electronic submittal of data is required and CIWQS does not provide for entry into a tabular format within the system, the Discharger shall electronically submit the data in a tabular format as an attachment.

   b. The Discharger shall attach a cover letter to the SMR. The information contained in the cover letter shall clearly identify violations of the WDRs; discuss corrective actions taken or planned; and the proposed time schedule for corrective actions. Identified violations must include a description of the requirement that was violated and a description of the violation.

   c. SMRs must be submitted to the Regional Water Board, signed and certified as required by the Standard Provisions (Attachment D), to the address listed below:

   Regional Water Quality Control Board, San Diego Region
   9174 Sky Park Court, Suite 100
   San Diego, CA 92123

C. Discharge Monitoring Reports (DMRs)

1. As described in section X.B.1 above, at any time during the term of this permit, the State or Regional Water Board may notify the Discharger to electronically submit SMRs that will satisfy federal requirements for submittal of Discharge Monitoring Reports (DMRs). Until such notification is given, the Discharger shall submit DMRs in accordance with the requirements described below.

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2. DMRs must be signed and certified as required by the standard provisions (Attachment D). The Discharger shall submit the original DMR and one copy of the DMR to the address listed below:

STANDARD MAIL	FEDEX/UPS/ OTHER PRIVATE CARRIERS
State Water Resources Control Board Division of Water Quality c/o DMR Processing Center PO Box 100 Sacramento, CA 95812-1000	State Water Resources Control Board Division of Water Quality c/o DMR Processing Center 1001 I Street, 15th Floor Sacramento, CA 95814

All discharge monitoring results must be reported on the official USEPA pre-printed DMR forms (EPA Form 3320-1). Forms that are self-generated will not be accepted unless they follow the exact same format of USEPA Form 3320-1.

D. Other Reports

1. **Progress Reports.** As specified in the compliance time schedules required in Special Provisions VI, progress reports shall be submitted in accordance with the following reporting requirements. At minimum, the progress reports shall include a discussion of the status of final compliance, whether the Discharger is on schedule to meet the final compliance date, and the remaining tasks to meet the final compliance date.

Table E-15. Reporting Requirements for Special Provisions Progress Reports

Special Provision	Reporting Requirements
Compliance Schedules for Final Effluent Limitations for Steam Condensate Discharges of Copper, Lead, TCDD-Equivalents, and Bis (2-Ethylhexyl) Phthalate (section VI.C.7.a)	July 10, 2009, and by the end of every other subsequent month, until final compliance
Compliance Schedules for Final Effluent Limitations for Diesel Engine Cooling Water Discharges of Copper, Lead, Mercury, Zinc, TCDD-Equivalents, and 4,4-DDE (section VI.C.7.b)	July 10, 2009, and by the end of every other subsequent month, until final compliance
Compliance Schedules for Final Effluent Limitations for Diesel Engine Cooling Water Discharges of Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Zinc, DDT, and TCDD-Equivalents (section VI.C.7.c)	July 10, 2009, and by the end of every other subsequent month, until final compliance

2. The Discharger shall report the results of any acute toxicity testing, TRE/TIE, or Pollution Prevention Plan required by Special Provisions – VI.C.2 and VI.C.3 of this Order. The Discharger shall report the progress in satisfaction of compliance schedule dates specified in Special Provisions – VI.C.7 of this Order. The Discharger shall submit reports with the first monthly SMR scheduled to be submitted on or immediately following the report due date.

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ATTACHMENT F – FACT SHEET

As described in section II of this Order, this Fact Sheet includes the legal requirements and technical rationale that serve as the basis for the requirements of this Order.

This Order has been prepared under a standardized format to accommodate a broad range of discharge requirements for Dischargers in California. Only those sections or subsections of this Order that are specifically identified as "not applicable" have been determined not to apply to this Discharger. Sections or subsections of this Order not specifically identified as "not applicable" are fully applicable to this Discharger.

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I. PERMIT INFORMATION

The following table summarizes administrative information related to the Facility.

Table F-1. Facility Information

WDID	
Discharger	United States Department of the Navy
Name of Facility	Naval Base Coronado
Facility Address	937 N. Harbor Drive
	San Diego, CA 92132-0058
	San Diego County
Facility Contact, Title and Phone	~~Lou~~Luis Perez, Installation Environmental Program Manager, (619) 545-3429
Authorized Person to Sign and Submit Reports	~~Lou~~Luis Pere~~-~~z, Installation Environmental Program Manager, (619) 545-3429 or ~~Robert Chichester~~Brian Gordon, Water Program Manager, (619) 532-~~2261~~2273
Mailing Address	Same as Facility Address
Billing Address	Same as Facility Address
Type of Facility	Naval Base
Major or Minor Facility	Major
Threat to Water Quality	1
Complexity	A
Pretreatment Program	Not Applicable
Reclamation Requirements	Not Applicable
Facility Permitted Flow	Not Applicable
Facility Design Flow	Not Applicable
Watershed	San Diego Bay
Receiving Water	Pacific Ocean, San Diego Bay, and Tijuana River (within the Tijuana River Estuary)
Receiving Water Type	Ocean, Enclosed Bay, Estuary

A. The United States Department of the Navy (hereinafter Discharger) is the owner and operator of Naval Base Coronado (hereinafter Facility), a U.S. naval base.

For the purposes of this Order, references to the "discharger" or "permittee" in applicable federal and state laws, regulations, plans, or policy are held to be equivalent to references to the Discharger herein.

B. The Facility discharges wastewater from multiple discharge points to the Pacific Ocean, the San Diego Bay, and the Tijuana River, all waters of the United States. The Facility is currently regulated by Order No. R9-2003-0008, which was adopted on May 14, 2003 and expired on May 14, 2008. The terms and conditions of the current Order have been automatically continued and remain in effect until new Waste Discharge Requirements (WDRs) and National Pollutant Discharge Elimination System (NPDES) permit are adopted pursuant to this Order.

C. The Discharger filed a report of waste discharge and submitted an application for renewal of its WDRs and NPDES permit in November 2007. A site visit was conducted on December 12, 2007 to observe operations and collect additional data to develop permit limitations and conditions.

II. FACILITY DESCRIPTION

The Discharger manages several installations in the San Diego area. These installations are aligned into three major naval bases, including the Facility, Naval Base Point Loma (NBPL), and Naval Base San Diego (NBSD). The Facility is comprised of the following installations: Naval Air Station, North Island (NASNI); Naval Amphibious Base, Coronado (NAB); Naval Outlying Landing Field, Imperial Beach (NOLF); Naval Radio Receiving Facility (NRRF); Naval Auxiliary Landing Field, San Clemente Island (NALF); Survival, Evasion, Resistance, and Escape Training School (SERE); La Posta Mountain Warfare Training Center (La Posta MWTC); and Camp Morena.

Of the eight installations aligned under the Facility, only NASNI, NAB, NOLF, NRRF, and NALF have discharges subject to NPDES permitting. NALF is located in the Los Angeles Regional Water Quality Control Board jurisdictional area and, therefore, is not regulated by this Order.

NASNI. The mission of NASNI is to arm, repair, provision, service, and support the U.S. Pacific Fleet and other operating forces. It is the only aviation industrial complex on the West Coast and the only naval air station in California with an airfield having 24-hour support capabilities. The installation houses the California Least Tern Preserve and Nesting area.

NASNI is also the only military installation in southern California capable of berthing and maintaining a *Nimitz* Class aircraft carrier. The Discharger's largest Naval Aviation Depot and the Defense Distribution Center are located at NASNI. It is distinguished as headquarters for several major military flag staffs, including Commander, U.S. Naval Air Forces (CNAF); Commander, Strike Force Training Pacific (CSFTP); Commander, Carrier Strike Group SEVEN (CCSG7); and Commander, Naval Air Force Reserve.

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NASNI provides aviation support shore facilities, three aircraft carrier piers, industrial maintenance support, aircraft maintenance, bachelor quarters and dining facilities, training facilities, and the attendant support infrastructure of utilities, roads, and grounds. The airport at NASNI has two runways which are 7,500 feet and 8,000 feet long. Approximately 70 percent of the total area is impervious to storm water infiltration.

The three piers at NASNI are used to berth aircraft carriers, support vessels, and barges which receive various ship support services such as supplies and minor maintenance. Ship support services on the three piers include loading supplies and equipment onto the ships. Berth-side ship maintenance may include abrasive blasting, hydro-blasting, metal grinding, painting, tank cleaning, removal of bilge and ballast water, removal of anti-fouling paint, sheet metal work, electrical work, mechanical repair, engine repair, hull repair, and sewage disposal. Berth-side ship repair activities are generally less complex than the ship repair activities conducted at commercial shipyards or at the Discharger's graving dock or floating dry-dock. Berth-side maintenance may be conducted by Naval personnel, civil service personnel, or civilian contractors.

Ship maintenance may also be conducted on the piers. Boats, ship sections, or parts can be placed on the piers or adjacent lands for repairs. The ship maintenance activities may be conducted by Naval personnel, civil service personnel, or by civilian contractors. The breadth of work performed by the civilian contractors is typically greater than the work performed by Naval personnel. Some complex ship repair work is conducted inside various support buildings near the piers. Typically, civilian contractors will store materials and supplies on the piers while working aboard the ships.

NASNI has an Industrial Wastewater Treatment Plant (IWTP), which discharges treated industrial wastewater to the San Diego Metropolitan Sanitary Sewer System (SDMSSS). The discharge primarily includes wastewater from metal plating facilities. The IWTP is permitted by the City of San Diego to discharge up to 3,097 gallons per day (GPD) to the sanitary sewer.

NASNI also has an Oil Recovery Plant (ORP), which discharges treated oily wastewater to the SDMSSS. The oily wastewater is from the ships, ballast and bilge water, and other facilities at NASNI. The ORP is permitted by the City of San Diego to discharge up to 26,100 GPD to the sanitary sewer.

The IWTP and ORP are located on the same facility plot. The storm water at the IWTP and ORP facility is collected and diverted to the sanitary sewer system. The IWTP and ORP are operated by Shaw Group, Inc., a third party contractor.

Industrial activities at NASNI are classified into the following major industrial categories: aircraft/helicopter repair and maintenance, airport/heliport, cleaning and degreasing, cogeneration plant, electric utilities, electronic assembly and testing, fuel storage and dispensing, gasoline service station, hazardous substance storage, materials storage, metal finishing/electroplating, ordnance storage, painting and sandblasting, pumping station, repair and maintenance (general), ship support services, small boat maintenance and repair, vehicle repair and maintenance, water/wastewater treatment plant, and

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miscellaneous.

Point source discharges from NASNI are classified as steam condensate, diesel engine cooling water, pier boom cleaning, utility vault and manhole dewatering, pier cleaning, and miscellaneous discharges associated with facility maintenance.

NAB. NAB is a major shore command. The mission of NAB is to provide on-base facilities and services for the support of U.S. and allied forces engaged in amphibious, inshore, clandestine, and unconventional and special warfare training operations. The primary land uses include the administrative areas, training beaches, California Least Tern Preserve, recreational marina, and housing. There are 21 piers located at NAB which are used to berth coastal patrol boats, MK-5 boats, Mike 8 boats, LCU boats, and ferry barges.

State Highway 75 separates NAB into two areas known as surfside (oceanside) and bayside. The bayside administrative area consists of over 170 buildings for housing, administration, operations, recreation, community support facilities, utilities, and maintenance facilities. The surfside administrative area houses the Naval Special Warfare Command. Approximately 60 percent of the total area is impervious to storm water infiltration.

Industrial activities at NAB are classified into the following major industrial categories: fire station, fuel storage and dispensing, general repair and maintenance, hazardous substance storage, materials storage, metal processing, painting and sandblasting, recycling collection center, services for boat support, small boat maintenance and repair, utilities, vehicle and equipment maintenance, vehicle and boat storage, and water/wastewater treatment.

Point source discharges from NAB are classified as utility vault and manhole dewatering, pier cleaning, reverse osmosis water purification unit (ROWPU) product water, boat rinsing, swimmer rinsing, and miscellaneous discharges associated with facility maintenance.

NRRF. NRRF is primarily used for Naval Special Warfare training. There are a few structures on the installation, although only a maintenance shop is used on a daily basis. A *Wullenweber* antenna is located at NRRF, though it is not operational.

Point source discharges from NRRF are classified as utility vault and manhole dewatering and miscellaneous discharges associated with facility maintenance.

NOLF. The mission of NOLF, as an extension of NASNI, is to provide a practice field for helicopter operations and miscellaneous personnel support facilities that serve the military population in the Imperial Beach area. Naval helicopters from NASNI conduct daily landing practice and lift-training operations at NOLF. Helicopters are not stationed at NOLF. Approximately 30 percent of the total area is impervious to storm water infiltration.

Industrial activities at NOLF are classified into the following major industrial categories: fire station, hazardous substance storage, and materials storage.

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Point source discharges from NOLF are classified as miscellaneous discharges associated with facility maintenance.

A. Description of Wastewater

Discharges at the Facility consist of the following:

1. Industrial Storm Water Discharges

The industrial storm water discharges from NASNI are associated with the runways and flight lines, the industrial facilities, and the berthing areas. A total of 58 outfalls drain storm water runoff from industrial areas at NASNI into San Diego Bay and the Pacific Ocean. Seven *Aqua Shield™, AquaSwirl* storm water treatment systems are installed at the Joliet (J) Pier as required by the California Coastal Commission. These treatment systems are a rotational deflective type system used to treat storm water for removal of sediment and free-floating oil and debris. The storm water enters the treatment vault and is spun to remove the trash or oil. The storm water treatment systems are located beneath the surface of the pier and may be subject to tidal influence. A map of the industrial storm water discharge locations at NASNI is shown in Attachment B (Figure B-2).

A total of 54 outfalls drain storm water runoff from industrial areas at NAB into San Diego Bay. Storm water treatment systems using filter-absorption technology are installed at the causeway repair area in the vicinity of Buildings 332 (Boatfitting/Sail Loft Facility) and 350 (Abrasive Blast Facility). Storm water runoff at the causeway repair area drains through treatment units before discharge through NAB-007 and NAB-008. Pollutants such as metals and sediment are removed as storm water flows through a multi-media filter treatment unit comprised of gravel, bone char, and activated alumina. The maximum design flow rate through the system is 250 gallons per minute (GPM). The filter media is expected to last at least 11 years. The expended media is anticipated to be disposed of as non-hazardous waste. A map of the industrial storm water discharge locations at NAB is shown in Attachment B (Figure B-3).

Storm water discharges from NRRF are considered non-industrial and are not subject to regulation by this Order. South and southwest of the installation is Camp Surf, a YMCA aquatic activities and education camp for youth on land leased from the Discharger. On Camp Surf is a wetland that fills with storm water runoff during the rainy season. A concrete-lined swale drains the wetland area of excess rainwater to the ocean. This swale also brings storm water runoff from an Imperial Beach residential area south of Camp Surf. Because the wetland area and swale are below sea level, a water level-controlled pump house is activated to pump the storm water to an ocean outfall at approximately 20 GPM. The storm water outfall is located on the beach adjacent to Camp Surf.

Three outfalls drain storm water runoff from industrial areas at NOLF into the Tijuana River. The storm drain systems for two of the outfalls merge and then separate again. The storm drain for the third outfall is separate. A map of the industrial storm water discharge locations at NOLF is shown in Attachment B (Figure B-4).

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2. Steam Condensate

The Discharger uses a pressurized steam system for both shore and afloat operations. Within the Facility, only NASNI has an on-base steam system.

Steam is produced by an on-site cogeneration plant operated by Sithe Energy. During the production of steam, one or more of the following chemical additives are injected: Trident 3506 (into boiler feed water), Trident 2301 (into boiler feed water), Trident 1003 (into boiler), and Trident 1103 (into boiler). Only Trident 2301 leaves the boiler and can be found in the steam condensate. These additives are added to assist in the control of pH to avoid the creation of acids in the steam distribution system. Specific chemicals that may be present in the steam condensate as a result of the additives include cyclohexylamine, diethylaminoethanol, diethylhydroxylamine, hydroquinone, and morpholine.

After leaving the plant, the steam enters the distribution system, which consists of high- and low-pressure steam lines, pressure reducing valve stations, and expansion joints. The steam is provided to buildings and surface ships. The steam system has traps in the steam lines designed to discharge steam condensate to ensure the steam supplied to users meets quality assurance specifications and is free of condensate.

There are 66 steam discharge points at NASNI, nine of which are located on the quay wall bordering San Diego Bay. At most locations, the system releases steam condensate from traps in a cloud of steam that has a temperature in excess of 100°C. A portion of this steam discharge evaporates prior to forming a condensate and discharging to the land or to San Diego Bay through Discharge Point Nos. SC-001 through SC-066.

The pier discharge points, in addition to releasing steam, drip small amounts of water to the San Diego Bay between steam discharges. The estimated discharge rate for the steam lines is 1 ounce per minute (oz/min) per discharge point. Steam condensate shore side is discharged into steam vaults and steam manholes. Steam condensate discharges are routed to the sanitary system in many cases. Based on a 1 oz/min release rate for 66 outfalls, the total discharge volume for the steam lines is approximately 750 GPD.

Pollutants that may be found in the discharges include pollutants in the potable water supplied to the steam boilers, chemicals added during the steam generation process, contaminants that the steam condensate comes into contact with as it circulates through the steam distribution system, and heat from the steam itself. A map of the steam condensate discharge locations at NASNI is shown in Attachment B (Figure B-5). A line drawing for the steam condensate discharges is shown in Attachment C (Figure C-1).

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3. Diesel Engine Cooling Water

The emergency fire sprinkler stations at NASNI use diesel motors to supply water to the fire suppression system (sprinklers). Pump tests are performed at each station to ensure that the fire sprinkler pumps are operational. During the pump tests, non-contact cooling water is used to cool the diesel engines that power the fire sprinkler pumps. During an emergency, the pumps supply water to the fire sprinkler system in adjacent buildings. During the tests, the cooling water is discharged directly into the storm drain system or onto the ground surface where it may flow and enter a storm drain system that discharges to the San Diego Bay or the Pacific Ocean.

Order No. R9-2003-0008 regulated diesel engine cooling water from the pump stations at NASNI in Buildings 499, 812, 1357, 348, and 554 and gasoline engine cooling water from the pump station at NOLF in Building 186. Cooling water from the station at Building 499 is now treated with chlorine and diverted to the sewer system. The diesel engines in Buildings 348 and 554 at NASNI and the gasoline engine in Building 186 at NOLF have been replaced with electric motors and these stations no longer discharge cooling water. Therefore, cooling water from the stations at Buildings 499, 348, and 554 at NASNI and Building 186 at NOLF are no longer regulated in this Order. However, two additional discharges of diesel engine cooling water from pump stations in Buildings 1362 and 1440 were discovered over the term of Order No. R9-2003-0008. Therefore, the point source discharges of diesel engine cooling water at NASNI from the pump stations in Buildings 812, 1357, 1362, and 1440 (Discharge Point Nos. CW-001 through CW-004, respectively) will be regulated by this Order.

Pollutants that may be found in discharges of diesel engine cooling water include pollutants in the San Diego Bay water supplied to the pump station at Building 812 or pollutants in the potable water supplied to the pump stations in Buildings 1357, 1362, and 1440; pollutants that the water contacts as it flows through the system; and heat from the diesel engines. A map of the diesel engine cooling water discharge locations at NASNI is shown in Attachment B (Figure B-6).

Building 812 houses one diesel engine-powered pump and discharges to the San Diego Bay at Discharge Point No. CW-001. The pump has not been operational for several years and is awaiting repair or replacement. However, when operational, test water (non-contact seawater) is pumped from San Diego Bay through a steel pipe that is approximately 48 feet long and 15 inches in diameter during the weekly pump tests. The pump discharges non-contact cooling seawater through a 2-inch steel pipe that runs approximately 12 feet into a sump that flows into the storm drain and channels into San Diego Bay. The pump is rated at 1,500 GPM and the weekly pump tests are approximately 15 minutes. The maximum weekly discharge volume for this station is up to 22,500 gallons. However, the non-contact cooling seawater only flows through the engine at 20-30 GPM during pump tests. Therefore the estimated actual weekly discharge volume for this station is 450 gallons. A line drawing for the diesel engine cooling water discharge from Building 812 is shown in Attachment C (Figure C-2).

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Building 1357 houses five diesel engine-powered pumps and discharges to the Pacific Ocean at Discharge Point No. CW-002. During the weekly pump test, single-pass non-contact cooling water from the potable water system flows through a 72-inch diameter, 25-foot long steel pipe to the five pumps. According to Order No. R9-2003-0008, when the fire sprinkler system is not actuated, this test water is pumped through 10-inch diameter, 48 feet long PVC piping to a discharge outlet outside the building onto a paved surface which then flows along the street and is absorbed into the ground or discharged into a storm drain. However, an evaluation by the Discharger of the storm water conveyance system servicing Building 1357 indicated that the cooling water is discharged to the storm drain system and routed to a holding pond used as a water feature on the golf course at NASNI. The pond discharges to the Pacific Ocean only when it overflows during prolonged rain events. Each of the five pumps is rated at 1,500 GPM and the weekly pump test is approximately 15 minutes. The maximum weekly discharge volume for this station is up to 112,500 gallons. However, the non-contact cooling water only flows through the engine at 20-30 GPM during pump tests. Therefore the estimated actual weekly discharge volume for this station is 2,250 gallons. A line drawing for the diesel engine cooling water discharge from Building 1357 is shown in Attachment C (Figure C-3).

Building 1362 houses one diesel engine-powered pump and discharges to the Pacific Ocean at Discharge Point No. CW-003. During the weekly pump test, single-pass non-contact cooling water from the potable water system flows to the pump. The pump is rated at 1,500 GPM and the weekly pump tests are approximately 15 minutes. The maximum weekly discharge volume for this station is up to 22,500 gallons. However, the non-contact cooling water only flows through the engine at 20-30 GPM during pump tests. Therefore the estimated actual weekly discharge volume for this station is 450 gallons. The piping for the non-contact cooling water leads into the floor inside the building. As-built drawings are currently not available for the Building 1362 piping system. Therefore, the discharge location for the single-pass potable water has not been identified. Based on the location of the building, the Pacific Ocean is the most probable receiving water if discharge flows to the storm drain system. A line drawing for diesel engine cooling water discharge from Building 1362 is shown in Attachment C (Figure C-4).

Building 1440 houses one diesel-engine-powered pump and discharges to the San Diego Bay at Discharge Point No. CW-004. During the weekly pump test when the pump is operational, single-pass non-contact cooling water from the potable water system flows to the pump. The pump is rated at 1,500 GPM and the weekly pump tests are approximately 15 minutes. The maximum weekly discharge volume for this station is up to 22,500 gallons. However, the non-contact cooling water only flows through the engine at 20-30 GPM during pump tests. Therefore the estimated actual weekly discharge volume for this station is 450 gallons. This water is pumped through piping to a discharge outlet outside the building onto a paved surface where it ponds and is absorbed into the ground or evaporates. If the engine is run for an extended period of time, there is the potential that the cooling water discharge would sheet flow into a storm drain inlet along the nearby roadway that drains into San

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Diego Bay. A line drawing for the diesel engine cooling water discharge from Building 1440 is shown in Attachment C (Figure C-5).

4. Pier Boom Cleaning

The security and oil containment booms placed around the vessels and piers at the Facility have marine growth and guano on them. Marine growth on oil booms placed around the ships and piers at the Facility can cause the booms to sink. Accumulated bird guano can be a health hazard. The marine growth and bird guano are washed off with high-pressure potable water or seawater.

All booms are cleaned twice per year with half cleaned each quarter. The pressure washer discharges 5 GPM and is run 6 hours per day for 2 to 3 weeks per quarter. The daily discharge when boom cleaning is performed is 1,800 gallons, with a total annual discharge of approximately 108,000 gallons.

After a response to an oil spill, oily booms are removed from the San Diego Bay by barge and transported to a designated cleaning area at NBSD for cleaning. The cleaning water from the designated cleaning area discharges to the ORP and then to the SDMSSS. Discharge points for boom cleaning at the Facility are primarily around the quay wall and the other two aircraft carrier piers at NASNI, but can occur anywhere oily booms are installed.

Pollutants that may be found in the discharge include pollutants in the potable water or San Diego Bay water used in the pressure wash, any pollutants that the water comes into contact with as it passes through the pressure-wash equipment, and contaminants washed from the surfaces of the pier booms. A map of the pier boom cleaning discharge locations at NASNI is shown in Attachment B (Figure B-7). A line drawing for the pier boom cleaning discharges is shown in Attachment C (Figure C-6).

5. Utility Vault and Manhole Dewatering

The Facility has electrical and steam utility vaults and manholes that may discharge wastes to surface waters from Discharge Point Nos. UV-001 through UV-036. The utility vaults and manholes are located at NASNI, NAB, and NRRF. Only NASNI has steam vaults. NAB and NRRF have only electrical switch or substation vaults.

Utility companies, or agencies, such as the Naval Facilities Engineering Command Southwest (NAVFAC SW) Public Works (formerly known as the Public Works Center or PWC) for the Discharger, supply resources, excluding water, as necessary for day-to-day living and operations. This includes, but is not limited to, supplies of gas, electricity, and telephone service. Electrical and steam utilities at the Facility are owned and maintained by the NAVFAC SW.

Typically, utility companies must dewater the vaults and underground structures prior to performing any repair, maintenance, and/or installation of equipment when the volume of water interferes with safety or quality of the work to be done. The

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volume of discharge could vary from a few gallons to thousands of gallons. The duration of discharge and pump rates for the discharge could also vary greatly.

The Discharger's installations in San Diego require electrical power for both shore and afloat operations. The on-base electrical power is carried through an extensive underground conduit system. Electrical utility vaults and manholes contain high voltage electrical equipment, transformers, switchgear, and/or below ground cables.

The steam utility manholes can also accumulate steam condensate water. High-pressure steamlines are also located in underground conduit systems and are accessed through utility manholes.

There are 28 electrical vaults located at NASNI that can have point source discharges. Of the 28 vaults, 20 are located on the quay walls at the piers. The quay wall vaults are subject to bay water intrusion. At high tide, bay water routinely flows into and out of the vaults. The quay wall vaults do not have dewatering or sump pumps.

The remaining eight vaults are located on land at NASNI, inside buildings, and are associated with electrical switching or substations. These vaults can also accumulate groundwater and storm water and are dewatered using automatic sump pumps. The sump pumps discharge the water directly to the sanitary sewer, or in some instances, onto the ground surface around the vault building. Depending on the volume, these discharges could reach a storm drain inlet that drains to San Diego Bay.

In addition to the vaults, electrical and steam utility manholes are located at all of the installations at the Facility. Both the electrical and steam utility manholes can accumulate groundwater and storm water that must be removed when maintenance or emergency work is required. Steam utility vaults are located at NASNI. The steam utility vaults can also accumulate steam condensate water.

There are two electrical switch or substation vaults located at NAB. These vaults are located inside buildings and are away from the quay walls and piers. These vaults can also accumulate groundwater and storm water and are dewatered using automatic sump pumps. Depending on the volume, these discharges could reach a storm drain inlet that drains to San Diego Bay. There are also electrical utility manholes at NAB.

There is one electrical switch or substation at NRRF. This substation is located inside a building and has an automated sump pump to dewater the vaults of groundwater seepage and storm water. The sump pump prevents the water from contacting the electrical equipment. The sump discharges to the ground surface around the building. Depending on volume, these discharges could reach a storm drain that drains to the San Diego Bay. There are also various electrical manholes at NRRF.

Vaults without sump pumps and manholes at the Facility are manually dewatered

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when necessary using a portable pump or pump truck. The Discharger has implemented procedures to eliminate dewatering discharges to surface waters from vaults without sump pumps or manholes. The Discharger either pumps the water into an adjacent utility manhole or transfers the water to the sanitary sewer system. However, there could be rare emergency situations that would require dewatering vaults without sump pumps or manholes onto the ground surface.

Pollutants that may be found in the discharge include pollutants in the San Diego Bay water that accumulates in pier vaults, pollutants in ground water that accumulates in shoreside vaults and manholes, pollutants in storm water that accumulates in the utility vaults and manholes, and pollutants from electrical and steam equipment (e.g., oils, grease, metals) located in the vaults and manholes. Maps of the utility vault and manhole dewatering discharge locations at NASNI, NAB, and NRRF are shown in Attachment B (Figures B-8 through B-11). A line drawing for the utility vault and manhole dewatering discharges is shown in Attachment C (Figure C-7).

Prior to the adoption of Order No. R9-2003-0008, discharges from utility vaults and manholes were regulated by the statewide General Order for Discharges from Utility Vaults and Underground Structures to Surface Waters (Order No. 96-12-DWQ, NPDES No. CAG990002). At the time of adoption of Order No. R9-2003-0008, the State Water Board was awaiting USEPA approval of the re-issued General Order (Order No. 2001-11-DWQ). In order to regulate all of the discharges at the Facility under one order, the Regional Water Board incorporated the pertinent specifications, limitations, and monitoring requirements of Order No. 2001-11-DWQ into Order No. R9-2003-0008. The State Water Board has since re-issued the General Order again, the most recent version being Order No. 2006-0008-DWQ.

6. Pier Cleaning

The ammunition pier known as Bravo Pier, at the western shore of NASNI, is located southeast of the bait barges which supply bait for the commercial fishing operations of San Diego Bay fishermen. Consequently, the area has a significant marine bird population. The marine birds roost at Bravo Pier and create a significant amount of guano. To minimize health and safety issues resulting from the accumulated guano, the pier is washed with fire system potable water once a week.

Bravo Pier is swept with a street sweeper prior to being washed. A pump located on the pier is used to supply potable water for washing. The pump is rated at 240 GPM and the pier cleaning takes approximately 120 minutes to complete. The discharge volume for the pier is approximately 28,800 gallons for each washing and 1.5 million gallons annually. The wash water discharges to San Diego Bay over the edge of the pier and from several rectangular drains located on the pier. Pollutants that may be found in the discharge include pollutants already present in the wash water and pollutants removed from the pier surface during the wash down (e.g., coliform bacteria from bird guano). A map of the pier cleaning discharge location at NASNI is shown in Attachment B (Figure B-12). A line drawing for the pier cleaning discharges is shown in Attachment C (Figure C-8).

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7. Reverse Osmosis Water Purification Unit (ROWPU)

ROWPUs are used to remove suspended solids, dissolved solids, and chemicals found in freshwater and seawater sources to a level fit for human consumption. This is done through filtration, reverse osmosis, and treating the water with select chemicals. The purification process works as follows: the raw intake water passes through a first-stage multi-media filter to remove large particles of suspended solids. Polymer is added to the raw water to coagulate the suspected solids so that they can be removed by the filter and sodium hexametaphosphate is injected into the raw water to reduce scaling and corrosion of pipes, pumps, and filters caused by hard water deposits. The filter contains six types of media including gravel, coarse garnet, tine garnet, silica sand, anthracite, and plastic. A second stage cartridge filter removes the finer suspended solids, and then a reverse osmosis unit removes dissolved solids and any suspended solids that may have passed through the multi-media and cartridge filters. Citric acid is injected downstream of the multi-media filter to remove scale deposits that build up on the reverse osmosis element and to maintain proper pH balance. Chlorine is added to the product water to reduce bacteria and make the water safe for consumption.

Each ROWPU processes a maximum of 600 gallons per hour (GPH) from freshwater or 400 GPH from seawater, and produces 10 gallons of product for every 30 gallons of raw water processed. Typically during a training event, one ROWPU is used and approximately 400 gallons of product water and approximately 800 gallons of brine are produced which are stored separately in 3,000-gallon collapsible water tanks.

After using a ROWPU, the multi-media filters are backwashed into a tank. Potable water is used as the source water for the backwashing process. The filters are backwashed for approximately 15 minutes. The maximum backwash flow rate is 120 GPM and approximately 1,800 gallons of backwash water is produced per backwash event.

The tanks are emptied at the conclusion of ROWPU exercises. Currently, the tanks are emptied into the sanitary sewer system. There are three types of discharges from the ROWPUs: product water, brine water, and backwash water. Due to the time-consuming and cumbersome nature of this activity, the Discharger has requested the ability to empty the tanks along the shoreline back into the supply source, either San Diego Bay or the Pacific Ocean. As discussed further in section IV.A and IV.D of this Fact Sheet, discharges of reverse osmosis brine and backwash water are not permitted by this Order. However, due to the low volume and high quality of discharges of ROWPU product water, these discharges will be permitted by this Order.

Pollutants that may be found in the discharges of ROWPU product water include pollutants in the San Diego Bay or Pacific Ocean water supplied to the ROWPU, pollutants that the water contacts as it circulates through the system, and pollutants that the water contacts in the temporary storage tanks prior to discharge. A map of the ROWPU product water discharge locations at NAB is shown in Attachment B

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(Figure B-13). A line drawing for the ROWPU product water discharge is shown in Attachment C (Figure C-9).

8. Boat Rinsing

Small boats are rinsed off with low-pressure potable water from local hose bibbs at boat ramps located on both the northwest and southeast sides of the NAB peninsula or other paved areas throughout NAB. The maximum discharge rate is approximately 8 GPM. When necessary, high-pressure heated potable water (maximum of 170°F) is used to remove marine growth and any marine mammal fecal matter from the boats. The approximate discharge rate for high-pressure heated potable water boat rinsing is 3.2 GPM for approximately 2 hours per day, with a total discharge up to 960 GPD.

Boat engines are flushed with potable water to remove seawater from their cooling systems. The maximum discharge rate for boat engine flushing is 8 GPM. At approximately 20 minutes per day, the flushing discharges 160 GPD.

Small boat rinse water is discharged into San Diego Bay. Pollutants that may be found in the discharge include pollutants in the source water, fecal coliform from the marine mammal feces, pollutants that could be picked up as the water passes through the high-pressure heated water system and over the surface of the boats, and oils that could be picked up in the cooling water during engine flushing. A map of the boat rinsing discharge locations at NAB is shown in Attachment B (Figure B-14). A line drawing for the boat rinsing discharges is shown in Attachment C (Figure C-10).

9. Swimmer Rinsing

Individuals that have been swimming in the San Diego Bay by the mammal pens typically rinse off using potable water at the two bayside, outdoor showers at Building 215 at NAB. The water flows from the shower platforms across the pavement and into San Diego Bay. Individuals that have been swimming in the pool, or in some cases, swimming in the San Diego Bay, rinse off using the outdoor multi-head shower unit (containing 15 shower heads) at Building 164. The shower discharges fall onto the ground surface, flow down the street, and into the storm drain system that drains into San Diego Bay.

The two showers at Building 215 discharge at a combined rate of 8 GPM and are used approximately 20 minutes per day, 2 days per week. The multi-head shower at Building 164 discharges at a rate of 60 GPM and is used approximately 10 minutes per day, 3 days per week. The total volume of swimmer rinse water is approximately 2,120 gallons per week (GPW).

Pollutants that may be found in the discharge include pollutants in the source water and pollutants that may be picked up as the water flows down the street. A map of the swimmer rinsing discharge locations at NAB is shown in Attachment B (Figure B-

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15). A line drawing for the swimmer rinsing discharges is shown in Attachment C (Figure C-11).

10. Marine Mammal Enclosure Cleaning

Marine mammal enclosure cleaning water is discharged to San Diego Bay. Pollutants that may be found in the marine mammal enclosure cleaning discharges include pollutants in the source water, fecal coliform from the sea mammal feces, and pollutants that could be picked up as the water passes through the high-pressure heated water system. A map of the marine mammal enclosure cleaning discharge locations at NAB is shown in Attachment B (Figure B-16). A line drawing for the marine mammal enclosure cleaning discharges is shown in Attachment C (Figure C-12).

11. Miscellaneous Discharges Associated With Facility Maintenance

a. Fire Hydrant Flushing. Fire hydrants are periodically flushed to remove stagnant water in the line to ensure that the proper chlorine residual is maintained in the distribution system. Hydrants are also flushed when maintenance on valves is conducted, when tests to determine hydraulic pressure and flow rates are performed, and when any rust or sediment in the line requires removal. These discharges are regulated by Order No. R9-2002-0020, NPDES No. CAG679001.

b. Fire Suppression Sprinkler System Flushing. Recurring maintenance of building fire suppression sprinkler systems includes draining and flushing the sprinkler piping to remove stagnant water and inspection and maintenance of the valves, sprinkler heads and manual actuators, and alarm infrastructure.

c. Potable Water System Operation, Maintenance, and Testing. As part of the Discharger's backflow prevention and water system maintenance programs, backflow prevention assemblies and other potable water equipment must be tested and maintained on a regular basis. Discharges of potable water may occur during testing and maintenance. These discharges are regulated by Order No. R9-2002-0020, NPDES No. CAG679001.

d. Emergency Eye Wash/Shower Maintenance. Proper maintenance of the emergency eye wash/shower stations is essential for maintaining a safe work environment. Eye wash/shower stations are flushed when maintenance is conducted. Water released from the station during maintenance is discharged to the ground and has the potential to enter the storm drain system depending on the proximity to the nearest storm drain inlet.

e. Air Conditioner Condensate. Air conditioners are located throughout the Facility and are used for environment and equipment cooling. Condensate is regularly discharged from air conditioners. However, most condensate discharges are at an extremely low flow rate and may not reach the storm drain system, depending on the proximity of the nearest storm inlet.

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f. Landscape Watering. Landscape watering constitutes a significant portion of the potable water usage at the Facility. Runoff from landscape watering can flow into the storm drain system or directly into San Diego Bay.

12. Ship Repair and Maintenance Activities

The diverse discharges from ship repair and maintenance activities could occur at several locations, including aboard ship when docked, on the piers, or on shore locations. Ship repair and maintenance activities include abrasive blasting, hydroblasting, metal grinding, painting, tank cleaning, removal of bilge and ballast water, removal of anti-fouling paint, sheet metal work, electrical work, mechanical repair, engine repair, hull repair, and sewage disposal. Discharges associated with these activities include water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum; hydroblast water; tank cleaning water from tank cleaning to remove sludge and/or dirt; clarified water from oil/water separator; steam cleaning water; demineralizer and reverse osmosis brine; oily bilge water; vessel washdown water; pipe and tank hydrostatic test water; miscellaneous low-volume water; saltbox water; paint chips; paint over spray; paint spills; hydraulic oil leaks and spills; fuel leaks and spills; abrasive blast materials; trash; miscellaneous refuse and rubbish; fiberglass dust; swept materials; and ship repair and maintenance activity debris. This Order prohibits discharges from ship repair and maintenance activities.

B. Discharge Points and Receiving Waters

1. The Facility is shown in Attachment B (Figure B-1), a part of this Order.

2. NASNI is located on the northern end of the Coronado Peninsula west of the city of San Diego's downtown district and adjacent to the city of Coronado. San Diego Bay borders NASNI on the north and east, and the Pacific Ocean borders it on the west. The base consists of 2,803 acres (2,397 on land and 406 acres in water). NASNI is located within the *Coronado Hydrologic Area* (910.10) in the *Otay Hydrologic Unit* (910.00).

3. NAB is located on a sand-spit strip known as the Silver Strand in the north-central section of the Coronado Peninsula, just west of the city of San Diego. NAB is within the city of Coronado. The Glorietta Bay area of San Diego Bay borders NAB on the north, San Diego Bay borders NAB on the east, and the Pacific Ocean borders it on the west. The base consists of 1,006 acres, including 257 beachfront acres leased from the State along the Pacific Ocean. NAB is located within the *Coronado Hydrologic Area* (910.10) in the *Otay Hydrologic Unit* (910.00).

4. NRRF occupies approximately 548 acres on the southern tip of the Silver Strand. The city of Imperial Beach adjoins the installation on the southern end, while Silver Strand State Beach is adjacent on the north. State Highway 75 parallels the eastern end of the installation. NRRF is located within the *Coronado Hydrologic Area* (910.10) in the *Otay Hydrologic Unit* (910.00).

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5. NOLF is located 10 miles south of NASNI and 1.5 miles north of the U.S. border with Mexico. NOLF is located within the *San Ysidro Hydrologic Subarea* (911.11) of the *Tijuana Valley Hydrologic Area* (911.10) of the *Tijuana Hydrologic Unit* (911.00). NOLF contains approximately 1,295 acres in the Tijuana River Valley, south of Silver Strand peninsula. Approximately 283 acres of NOLF is part of the *Tijuana River National Estuarine Sanctuary Management Authority*. This area and certain adjoining lands of the Tijuana River Valley have been designated a *National Natural Landmark*.

6. Wastewater is discharged into the Pacific Ocean, San Diego Bay, and Tijuana River as summarized below:

Table F-2. Discharge Locations

Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
NIQWWST2A	SC-001	Steam Condensate	32° 42' 23"	117° 11' 23"	San Diego Bay
NIQWWST3B	SC-002	Steam Condensate	32° 42' 23"	117° 11' 23"	San Diego Bay
NIQWWST4	SC-003	Steam Condensate	32° 42' 22"	117° 11' 20"	San Diego Bay
NIQWWST5	SC-004	Steam Condensate	32° 42' 19"	117° 11' 10"	San Diego Bay
NIQWWST6	SC-005	Steam Condensate	32° 42' 18"	117° 12' 7"	San Diego Bay
NIQWWST7	SC-006	Steam Condensate	32° 42' 17"	117° 11' 3"	San Diego Bay
NIQWWST8	SC-007	Steam Condensate	32° 42' 16"	117° 11' 0"	San Diego Bay
I23233	SC-008	Steam Condensate	32° 42' 30"	117° 11' 24"	San Diego Bay
I32390	SC-009	Steam Condensate	32° 42' 28"	117° 11' 28"	San Diego Bay
I34329	SC-010	Steam Condensate	32° 42' 28"	117° 11' 30"	San Diego Bay
I41369	SC-011	Steam Condensate	32° 42' 29"	117° 11' 32"	San Diego Bay
I43319	SC-012	Steam Condensate	32° 42' 29"	117° 11' 33"	San Diego Bay
I41168	SC-013	Steam Condensate	32° 42' 31"	117° 11' 32"	San Diego Bay
F41313	SC-014	Steam Condensate	32° 42' 38"	117° 11' 31"	San Diego Bay
F41327	SC-015	Steam Condensate	32° 42' 38"	117° 11' 31"	San Diego Bay
F34716	SC-016	Steam Condensate	32° 42' 40"	117° 11' 30"	San Diego Bay
E44181	SC-017	Steam Condensate	32° 42' 43"	117° 11' 35"	San Diego Bay
E53113	SC-018	Steam Condensate	32° 42' 43"	117° 11' 37"	San Diego Bay
E63164	SC-019	Steam Condensate	32° 42' 43"	117° 11' 42"	San Diego Bay
E71175	SC-020	Steam Condensate	32° 42' 43"	117° 11' 45"	San Diego Bay
E73104	SC-021	Steam Condensate	32° 42' 44"	117° 11' 48"	San Diego Bay
E84306	SC-022	Steam Condensate	32° 42' 42"	117° 11' 54"	San Diego Bay
F84104	SC-023	Steam Condensate	32° 42' 41"	117° 11' 54"	San Diego Bay
E92386	SC-024	Steam Condensate	32° 42' 42"	117° 11' 56"	San Diego Bay
F92184	SC-025	Steam Condensate	32° 42' 41"	117° 11' 56"	San Diego Bay
F73339	SC-026	Steam Condensate	32° 42' 38"	117° 11' 47"	San Diego Bay
F73320	SC-027	Steam Condensate	32° 42' 38"	117° 11' 47"	San Diego Bay
F71320	SC-028	Steam Condensate	32° 42' 38"	117° 11' 45"	San Diego Bay
F64390	SC-029	Steam Condensate	32° 42' 38"	117° 11' 44"	San Diego Bay
F52312	SC-030	Steam Condensate	32° 42' 38"	117° 11' 37"	San Diego Bay
F62330	SC-031	Steam Condensate	32° 42' 38"	117° 11' 41"	San Diego Bay
G52201	SC-032	Steam Condensate	32° 42' 37"	117° 11' 37"	San Diego Bay
G52208	SC-033	Steam Condensate	32° 42' 36"	117° 11' 37"	San Diego Bay
G44153	SC-034	Steam Condensate	32° 42' 37"	117° 11' 35"	San Diego Bay

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Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
G103276	SC-035	Steam Condensate	32° 42' 37"	117° 12' 2"	San Diego Bay
F103571	SC-036	Steam Condensate	32° 42' 39"	117° 12' 1"	San Diego Bay
G112287	SC-037	Steam Condensate	32° 42' 37"	117° 12' 5"	San Diego Bay
G112380	SC-038	Steam Condensate	32° 42' 36"	117° 12' 21"	San Diego Bay
J103162	SC-039	Steam Condensate	32° 42' 29"	117° 12' 21"	San Diego Bay
J103265	SC-040	Steam Condensate	32° 42' 26"	117° 12' 21"	San Diego Bay
K103165	SC-041	Steam Condensate	32° 42' 26"	117° 12' 21"	San Diego Bay
K103378	SC-042	Steam Condensate	32° 42' 24"	117° 12' 21"	San Diego Bay
K93379	SC-043	Steam Condensate	32° 42' 24"	117° 12' 21"	San Diego Bay
K93399	SC-044	Steam Condensate	32° 42' 23"	117° 12' 21"	San Diego Bay
N103264	SC-045	Steam Condensate	32° 42' 16"	117° 12' 21"	San Diego Bay
M103163	SC-046	Steam Condensate	32° 42' 20"	117° 12' 21"	San Diego Bay
L143267	SC-047	Steam Condensate	32° 42' 22"	117° 12' 21"	San Diego Bay
M52158	SC-048	Steam Condensate	32° 42' 19"	117° 11' 38"	San Diego Bay
L52320	SC-049	Steam Condensate	32° 42' 19"	117° 11' 37"	San Diego Bay
L44385	SC-050	Steam Condensate	32° 42' 20"	117° 11' 36"	San Diego Bay
M43171	SC-051	Steam Condensate	32° 42' 19"	117° 11' 35"	San Diego Bay
L63257	SC-052	Steam Condensate	32° 42' 21"	117° 11' 43"	San Diego Bay
O151288	SC-053	Steam Condensate	32° 42' 19"	117° 11' 22"	San Diego Bay
O1512881	SC-054	Steam Condensate	32° 42' 14"	117° 12' 24"	San Diego Bay
P152136	SC-055	Steam Condensate	32° 42' 12"	117° 12' 24"	San Diego Bay
P144133	SC-056	Steam Condensate	32° 42' 12"	117° 12' 22"	San Diego Bay
P142153	SC-057	Steam Condensate	32° 42' 12"	117° 12' 20"	San Diego Bay
P132153	SC-058	Steam Condensate	32° 42' 12"	117° 12' 16"	San Diego Bay
P122163	SC-059	Steam Condensate	32° 42' 12"	117° 12' 11"	San Diego Bay
S141303	SC-060	Steam Condensate	32° 42' 1"	117° 12' 20"	San Diego Bay
X94212	SC-061	Steam Condensate	32° 41' 47"	117° 12' 0"	San Diego Bay
S22373	SC-062	Steam Condensate	32° 41' 59"	117° 11' 25"	San Diego Bay
T1E2390	SC-063	Steam Condensate	32° 41' 55"	117° 11' 16"	San Diego Bay
NIQWST1	SC-064	Steam Condensate	32° 42' 24"	117° 11' 24"	San Diego Bay
T11171	SC-065	Steam Condensate	32° 41' 58"	117° 11' 15"	San Diego Bay
U2E4224	SC-066	Steam Condensate	32° 41' 54"	117° 11' 13"	San Diego Bay
Building 812	CW-001	Diesel Engine Cooling Water	32° 42' 42"	117° 13' 36"	San Diego Bay
Building 1357	CW-002	Diesel Engine Cooling Water	32° 42' 9"	117° 12' 9"	Pacific Ocean
Building 1362	CW-003	Diesel Engine Cooling Water	32° 41' 29"	117° 13' 15"	Pacific Ocean
Building 1440	CW-004	Diesel Engine Cooling Water	32° 41' 48"	117° 13' 15"	San Diego Bay
Piers	BW-001[1]	Pier Boom Cleaning	32° 42' 21"	117° 11' 18"	San Diego Bay
Switch Station a	UV-001	Utility Vault and Manhole Dewatering	32° 42' 7"	117° 10' 57"	San Diego Bay
Switch Station b	UV-002	Utility Vault and Manhole Dewatering	32° 42' 36"	117° 11' 24"	San Diego Bay
Switch Station c	UV-003	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 11"	San Diego Bay
Switch Station d	UV-004	Utility Vault and Manhole Dewatering	32° 42' 38"	117°11' 24"	San Diego Bay

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Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Switch Station f	UV-005	Utility Vault and Manhole Dewatering	32° 41' 42"	117° 12' 13"	San Diego Bay
Switch Station g	UV-006	Utility Vault and Manhole Dewatering	32° 41' 26"	117° 11' 39"	San Diego Bay
Switch Station h	UV-007	Utility Vault and Manhole Dewatering	32° 41' 20"	117° 11' 27"	San Diego Bay
Switch Station j	UV-008	Utility Vault and Manhole Dewatering	32° 41' 2"	117° 11' 25"	San Diego Bay
Switch Station l	UV-009	Utility Vault and Manhole Dewatering	32° 41' 16"	117° 11' 56"	San Diego Bay
Quay Wall m1	UV-010	Utility Vault and Manhole Dewaterivng	32° 42' 23"	117° 11' 25"	San Diego Bay
Quay Wall m2	UV-011	Utility Vault and Manhole Dewatering	32° 42' 23"	117° 11' 23"	San Diego Bay
Quay Wall m3	UV-012	Utility Vault and Manhole Dewaterivng	32° 42' 22"	117° 11' 21"	San Diego Bay
Quay Wall m4	UV-013	Utility'Vault and Manhole Dewatering	32° 42' 22"	117° 11' 20"	San Diego Bay
Quay Wall m5	UV-014	Utility Vault and Manhole Dewatering	32° 42' 21"	117° 11' 18"	San Diego Bay
Quay Wall m6	UV-015	Utility Vault and Manhole Dewatering	32° 42' 21"	117° 11' 17"	San Diego Bay
Quay Wall m7	UV-016	Utility Vault and Manhole Dewatering	32° 42' 20"	117° 11' 15"	San Diego Bay
Quay Wall m8	UV-017	Utility Vault and Manhole Dewatering	32° 42' 20"	117° 11' 13"	San Diego Bay
Quay Wall m9	UV-018	Utility Vault and Manhole Dewatering	32° 42' 19"	117° 11' 12"	San Diego Bay
Quay Wall m10	UV-019	Utility Vault and Manhole Dewatering	32° 42' 19"	117° 11' 10"	San Diego Bay
Quay Wall m11	UV-020	Utility Vault and Manhole Dewatering	32° 42' 18"	117° 11' 9"	San Diego Bay
Quay Wall m12	UV-021	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 6"	San Diego Bay
Quay Wall m13	UV-022	Utility Vault and Manhole Dewatering	32° 42' 17"	117° 11' 5"	San Diego Bay
Quay Wall m14	UV-023	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 4"	San Diego Bay
Quay Wall m15	UV-024	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 2"	San Diego Bay
Quay Wall m16	UV-025	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 0"	San Diego Bay
Quay Wall m17	UV-026	Utility Vault and Manhole Dewatering	32° 42' 15"	117° 10' 58"	San Diego Bay
Quay Wall m18	UV-027	Utility Vault and Manhole Dewatering	32° 42' 15"	117° 10' 57"	San Diego Bay
Quay Wall m19	UV-028	Utility Vault and Manhole Dewatering	32° 42' 14"	117° 10' 55"	San Diego Bay
Quay Wall m20	UV-029	Utility Vault and Manhole Dewatering	32° 42' 14"	117° 10' 53"	San Diego Bay
B1354	UV-030	Utility Vault and Manhole Dewatering	32° 42' 9"	117° 12' 9"	San Diego Bay

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Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
Sub Station 308 (NAB)	UV-031	Utility Vault and Manhole Dewatering	32° 40' 31"	117° 9' 38"	San Diego Bay
Sub Station 509 (NAB)	UV-032	Utility Vault and Manhole Dewatering	32° 40' 23"	117° 10' 1"	San Diego Bay
NRRF Sub Station	UV-033	Utility Vault and Manhole Dewatering	32° 35' 56"	117° 7' 25"	San Diego Bay
Building 33 Steam Vault	UV-034	Utility Vault and Manhole Dewatering	32° 42' 37"	117° 11' 37"	San Diego Bay
Building 689 Steam Vault	UV-035	Utility Vault and Manhole Dewatering	32° 42' 16"	117° 11' 28"	San Diego Bay
Building 698 Steam Vault	UV-036	Utility Vault and Manhole Dewatering	32° 42' 9"	117° 11' 27"	San Diego Bay
Bravo Pier	PW-001	Pier Cleaning	32° 41' 43"	117° 13 '36"	San Diego Bay
NAB Shoreline	RO-001[2]	ROWPU Product Water	32° 40' 24"	117° 9' 32"	San Diego Bay or Pacific Ocean
Ramp	BR-001[3]	Boat Rinsing	32° 40' 47"	117° 9' 31"	San Diego Bay
Ramp	BR-002[3]	Boat Rinsing	32° 40' 32"	117° 9' 22"	San Diego Bay
Building 164	SR-001[4]	Swimmer Rinsing	32° 40' 40"	117° 9' 31"	San Diego Bay
Building 215	SR-002[4]	Swimmer Rinsing	32° 40' 48"	117° 9' 29"	San Diego Bay
Marine Mammal Enclosures	ME-001[5]	Marine Mammal Enclosure Cleaning	32° 40' 50"	117° 9' 30"	San Diego Bay
3 (NASNI)	NAS-001	Industrial Storm Water	32° 41' 15"	117° 11' 53"	Pacific Ocean
5 (NASNI)	NAS-002	Industrial Storm Water	32° 41' 16"	117° 12'47"	Pacific Ocean
6 (NASNI)	NAS-003	Industrial Storm Water	32° 41' 11"	117° 13' 1"	Pacific Ocean
7 (NASNI)	NAS-004	Industrial Storm Water	32° 41' 7"	117° 13' 12"	Pacific Ocean
8 (NASNI)	NAS-005	Industrial Storm Water	32° 41' 46"	117° 13' 37"	San Diego Bay
9 (NASNI)	NAS-006	Industrial Storm Water	32° 42' 9"	117° 13' 27"	San Diego Bay
10 (NASNI)	NAS-007	Industrial Storm Water	32° 42' 18"	117° 13' 22"	San Diego Bay
11 (NASNI)	NAS-008	Industrial Storm Water	32° 42' 24"	117° 13' 16"	San Diego Bay
12 (NASNI)	NAS-009	Industrial Storm Water	32° 42' 30"	117° 13' 10"	San Diego Bay
14 (NASNI)	NAS-010	Industrial Storm Water	32° 42' 46"	117° 12' 38"	San Diego Bay
15 (NASNI)	NAS-011	Industrial Storm Water	32° 42' 48"	117° 12' 35"	San Diego Bay
16 (NASNI)	NAS-012	Industrial Storm Water	32° 42' 50"	117° 12' 25"	San Diego Bay
17 (NASNI)	NAS-013	Industrial Storm Water	32° 42' 53"	117° 12' 6"	San Diego Bay
21 (NASNI)	NAS-014	Industrial Storm Water	32° 42' 38"	117° 11' 20"	San Diego Bay
22A (NASNI)	NAS-015	Industrial Storm Water	32° 42' 35"	117° 11' 22"	San Diego Bay
22B (NASNI)	NAS-016	Industrial Storm Water	32° 42' 35"	117° 11' 21"	San Diego Bay
23A (NASNI)	NAS-017	Industrial Storm Water	32° 42' 32"	117° 11' 23"	San Diego Bay
23B (NASNI)	NAS-018	Industrial Storm Water	32° 42' 34"	117° 11' 26"	San Diego Bay
24 (NASNI)	NAS-019	Industrial Storm Water	32° 42' 30"	117° 11' 23"	San Diego Bay
25 (NASNI)	NAS-020	Industrial Storm Water	32° 42' 25"	117° 11' 26"	San Diego Bay
26 (NASNI)	NAS-021	Industrial Storm Water	32° 42' 24"	117° 11' 26"	San Diego Bay
27 (NASNI)	NAS-022	Industrial Storm Water	32° 42' 23"	117° 11' 25"	San Diego Bay
28 (NASNI)	NAS-023	Industrial Storm Water	32° 42' 23"	117° 11' 24"	San Diego Bay
29 (NASNI)	NAS-024	Industrial Storm Water	32° 42' 22"	117° 11' 19"	San Diego Bay
30 (NASNI)	NAS-025	Industrial Storm Water	32° 42' 21"	117° 11' 17"	San Diego Bay
31 (NASNI)	NAS-026	Industrial Storm Water	32° 42' 21"	117° 11' 16"	San Diego Bay
31A (NASNI)	NAS-027	Industrial Storm Water	32° 42' 20"	117° 11' 15"	San Diego Bay
32 (NASNI)	NAS-028	Industrial Storm Water	32° 42' 20"	117° 11' 14"	San Diego Bay

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Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
33 (NASNI)	NAS-029	Industrial Storm Water	32° 42' 19"	117° 11' 11"	San Diego Bay
34 (NASNI)	NAS-030	Industrial Storm Water	32° 42' 18"	117° 11' 7"	San Diego Bay
35 (NASNI)	NAS-031	Industrial Storm Water	32° 42' 17"	117° 11' 4"	San Diego Bay
36 (NASNI)	NAS-032	Industrial Storm Water	32° 42' 16"	117° 11' 0"	San Diego Bay
37 (NASNI)	NAS-033	Industrial Storm Water	32° 42' 15"	117° 10' 57"	San Diego Bay
38 (NASNI)	NAS-034	Industrial Storm Water	32° 42' 14"	117° 10' 54"	San Diego Bay
39 (NASNI)	NAS-035	Industrial Storm Water	32° 42' 13"	117° 10' 52"	San Diego Bay
43 (NASNI)	NAS-036	Industrial Storm Water	32° 41' 24"	117° 12' 24"	Pacific Ocean
46 (NASNI)	NAS-037	Industrial Storm Water	32° 41' 43"	117° 13' 37"	San Diego Bay
50 (NASNI)	NAS-038	Non-Industrial Storm Water	32° 42' 31"	117° 13' 31"	San Diego Bay
53 (NASNI)	NAS-039	Industrial Storm Water	32° 42' 41"	117° 12' 53"	San Diego Bay
59 (NASNI)	NAS-040	Industrial Storm Water	32° 42' 53"	117° 12' 10"	San Diego Bay
62 (NASNI)	NAS-041	Industrial Storm Water	32° 42' 53"	117° 11' 56"	San Diego Bay
CVN1 (NASNI)	NAS-042	Industrial Storm Water	32° 42' 52"	117° 11' 41"	San Diego Bay
CVN2 (NASNI)	NAS-043	Industrial Storm Water	32° 42' 52"	117° 11' 37"	San Diego Bay
CVN4 (NASNI)	NAS-044	Industrial Storm Water	32° 42' 51"	117° 11' 37"	San Diego Bay
CVN5 (NASNI)	NAS-045	Industrial Storm Water	32° 42' 49"	117° 11' 33"	San Diego Bay
CVN6 (NASNI)	NAS-046	Industrial Storm Water	32° 42' 49"	117° 11' 29"	San Diego Bay
CVN8 (NASNI)	NAS-047	Industrial Storm Water	32° 42' 41"	117° 11' 18"	San Diego Bay
CVN9 (NASNI)	NAS-048	Industrial Storm Water	32° 42' 36"	117° 11' 20"	San Diego Bay
CVN12 (NASNI)	NAS-049	Industrial Storm Water	32° 42' 52"	117° 11' 43"	San Diego Bay
CVN13A (NASNI)	NAS-050	Industrial Storm Water	32° 42' 39"	117° 11' 19"	San Diego Bay
CVN13B (NASNI)	NAS-051	Industrial Storm Water	32° 42' 33"	117° 11' 22"	San Diego Bay
CVN14 (NASNI)	NAS-052	Industrial Storm Water	32° 42' 40"	117° 11' 18"	San Diego Bay
CVN15 (NASNI)	NAS-053	Industrial Storm Water	32° 42' 49"	117° 11' 29"	San Diego Bay
CVN16 (NASNI)	NAS-054	Industrial Storm Water	32° 42' 48"	117° 11' 27"	San Diego Bay
CVN17 (NASNI)	NAS-055	Industrial Storm Water	32° 42' 47"	117° 11' 25"	San Diego Bay
CVN18 (NASNI)	NAS-056	Industrial Storm Water	32° 42' 46"	117° 11' 23"	San Diego Bay
CVN20 (NASNI)	NAS-057	Industrial Storm Water	32° 42' 45"	117° 11' 22"	San Diego Bay
CVN21 (NASNI)	NAS-058	Industrial Storm Water	32° 42' 43"	117° 11' 18"	San Diego Bay
2 (NAB)	NAB-001	Industrial Storm Water	32° 40' 30"	117° 9' 58"	San Diego Bay
3 (NAB)	NAB-002	Industrial Storm Water	32° 40' 30"	117° 9' 54"	San Diego Bay
4 (NAB)	NAB-003	Industrial Storm Water	32° 40' 31"	117° 9' 52"	San Diego Bay
5 (NAB)	NAB-004	Industrial Storm Water	32° 40' 42"	117° 9' 37"	San Diego Bay
6 (NAB)	NAB-005	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
7 (NAB)	NAB-006	Industrial Storm Water	32° 40' 49"	117° 9' 28"	San Diego Bay
9 (NAB)	NAB-007	Industrial Storm Water	32° 40' 33"	117° 9' 18"	San Diego Bay
10 (NAB)	NAB-008	Industrial Storm Water	32° 40' 32"	117° 9' 19"	San Diego Bay
11 (NAB)	NAB-009	Industrial Storm Water	32° 40' 32"	117° 9' 20"	San Diego Bay
17 (NAB)	NAB-010	Industrial Storm Water	32° 40' 16"	117° 9' 37"	San Diego Bay
18 (NAB)	NAB-011	Industrial Storm Water	32° 40' 30"	117° 10' 1"	San Diego Bay
30 (NAB)	NAB-012	Industrial Storm Water	32° 40' 34"	117° 9' 47"	San Diego Bay
31 (NAB)	NAB-013	Industrial Storm Water	32° 40' 36"	117° 9' 45"	San Diego Bay
33 (NAB)	NAB-014	Industrial Storm Water	32° 40' 40"	117° 9' 39"	San Diego Bay
34 (NAB)	NAB-015	Industrial Storm Water	32° 40' 41"	117° 9' 38"	San Diego Bay
41 (NAB)	NAB-016	Industrial Storm Water	32° 40' 30"	117° 9' 56"	San Diego Bay
51 (NAB)	NAB-017	Industrial Storm Water	32° 40' 49"	117° 9' 26"	San Diego Bay

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Application Name	Discharge Point	Effluent Description	Discharge Point Latitude	Discharge Point Longitude	Receiving Water
52 (NAB)	NAB-018	Industrial Storm Water	32° 40' 49"	117° 9' 26"	San Diego Bay
53 (NAB)	NAB-019	Industrial Storm Water	32° 40' 47"	117° 9' 24"	San Diego Bay
54 (NAB)	NAB-020	Industrial Storm Water	32° 40' 45"	117° 9' 21"	San Diego Bay
57 (NAB)	NAB-021	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
108 (NAB)	NAB-022	Industrial Storm Water	32° 40' 43"	117° 9' 35"	San Diego Bay
OLF 9 (NAB)	NAB-023	Industrial Storm Water	32° 40' 31"	117° 9' 18"	San Diego Bay
OLF 11 (NAB)	NAB-024	Non-Industrial Storm Water	32° 40' 33"	117° 9' 49"	San Diego Bay
OLF 12 (NAB)	NAB-025	Industrial Storm Water	32° 40' 34"	117° 9' 47"	San Diego Bay
OLF 13 (NAB)	NAB-026	Industrial Storm Water	32° 40' 35"	117° 9' 46"	San Diego Bay
OLF 15 (NAB)	NAB-027	Industrial Storm Water	32° 40' 37"	117° 9' 43"	San Diego Bay
OLF 16 (NAB)	NAB-028	Industrial Storm Water	32° 40' 38"	117° 9' 42"	San Diego Bay
OLF 18 (NAB)	NAB-029	Industrial Storm Water	32° 40' 39"	117° 9' 40"	San Diego Bay
OLF 19 (NAB)	NAB-030	Industrial Storm Water	32° 40' 43"	117° 9' 36"	San Diego Bay
OLF 20 (NAB)	NAB-031	Industrial Storm Water	32° 40' 90"	117° 9' 35"	San Diego Bay
OLF 21 (NAB)	NAB-032	Industrial Storm Water	32° 40' 37"	117° 9' 51"	San Diego Bay
OLF 22 (NAB)	NAB-033	Industrial Storm Water	32° 40' 38"	117° 9' 50"	San Diego Bay
OLF 23 (NAB)	NAB-034	Industrial Storm Water	32° 40' 38"	117° 9' 48"	San Diego Bay
OLF 24 (NAB)	NAB-035	Industrial Storm Water	32° 40' 39"	117° 9' 47"	San Diego Bay
OLF 25 (NAB)	NAB-036	Industrial Storm Water	32° 40' 39"	117° 9' 46"	San Diego Bay
OLF 26 (NAB)	NAB-037	Industrial Storm Water	32° 40' 40"	117° 9' 45"	San Diego Bay
OLF 27 (NAB)	NAB-038	Industrial Storm Water	32° 40' 41"	117° 9' 45"	San Diego Bay
OLF 28 (NAB)	NAB-039	Industrial Storm Water	32° 40' 42"	117° 9' 44"	San Diego Bay
OLF 29 (NAB)	NAB-040	Industrial Storm Water	32° 40' 42"	117° 9' 43"	San Diego Bay
OLF 30 (NAB)	NAB-041	Industrial Storm Water	32° 40' 43"	117° 9' 42"	San Diego Bay
OLF 31 (NAB)	NAB-042	Industrial Storm Water	32° 40' 44"	117° 9' 41"	San Diego Bay
OLF 33 (NAB)	NAB-043	Industrial Storm Water	32° 40' 45"	117° 9' 40"	San Diego Bay
OLF 34 (NAB)	NAB-044	Industrial Storm Water	32° 40' 45"	117° 9' 39"	San Diego Bay
OLF 35 (NAB)	NAB-045	Industrial Storm Water	32° 40' 46"	117° 9' 38"	San Diego Bay
OLF 36 (NAB)	NAB-046	Industrial Storm Water	32° 40' 44"	117° 9' 34"	San Diego Bay
OLF 37 (NAB)	NAB-047	Industrial Storm Water	32° 40' 29"	117° 9' 55"	San Diego Bay
OLF 39 (NAB)	NAB-048	Industrial Storm Water	32° 40' 32"	117° 9' 50"	San Diego Bay
OLF 42 (NAB)	NAB-049	Industrial Storm Water	32° 40' 30"	117° 9' 23"	San Diego Bay
OLF 43 (NAB)	NAB-050	Industrial Storm Water	32° 40' 49"	117° 9' 36"	San Diego Bay
OLF 44 (NAB)	NAB-051	Industrial Storm Water	32° 40 '49"	117° 9' 27"	San Diego Bay
OLF 45 (NAB)	NAB-052	Industrial Storm Water	32° 40' 47"	117° 9' 31"	San Diego Bay
2 (NOLF)	NOLF-001	Industrial Storm Water	32° 33' 50"	117° 6' 28"	Tijuana River
3 (NOLF)	NOLF-002	Industrial Storm Water	32° 33' 50"	117° 6' 25"	Tijuana River
4 (NOLF)	NOLF-003	Industrial Storm Water	32° 33' 51"	117° 6' 21"	Tijuana River
5 (NOLF)	NOLF-004	Industrial Storm Water	32° 33' 53"	117° 6' 14"	Tijuana River

[1] Discharge points for boom cleaning are primarily around the quay wall and the other two aircraft carrier piers at NASNI, but pier boom cleaning can occur at any point where pier booms are installed. The discharge point identified in the table represents a point along the quay wall at NASNI in the general area where most of the discharges occur.

[2] Discharges of product water from the ROWPU training exercises occur along the beaches both bayside and surfside (oceanside). The discharge point identified in the table represents a point along the shoreline on the southeastern side of the NAB peninsula in the general area where the discharges occur.

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[3] Discharges from boat rinsing activities may occur at industrial outfalls depending on the actual location of the rinsing activity at NAB. The discharge points identified in the table represent the location of two boat ramps in the general area where most of the discharges occur.

[4] The discharge points identified in the table represent the location of the showers at NAB at Buildings 164 and 215.

[5] The discharge point identified in the table represents the general location of the marine mammal enclosures at NAB.

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C. Summary of Existing Requirements and Self-Monitoring Report (SMR) Data

1. Discharge prohibitions contained in Order No. R9-2003-0008 are as follows:

a. Discharge of the following wastes are prohibited:

i. paint chips;
ii. blasting materials;
iii. paint over spray;
iv. paint spills;
v. water contaminated with abrasive blast materials, paint, oils, fuels, lubricants, solvents, or petroleum;
vi. hydroblast water;
vii. tank cleaning water from tank cleaning to remove sludge and/or dirt;
viii. clarified water from oil and water separator, except for storm water discharges treated by an oil and water separator and reported by the Discharger to the Regional Board;
ix. steam cleaning water;
x. pipe and tank hydrostatic test water, unless regulated by an NPDES permit;
xi. saltbox water;
xii. hydraulic oil leaks and spills;
xiii. fuel leaks and spills;
xiv. trash;
xv. miscellaneous refuse and rubbish;
xvi. fibreglass dust;
xvii. swept materials;
xviii. ship repair and maintenance activity debris;
xix. demineralizer and reverse osmosis brine; and
xx. oily bilge water.

b. The thermal waste discharge from *engine cooling/sprinkler water* discharges shall not be greater than 4°F above the natural temperature of the receiving water unless the Regional Board grants, and the State Water Resources Control Board concurs with, an exception to the 4°F temperature limit pursuant to the *General Water Quality Provisions of the Thermal Plan*.

c. Compliance with the waste discharge prohibitions contained in the Basin Plan and as listed in Attachment C to Order No. R9-2003-0008 was required as a condition of the Order.

d. Discharges of wastes that have not been described in the Report of Waste Discharge (RWD) and Fact Sheet for Order No. R9-2003-0008, and discharges of waste in a manner or to a location that has not been specifically described in the RWD and Fact Sheet for Order No. R9-2003-0008 are prohibited unless regulated by applicable waste discharge requirements.

e. Except as allowed in the Storm Water Pollution Prevention Plan (SWPPP) requirements of Order No. R9-2003-0008, non-storm water discharges that discharge either directly or indirectly to waters of the United States are prohibited. Prohibited non-storm water discharges must be either eliminated or permitted by a separate NPDES permit.

f. Industrial storm water discharges and authorized or permitted non-storm water discharges shall not cause or threaten to cause pollution, contamination, or nuisance as defined in CWC Section 13050.

g. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields as noted in the Enclosed Bay and Estuaries Policy.

2. Discharge specifications contained in Order No. R9-2003-0008 are as follows:

a. The Discharger shall not cause pollution, contamination, or nuisance, as those terms are defined in CWC section 13050, as a result of the treatment or discharge of wastes.

b. Whenever the analyses of an industrial storm water discharge from any industrial activity contains a copper concentration greater than 63.6 µg/L or a zinc concentration greater than 117 µg/L, the Discharger shall perform the following task:

i. review and modify the SWPPP as necessary to reduce the concentrations of copper and zinc;
ii. after modifying the SWPPP, sample and analyze the next two storm water runoff events;
iii. document the review and the modifications to the SWPPP, and document the sampling analysis.

c. For NASNI and NAB, the discharge of the first ¼ inch of storm water runoff from all high risk areas[1] shall be terminated no later than 2 years after the adoption of Order No. R9-2003-0008.

d. For NASNI and NAB, effective 4 years after the adoption of Order No. R9-2003-0008, in a 96-hour static or continuous flow bioassay (toxicity) test, undiluted storm water runoff associated with industrial activity shall not produce less than

[1] *High-risk areas* are areas where wastes or pollutants (including abrasive blast grit material, primer, paint, paint chips, solvents, oils, fuels, sludges, detergents, cleaners, hazardous substances, toxic pollutants, non-conventional pollutants, materials of petroleum origin, or other substances of water quality significance) are subject to precipitation and runoff.

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90% survival, 50% of the time, and not less than 70 percent survival, 10% of the time, using standard test species and protocol.

e. During the 4-year period before the effective date of the toxicity limit set forth in the above specification, the Discharger shall conduct a study of the toxicity in storm water discharges from all areas of NASNI and NAB at which industrial activities are undertaken and shall recommend a scientifically valid survival rate for acute exposure to discharges of storm water from industrial areas at NASNI and NAB. The study may include a Toxicity Identification Evaluation (TIE), or a Toxicity Reduction Evaluation (TRE).

f. All waste treatment, containment and disposal facilities shall be protected against 100-year peak stream flows as defined by the San Diego County Flood Control Agency.

g. All waste treatment, containment and disposal facilities shall be protected against erosion, overland runoff and other impacts resulting from a 100-year frequency 24-hour storm.

h. Collected screenings, sludges, and other solids removed from liquid wastes, shall be disposed of in compliance with appropriate local, regional, state, and federal regulations or statutes.

i. Waste discharges shall be essentially free of:

i. Material that is floatable or will become floatable upon discharge.
ii. Settleable material or substances that may form sediments from which will degrade benthic communities or other aquatic life.
iii. Substances which will accumulate to toxic levels in marine waters, sediments, or biota.
iv. Materials that result in aesthetically undesirable discoloration of receiving waters.
v. Substances that significantly decrease the natural light to benthic communities and other marine life.

3. Provisions contained in Order No. R9-2003-0008 required the Discharger to do the following:

a. The Discharger shall reduce or prevent pollutants associated with industrial activity in storm water discharges and authorized non-storm water discharges through implementation of *best available technology economically achievable* (BAT) for toxic and non-conventional pollutants, and *best conventional pollutant control technology* (BCT) for conventional pollutants.

b. The Discharger shall develop and implement a Storm Water Pollution Prevention Plan (SWPPP) that complies with the requirements in Attachment D, Section A of Order No. R9-2003-0008 and that includes *Best Mangagement Practices* (BMPs) that achieve BAT and BCT.

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4. Order No. R9-2003-0008 established special conditions for utility vault and manhole dewatering discharges. The special conditions included reducing or preventing pollutants associated with these discharges through the implementation of BAT and BCT; development and implementation of a *Pollution Prevention Plan* (PLAN) with all of the required elements that includes BMPs that achieve BAT and BCT; and actions to be taken as a result of an exceedance of Receiving Water Limitations by a utility vault or manhole dewatering discharge.

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D. Compliance Summary

1. On April 13, 2004, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2003-0008. Major findings reported from that inspection include:

   a. The laboratory analytical results did not contain the name or initials of the analysts as required by MRP R9-2003-0008 A.6.d.

   b. Hazardous material stored on the Stennis Pier did not have adequate secondary containment and thus create the potential for an unpermitted discharge and a threat to cause pollution of a surface water (Permit A.5, 5; BMP 115).

   c. Scrap metal storage containers did not have covers to prevent materials, such as copper and zinc, from washing into the storm sewer system (Permit A.5, 6; BMP 061).

   d. Scrap metal storage containers did not have covers to prevent precipitation from washing materials into the storm water system (BMP 061).

   e. Reported sample pH readings were taken at the contract laboratory and thus do not meet the requirements of 40 CFR Part 136 which requires pH to be performed in situ or within 15 minutes of taking the sample (MRP R9-2003-0008 A.2).

2. On December 12, 2007, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2003-0008. Major findings reported from that inspection include:

   a. Monitoring and Reporting Program No. R9-2003-0008, Section C.4, Evaluation Monitoring of the Aquashield™, Aquaswirl Stormwater Treatment System, states that the discharger shall submit an evaluation of the treatment systems annually. The evaluation must include the following: maintenance records, volume or quantity of captured materials removed, a description of materials removed, the percent removal for the monitored parameters, and a description of the storm events that were sampled. This information was not provided in the 2006/2007 Annual Stormwater Monitoring Report.

   b. Monitoring and Reporting Program No. R9-2003-0008, Sections C.7.d and C.7.f, Stormwater Discharges and Other Visual Observations, state that "*Monthly, the Discharger shall visually observe stormwater storage and containment areas…*",

and "*The Discharger shall maintain records of all visual observations, personnel, observation dates/locations, and corrective actions…*", respectively. Monthly stormwater observations were conducted; however, no records of observations, personnel, corrective actions, etc. were provided for the storage and containment areas.

c. Regional Water Board Order No. R9-2003-0008, Attachment D, Section A.4.e, requires that "*activity which may have potential pollutant sources*" be identified on the Site Map. The portable toilets were not identified on the Site Map. Specifically five portable toilets were stored at east end of Juliet Pier near the office trailers and Outfall No. CVN8.

d. Regional Water Board Order No. R9-2003-0008, Attachment D, Section A.9.d, states that the Discharger shall conduct an Annual Comprehensive Site Compliance Evaluation with an evaluation report that includes the following (among other items): the dates of all significant corrective actions of any incidents of noncompliance and a certification that the discharger has completed the annual inspection and is complying with this Order. This information was not provided in the 2006/2007 Annual Stormwater Monitoring Report.

e. Regional Water Board Order no. R9-2003-0008, Provision D.2, requires the Discharger to implement a SWPPP that includes BMPs that achieve best conventional pollutant control technology (BCT). It was observed during the facility inspection that 55-gallon drums were not stored in accordance with the site-specific SWPPP (Section 4.6.70) on the eastern portion of the berth Juliet Pier. Specifically, three 55-gallon drums were observed stored on a plastic constructed secondary containment system. BMP 055 of the site-specific SWPPP, requires the use of overpack containers or containment pallets for the storage of 55-gallon drums outside of designated storage areas that are provided with permanent secondary containment. In addition, the practice of using the constructed secondary plastic in place of specified secondary containment practices did not comply with the Stormwater BMPs Guidance for Contractors Working on Navy Piers, dated August 2005. This guidance document is provided to each contractor working on the piers according to Mr. Chichester (Water Program Manager). Specifically, Section 3 of the guidance manual, Materials Waste/Labeling, Storage and Handling Procedures, requires that the "secondary containment must be large enough to contain materials/waste from the largest container plus rainwater."

f. The Facility exceeded effluent limitations specified in Regional Water Board Order No. R9-2003-0008, Section B.2 at Outfall No. 14 for both samples taken during the 2006/2007 sampling period. The Order specifies effluent limits of 63.6 µg/L of total copper and 117 µg/L of zinc at Outfall No. 14. The Facility reported the following exceedances of these effluent limitations on their SMRs submitted to the Regional Water Board.

i. December 27, 2007 – 76 µg/L, total copper;
ii. December 27, 2007 – 210 µg/L, total zinc;

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iii. April 20, 2007 – 610 µg/L, total copper; and
iv. April 20, 2007 – 3,800 µg/L, total zinc.

E. Planned Changes – Not Applicable

III. APPLICABLE PLANS, POLICIES, AND REGULATIONS

The requirements contained in the proposed Order are based on the requirements and authorities described in this section.

A. Legal Authorities

This Order is issued pursuant to section 402 of the federal Clean Water Act (CWA) and implementing regulations adopted by the USEPA and chapter 5.5, division 7 of the California Water Code (commencing with section 13370). It shall serve as a NPDES permit for point source discharges from this Facility to surface waters. This Order also serves as WDRs pursuant to article 4, chapter 4, division 7 of the Water Code (commencing with section 13260).

B. California Environmental Quality Act (CEQA)

Under Water Code section 13389, this action to adopt an NPDES permit is exempt from the provisions of CEQA, Public Resources Code sections 21100 through 21177.

C. State and Federal Regulations, Policies, and Plans

1. **Water Quality Control Plans.** The Regional Water Quality Control Board (Regional Water Board) adopted a Water Quality Control Plan for the San Diego Basin (hereinafter Basin Plan) on September 8, 1994, and last amended on April 25, 2007. The Basin Plan was subsequently approved by the State Water Resources Control Board (State Water Board) on December 13, 1994. Subsequent revisions to the Basin Plan have also been adopted by the Regional Water Board and approved by the State Water Board. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the plan. In addition, the Basin Plan implements State Water Board Resolution No. 88-63, which established State policy that all waters, with certain exceptions, should be considered suitable or potentially suitable for municipal or domestic supply. Requirements of this Order implement the Basin Plan. Beneficial uses applicable to the Pacific Ocean, the San Diego Bay, and the Tijuana River are as follows:

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Table F-3. Basin Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
CW-002, CW-003, RO-001, NAS-001 through NAS-004, and NAS-036	Pacific Ocean	Existing: Industrial service supply; navigation; contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; aquaculture; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting
SC-001 through SC-066, CW-001, CW-004, BW-001, UV-001 through UV-036, PW-001, RO-001, BR-001, BR-002, SR-001, SR-002, ME-001, NAS-005 through NAS-035 and NAS-37 through NAS-058, and NAB-001 through NAB-52	San Diego Bay	Existing: Industrial service supply; navigation; contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; estuarine habitat; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting
NOLF-001 through NOLF-003	Tijuana River (within the Tijuana River Estuary)	Existing: Contact water recreation; non-contact water recreation; commercial and sport fishing; preservation of biological habitats of special significance; estuarine habitat; wildlife habitat; preservation of rare, threatened or endangered species; marine habitat; migration of aquatic organisms; spawning, reproduction, and/or early development; shellfish harvesting

Requirements of this Order implement the Basin Plan.

2. **California Ocean Plan.** The State Water Board adopted the *Water Quality Control Plan for Ocean Waters of California, California Ocean Plan* (Ocean Plan) in 1972 and amended it in 1978, 1983, 1988, 1990, 1997, 2000, and 2005. The State Water Board adopted the latest amendment on April 21, 2005 and it became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. The Ocean Plan identifies beneficial uses of ocean waters of the State to be protected as summarized below:

Table F-4. Ocean Plan Beneficial Uses

Discharge Point	Receiving Water Name	Beneficial Use(s)
CW-002, CW-003, RO-001, NAS-001 through NAS-004, and NAS-036	Pacific Ocean	Existing Industrial water supply; water contact and non-contact recreation, including aesthetic enjoyment; navigation; commercial and sport fishing; mariculture; preservation and enhancement of designated Areas of Special Biological Significance (ASBS); rare and endangered species; marine habitat; fish spawning and shellfish harvesting

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In order to protect the beneficial uses, the Ocean Plan establishes water quality objectives and a program of implementation. Requirements of this Order implement the Ocean Plan.

3. **Thermal Plan.** The State Water Board adopted a *Water Quality Control Plan for Control of Temperature in the Coastal and Interstate Water and Enclosed Bays and Estuaries of California* (Thermal Plan) on May 18, 1972, and amended this plan on September 18, 1975.

   The Thermal Plan defines *thermal waste* as "*cooling water and industrial process water used for the purpose of transporting waste*." The Thermal Plan also defines a *new discharge* as "*any discharge (a) which is not presently taking place unless waste discharge requirements have been established and construction as defined in Paragraph 10 has commenced prior to adoption of this plan or (b) which is presently taking place and for which a material change is proposed but no construction as defined in Paragraph 10 has commenced prior to adoption of this plan*." Because the discharge of diesel engine cooling water meets the criteria of a thermal waste and because the diesel-engine-powered fire protection system was constructed subsequent to adoption of the Thermal Plan (May 18, 1972), the diesel engine cooling water is considered a new discharge of thermal waste for the purposes of this Order.

   The Thermal Plan defines *elevated temperature waste* as "*liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water.*" Because the discharges of steam condensate with temperatures in excess of 100°C and boat rinse water and marine mammal enclosure cleaning water with temperatures in excess of 170°F meet the criteria of an elevated temperature waste, and because these discharges commenced subsequent to adoption of the Thermal Plan, discharges of steam condensate, boat rinse water, and marine mammal enclosure cleaning water are considered new discharges of elevated temperature waste for the purposes of this Order.

   This plan contains temperature objectives for surface waters. Requirements of this Order implement the Thermal Plan.

4. **National Toxics Rule (NTR) and California Toxics Rule (CTR).** USEPA adopted the NTR on December 22, 1992, and later amended it on May 4, 1995 and November 9, 1999. About 40 criteria in the NTR applied in California. On May 18, 2000, USEPA adopted the CTR. The CTR promulgated new toxics criteria for California and, in addition, incorporated the previously adopted NTR criteria that were applicable in the state. The CTR was amended on February 13, 2001. These rules contain water quality criteria for priority pollutants which are discharged to inland surface waters, bays, and estuaries.

5. **State Implementation Policy.** On March 2, 2000, the State Water Board adopted the *Policy for Implementation of Toxics Standards for Inland Surface Waters, Enclosed Bays, and Estuaries of California* (State Implementation Policy or SIP). The SIP became effective on April 28, 2000 with respect to the priority pollutant

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criteria promulgated for California by the USEPA through the NTR and to the priority pollutant objectives established by the Regional Water Board in the Basin Plan. The SIP became effective on May 18, 2000 with respect to the priority pollutant criteria promulgated by the USEPA through the CTR. The State Water Board adopted amendments to the SIP on February 24, 2005 that became effective on July 13, 2005. The SIP establishes implementation provisions for priority pollutant criteria and objectives and provisions for chronic toxicity control. Requirements of this Order implement the SIP.

6. **Alaska Rule.** On March 30, 2000, USEPA revised its regulation that specifies when new and revised state and tribal water quality standards (WQS) become effective for CWA purposes (40 CFR § 131.21, 65 Fed. Reg. 24641 (April 27, 2000)). Under the revised regulation (also known as the Alaska rule), new and revised standards submitted to USEPA after May 30, 2000, must be approved by USEPA before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to USEPA by May 30, 2000, may be used for CWA purposes, whether or not approved by USEPA.

7. **Antidegradation Policy.** Section 131.12 requires that the state water quality standards include an antidegradation policy consistent with the federal policy. The State Water Board established California's antidegradation policy in State Water Board Resolution No. 68-16. Resolution No. 68-16 incorporates the federal antidegradation policy where the federal policy applies under federal law. Resolution No. 68-16 requires that existing water quality be maintained unless degradation is justified based on specific findings. The Regional Water Board's Basin Plan implements, and incorporates by reference, both the State and federal antidegradation policies. The permitted discharge must be consistent with the antidegradation provision of section 131.12 and State Water Board Resolution No. 68-16.

8. **Anti-Backsliding Requirements.** Sections 402(o)(2) and 303(d)(4) of the CWA and federal regulations at title 40, Code of Federal Regulations[1] section 122.44(l) prohibit backsliding in NPDES permits. These anti-backsliding provisions require that effluent limitations in a reissued permit must be as stringent as those in the previous permit, with some exceptions in which limitations may be relaxed.

9. **Atomic Energy Act.** Pursuant to the *Atomic Energy Act*, the Regional Water Board does not have jurisdictional authority to regulate the discharge of radioactive wastes. The Fact Sheet for Order No. R9-2003-0008 included an attached memorandum dated July 22, 2002 which was written for the Fact Sheet for Order No. R9-2002-0002. The memorandum specifies that radioactive discharges are not subject to regulation by the Regional Water Board and that the Navy and the Department of Energy have jurisdiction for discharges of radioactive material. The memorandum also specified that radioactivity monitoring was not to be included in the Order. The Regional Water Board finds that the memorandum is applicable to the Facility.

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[1] All further statutory references are to title 40 of the Code of Federal Regulations unless otherwise indicated.

Consistent with the memorandum, this Order does not regulate the discharge of radioactive wastes and does not include monitoring for radioactivity.

D. Impaired Water Bodies on CWA 303(d) List

Under section 303(d) of the 1972 Clean Water Act, states, territories and authorized tribes are required to develop lists of water quality limited segments. The waters on these lists do not meet water quality standards, even after point sources of pollution have installed the minimum required levels of pollution control technology. On November 30, 2006 USEPA gave final approval to California's 2006 section 303(d) List of Water Quality Limited Segments. The San Diego Bay, as a whole, is listed as impaired for polychlorinated biphenyls (PCBs). Additionally, a portion of the San Diego Bay, "San Diego Bay Shoreline, Glorietta Bay," is adjacent to NAB and is listed in the 303(d) list as impaired for copper.

An applicable Total Maximum Daily Load (TMDL) has not yet been adopted by the Regional Water Board and approved by USEPA. In the event that a TMDL is finalized during the term of this Order, the Regional Water Board reserves the right to reopen and revise this Order as necessary to comply with the applicable TMDL.

E. Other Plans, Polices and Regulations

1. **Bays and Estuaries Policy.** The State Water Board adopted a Water Quality Control Policy for Enclosed Bays and Estuaries of California (Bays and Estuaries Policy) on May 16, 1974 (last amended in 1995). The Bays and Estuaries Policy establishes principles for management of water quality, quality requirements for waste discharges, discharge prohibitions, and general provisions to prevent water quality degradation and to protect the beneficial uses of waters of enclosed bays and estuaries. These principles, requirements, prohibitions and provisions have been incorporated into this Order.

   a. The Bays and Estuaries Policy contains the following principle for management of water quality in enclosed bays and estuaries, which includes the San Diego Bay:

      i. 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 Water Board only when the Regional Water 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 non-municipal wastewater such as clear brines, washwater, and pool drains are not necessarily considered industrial process wastes, and may be allowed by Regional Water Boards under discharge requirements that provide protection to the beneficial uses of the receiving water.

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ii. The Bays and Estuaries Policy also prohibits the discharge or by-passing of untreated wastes. This Order prohibits the discharge and by-passing of untreated waste except for steam condensate, diesel engine cooling water, pier boom cleaning, utility vault and manhole dewatering, pier cleaning, ROWPU product water discharges, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning. For the purpose of the Bays and Estuaries Policy and this Order, the discharges of steam condensate, diesel engine cooling water, pier boom cleaning, utility vault and manhole dewatering, pier cleaning, ROWPU product water discharges, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning will be considered innocuous non-municipal wastewaters and, as such, will not be considered industrial process wastes.

b. The following Principles for the Management of Water Quality in Enclosed Bays and Estuaries, as stated in the Bays and Estuaries Policy, apply to all of California's enclosed bays and estuaries including San Diego Bay:

i. Persistent or cumulative toxic substances shall be removed from the waste to the maximum extent practicable through source control or adequate treatment prior to discharge.

ii. Bay or estuarine outfall and diffuser systems shall be designed to achieve the most rapid initial dilution practicable to minimize concentrations of substances not removed by source control or treatment.

iii. Wastes shall not be discharged into or adjacent to areas where the protection of beneficial uses requires spatial separation from waste fields.

iv. Waste discharges shall not cause a blockage of zones of passage required for the migration of anadromous fish.

v. Non-point sources of pollutants shall be controlled to the maximum practicable extent.

This Regional Water Board has considered the Principle for the Management of Water Quality in Enclosed Bays in Estuaries, in adopting this Order. The terms and conditions of this Order are consistent with the Principles for the Management of Water Quality in Enclosed Bays and Estuaries.

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IV. RATIONALE FOR EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

The CWA requires point source dischargers to control the amount of conventional, non-conventional, and toxic pollutants that are discharged into the waters of the United States. The control of pollutants discharged is established through effluent limitations and other requirements in NPDES permits. There are two principal bases for effluent limitations in the Code of Federal Regulations (CFR): 40 CFR section 122.44(a) requires that permits include applicable technology-based limitations and standards; and 40 CFR section

122.44(d) requires that permits include water quality-based effluent limitations (WQBEL) to attain and maintain applicable numeric and narrative water quality criteria to protect the beneficial uses of the receiving water.

A. Discharge Prohibitions

1. Ship repair and maintenance activities may result in the discharge of pollutants and wastes to waters of the United States. Discharge Prohibition III.A prohibits the discharge of wastes from ship repair and maintenance activities. This prohibition is based on the requirements of the Enclosed Bays and Estuaries Policy and is retained from Order No. R9-2003-0008.

   The Discharger requested in their application to discharge reverse osmosis brine, backwash, and product water from ROWPU training exercises to the Pacific Ocean and the San Diego Bay. Reverse osmosis brine water was prohibited in Order No. R9-2003-0008. Due to the high concentrations of pollutants expected in reverse osmosis brine and backwash water, and because priority pollutant monitoring has not been conducted for these discharges, the discharge of ROWPU brine and backwash water is not authorized by this Order. This Order includes a reopener that allows the Discharger to conduct a study to determine the effects of discharges of ROWPU brine and backwash water on the beneficial uses of the receiving waters. Subsequent to the submission of the study, if the Regional Water Board finds that the discharges of reverse osmosis brine and backwash water from the ROWPU will not negatively affect/impact the beneficial uses of the receiving water, this Order may be reopened for the authorization of ROWPU brine and backwash water and the addition of effluent limitations and/or discharge specifications for these discharges.

2. As discussed in section III.C.3 of this Fact Sheet, the discharge of diesel engine cooling water is considered a new discharge of thermal waste. The specific water quality objectives for enclosed bays for new discharges contained in the Thermal Plan states that "*thermal waste discharges having a maximum temperature greater than 4°F above the natural temperature of the receiving water are prohibited.*" Discharge Prohibition III.B is based on the requirements of the Thermal Plan and is retained from Order No. R9-2003-0008.

3. As discussed in section III.C.3 of this Fact Sheet, the discharges from boat rinsing and marine mammal enclosure cleaning are considered a new discharge of elevated temperature waste. The specific water quality objective for enclosed bays for new discharges contained in the Thermal Plan states that "*elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses. The maximum temperature of waste discharges shall not exceed the natural temperature of the receiving waters by more than 20°F.*" Discharge Prohibition III.C is based on the requirements of the Thermal Plan.

4. The Basin Plan prohibitions are incorporated by reference in the Order. Prohibitions III.D, III.E, III.F, and III.G are retained from Order No. R9-2003-0008 and require the Discharger to comply with the Basin Plan prohibitions.

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5. Discharge Prohibition III.H is based on the requirements of the Bays and Estuaries Policy and is retained from Order No. R9-2003-0008.

6. Waste discharges from ship repair and maintenance activities on ships, piers, and shoreside facilities can cause high concentrations of copper, zinc, other metals, and oil and grease in industrial storm water runoff. High concentrations of these pollutants in the industrial storm water runoff can be toxic to aquatic organisms. Discharge Prohibition III.I is based on the toxicity requirements contained in the Basin Plan and prohibits the discharge of the first ¼ inch (first flush) of storm water runoff from high risk areas.

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B. Technology-Based Effluent Limitations

1. Scope and Authority

Section 301(b) of the CWA and implementing USEPA permit regulations at section 122.44, title 40 of the Code of Federal Regulations, require that permits include conditions meeting applicable technology-based requirements at a minimum, and any more stringent effluent limitations necessary to meet applicable water quality standards. The discharges authorized by this Order must meet minimum federal technology-based requirements based on Best Professional Judgment (BPJ) in accordance with 40 CFR section 125.3.

The CWA requires that technology-based effluent limitations be established based on several levels of controls:

a. Best practicable treatment control technology (BPT) represents the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and non-conventional pollutants.

b. Best available technology economically achievable (BAT) represents the best existing performance of treatment technologies that are economically achievable within an industrial point source category. BAT standards apply to toxic and non-conventional pollutants.

c. Best conventional pollutant control technology (BCT) represents the control from existing industrial point sources of conventional pollutants including BOD, TSS, fecal coliform, pH, and oil and grease. The BCT standard is established after considering the “cost reasonableness” of the relationship between the cost of attaining a reduction in effluent discharge and the benefits that would result, and also the cost effectiveness of additional industrial treatment beyond BPT.

d. New source performance standards (NSPS) represent the best available demonstrated control technology standards. The intent of NSPS guidelines is to set limitations that represent state-of-the-art treatment technology for new sources.

The CWA requires USEPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BAT, BCT, and NSPS. Section 402(a)(1) of the CWA and section 125.3 of the Code of Federal Regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern. Where BPJ is used, the permit writer must consider specific factors outlined in 40 CFR 125.3.

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2. Applicable Technology-Based Effluent Limitations

a. The State Water Board adopted a revised Water Quality Control Plan for Ocean Waters of California (Ocean Plan) on April 21, 2005, which became effective on February 14, 2006. The Ocean Plan is applicable, in its entirety, to point source discharges to the ocean. Wastewater is discharged through Discharge Point Nos. CW-002, CW-003, and RO-001 to the Pacific Ocean which are therefore subject to the Ocean Plan.

Although the Ocean Plan is not directly applicable to enclosed bays, such as San Diego Bay, the salinity and beneficial uses of San Diego Bay are similar to those of the ocean waters of the State. Therefore, in order to protect the beneficial uses of San Diego Bay, the Ocean Plan can be used as a reference for developing discharge specifications, receiving water prohibitions, and narrative limitations and to supplement the provisions contained in the CTR, the SIP, and the Bays and Estuaries Policy. Therefore, the Regional Water Board finds that the requirements of the Ocean Plan are applicable to Discharge Point Nos. SC-001 through SC-066, CW-001, CW-004, and RO-001, which discharge to the San Diego Bay.

The Ocean Plan establishes water quality objectives, general requirements for management of waste discharged to the ocean, effluent quality requirements for waste discharges, discharge prohibitions, and general provisions. Further, Table A of the Ocean Plan establishes technology-based effluent limitations for industrial discharges for which ELGs have not been established pursuant to sections 301, 302, 304, or 306 of the federal CWA. Storm water discharges are not considered to be industrial discharges for the purposes of the Ocean Plan and therefore are not subject to the effluent limitations contained in Table A of the Ocean Plan.

Numeric effluent limitations based on Table A of the Ocean Plan are being established in this Order for discharges of steam condensate, diesel engine cooling water, and ROWPU product water from Discharge Point Nos. SC-001 through SC-066, CW-001 through CW-004, and RO-001. The applicable technology-based effluent limitations are summarized below:

Table F-5. Numeric Technology-based Effluent Limitations for Discharge Point Nos. SC-001 through SC-066, CW-001 through CW-004, and RO-001

Parameter	Units	Effluent Limitations		
		Average Monthly	Weekly Average	Instantaneous Maximum
Oil and Grease	mg/L	25	40	75
Settleable Solids	ml/L	1.0	1.5	3.0
Turbidity	NTU	75	100	225
pH	standard units	--	--	[1]

[1] Within limits of 6.0 – 9.0 at all times.

b. The State Water Board found in Section V.B.2 of the Fact Sheet to Order No. 2006-0008-DWQ that it is not feasible to establish numeric effluent limitations for pollutants in discharges from utility vaults and underground structures. Instead, the State Water Board included a provision in Order No. 2006-0008-DWQ requiring implementation of pollution prevention practices to control and abate the discharge of pollutants to surface waters, achieve compliance utilizing BAT and BCT requirements, and achieve compliance with applicable water quality standards. Federal Regulations at 40 CFR 122.44(k)(3) and (4) authorize the Regional Water Board to require BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible and when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA. Consistent with the requirements of the Order No. 2006-0008-DWQ and Order No. R9-2003-0008, and as described in section VII.B.3.a of this Fact Sheet, this Order includes a provision requiring the Discharger to continue the implementation and maintenance of their Pollution Prevention Plan (PLAN) which includes BMPs to reduce the discharge of pollutants from utility vault and manhole dewatering. The PLAN requirements have been revised from Order No. R9-2003-0008 to reflect the PLAN requirements included in Order No. 2006-0008-DWQ.

c. Due to the nature of activities associated with discharges of pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning, it is impractical to collect and treat the associated wastewaters prior to discharge. Therefore, the Regional Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning. In accordance with 40 CFR 122.44(k)(3) and (4), the Regional Water Board finds that the implementation of BMPs in lieu of numeric effluent limitations are appropriate. As described in section VII.B.3.b of this Fact Sheet, this Order includes a provision requiring the implementation of BMPs to control and abate the discharge of pollutants from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning.

d. In accordance with 40 CFR 122.44(k), Order No. R9-2003-0008 determined that the implementation of BMPs for the discharge of industrial storm water

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were appropriate. To carry out the purpose and intent of the CWA, Order No. R9-2003-0008 required the Discharger to develop and implement a SWPPP, as authorized by CWA section 304(e) and section 402(p), for toxic pollutants and hazardous substances, and for the control of storm water discharges. As discussed further in section VII.B.3.c, the requirement to implement an appropriate SWPPP is retained from Order No. R9-2003-0008.

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C. Water Quality-Based Effluent Limitations (WQBELs)

1. Scope and Authority

Section 301(b) of the CWA and 40 CFR 122.44(d) require that permits include limitations more stringent than applicable federal technology-based requirements where necessary to achieve applicable water quality standards.

40 CFR 122.44(d)(1)(i) mandates that permits include effluent limitations for all pollutants that are or may be discharged at levels that have the reasonable potential to cause or contribute to an exceedance of a water quality standard, including numeric and narrative objectives within a standard. Where reasonable potential has been established for a pollutant, but there is no numeric criterion or objective for the pollutant, WQBELs must be established using: (1) USEPA criteria guidance under CWA section 304(a), supplemented where necessary by other relevant information; (2) an indicator parameter for the pollutant of concern; or (3) a calculated numeric water quality criterion, such as a proposed state criterion or policy interpreting the state' s narrative criterion, supplemented with other relevant information, as provided in section 122.44(d)(1)(vi).

The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses of the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria that are contained in other state plans and policies, or any applicable water quality criteria contained in the CTR and NTR.

2. Applicable Beneficial Uses and Water Quality Criteria and Objectives

a. The Basin Plan designates beneficial uses, establishes water quality objectives, and contains implementation programs and policies to achieve those objectives for all waters addressed through the Basin Plan. The beneficial uses applicable to the Pacific Ocean, San Diego Bay, and the Tijuana River within the Tijuana River Estuary contained in the Basin Plan are summarized in section III.C.1 of this Fact Sheet. The Basin Plan includes both narrative and numeric water quality objectives applicable to the receiving waters.

   The CTR promulgated toxics criteria for California and, in addition, incorporated the previously adopted National Toxics Rule criteria that were applicable in the State. Priority pollutant water quality criteria in the CTR are applicable to discharges to the San Diego Bay. The CTR contains both saltwater and freshwater criteria. Because a distinct separation generally does not exist

between freshwater and saltwater aquatic communities, the following apply: In accordance with section 131.38(c)(3), freshwater criteria apply to areas where salinities are at or below 1 part per thousand (ppt) 95 percent or more of the time. The Regional Water Board determined that because the discharges are within a bay, saltwater CTR criteria are applicable. The CTR criteria for saltwater aquatic life or human health for consumption of organisms, whichever is more stringent, are used to prescribe the effluent limitations in this Order to protect the beneficial uses of the San Diego Bay, a water of the United States in the vicinity of the discharges.

The SIP procedures for implementation of CTR and NTR criteria are not applicable to storm water discharges. However, the toxicity objectives contained in the Basin Plan and the Bays and Estuary Policy are applicable to the discharge of storm water from the Facility to the Bay. The applicable toxicity limitations are discussed in section IV.C.5 of this Fact Sheet.

The SIP procedures for implementation of CTR and NTR criteria are applicable to non-storm water discharges. The non-storm water discharges from the Facility to San Diego Bay include steam condensate; diesel engine cooling water; pier boom cleaning; utility vault and manhole dewatering; pier cleaning; ROWPU product water; boat rinsing; swimmer rinsing; marine mammal enclosure cleaning; and miscellaneous discharges associated with facility maintenance.

Representative monitoring of the steam condensate discharges was conducted at four locations and submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the application for a total of 10 sampling events. Monitoring of the San Diego Bay in the vicinity of the discharges was submitted in the application. This data was used to conduct the RPA for steam condensate discharges.

Representative monitoring of the diesel engine cooling water discharges was conducted at the stations in Buildings 186, 348, 499, 554, 1357, 1362, and 1440 and was submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the application for a total of 16 sampling events. Monitoring of the San Diego Bay in the vicinity of the discharge from the station at Building 499 was submitted in the application. Although the discharge from the stations in Buildings 186, 348, 499, and 554 have been discontinued, the data from these stations is considered to be representative of the discharges of diesel engine cooling water at the Facility and was used to conduct the RPA.

Representative monitoring of utility vault and manhole dewatering discharges was conducted at eight locations and submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the Discharger's *Case Study for Utility Vault and Manhole Dewatering Discharges at Naval Base Point Loma, Naval Base San Diego, and Naval Base Coronado* for a total of 17 sampling events. Receiving water in the vicinity of the discharges was not conducted.

Monitoring for priority pollutants in the discharge water from similar discharges

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for boom cleaning, pier cleaning, boat rinsing, and marine mammal enclosure cleaning at NBPL and NBSD and receiving water monitoring was conducted and submitted in the Discharger's application. In the absence of monitoring data from the Facility for these types of discharges, the Regional Water Board conducted the RPA using data from NBPL and NBSD. However, this Order requires the Discharger to monitor the boom cleaning, pier cleaning, boat rinsing, and marine mammal enclosure cleaning discharges to accurately characterize the discharges at the Facility.

Data for discharges of ROWPU product water and from swimmer rinsing were not available. Monitoring requirements for these discharges for the CTR priority pollutants have been established in the Monitoring and Reporting Program to aid the Regional Water Board in determining if reasonable potential exists for these discharges to exceed water quality criteria exists. This Order may be reopened by the Regional Water Board for revisions as allowed in Provision VI.C.1.d (reopener), for the addition of effluent limitations, prohibitions, and additional monitoring requirements, based on the findings of the priority pollutant monitoring.

An RPA was conducted for the non-storm water discharges to the San Diego Bay using all the available data. The table below summarizes the applicable water quality criteria/objectives for priority pollutants reported in detectable concentrations in the effluent or receiving water. These criteria were used in conducting the RPAs for this Order.

Table F-6. Applicable CTR/NTR Water Quality Criteria

Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms Only
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Antimony, Total Recoverable	4,300	Not Applicable		--	--	Not Applicable	4,300
Arsenic, Total Recoverable	36.00			69.00	36.00		--
Beryllium, Total Recoverable	No Criteria			--	--		--
Cadmium, Total Recoverable	9.36			42.25	9.36		--
Chromium (III)	No Criteria			--	--		--
Chromium (VI)	50			1,100	50		--
Copper, Total Recoverable	3.73			5.78	3.73		--
Lead, Total Recoverable	8.52			220.82	8.52		--
Mercury, Total Recoverable	0.051			--	--		0.051
Nickel, Total Recoverable	8.28			74.75	8.28		--

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Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms Only
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
Silver, Total Recoverable	2.24			2.24	--		--
Selenium, Total Recoverable	71			290	71		--
Thallium, Total Recoverable	6.3			--	--		6.3
Zinc, Total Recoverable	85.62			95.14	85.62		--
TCDD-Equivalents	1.40×10^{-8}			--	--		1.40×10^{-8}
Benzene	71			--	--		71
Bromoform	360			--	--		360
Chlorobenzene	21,000			--	--		21,000
Chlorodibromomethane	34			--	--		34
Chloroform	No Criteria			--	--		--
Dichlorobromomethane	46			--	--		46
Methyl Chloride	No Criteria			--	--		--
Methylene Chloride	1,600			--	--		1,600
Toluene	200,000			--	--		200,000
Pentachlorophenol	7.9			13	7.9		8.2
Phenol	4,600,000			--	--		4,600,000
Acenaphthene	2,700			--	--		2,700
Acenaphthylene	No Criteria			--	--		--
Anthracene	110,000			--	--		110,000
Benzo (a) Anthracene	0.049			--	--		0.049
Benzo (a) Pyrene	0.049			--	--		0.049
Benzo (b) Fluoranthene	0.049			--	--		0.049
Benzo (ghi) Perylene	No Criteria			--	--		--
Benzo (k) Fluoranthene	0.049			--	--		0.049
Bis (2-ethylhexyl) Phthalate	5.9			--	--		5.9
Butylbenzyl Phthalate	5,200			--	--		5,200
Chrysene	0.049			--	--		0.049
Dibenzo (a,h) Anthracene	0.049			--	--		0.049
Diethyl Phthalate	120,000			--	--		120,000
Dimethyl Phthalate	2,900,000			--	--		2,900,000
Di-n-butyl Phthalate	12,000			--	--		12,000
Di-n-octyl Phthalate	No Criteria			--	--		--
Fluoranthene	370			--	--		370
Fluorene	14,000			--	--		14,000
Indeno (1,2,3-cd) Pyrene	0.049			--	--		0.049
Naphthalene	No Criteria			--	--		--

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Constituent	Selected Criteria	CTR/NTR Water Quality Criteria					
		Freshwater		Saltwater		Human Health for Consumption of:	
		Acute	Chronic	Acute	Chronic	Water & Organisms	Organisms Only
	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L	µg/L
N-nitrosodiphenylamine	16			--	--		16
Phenanthrene	No Criteria			--	--		--
Pyrene	11,000			--	--		11,000
1,2,4-Trichlorobenzene	No Criteria			--	--		--
4,4-DDE	0.00059			--	--		0.00059

b. The Ocean Plan designates beneficial uses for all ocean waters of the State, as summarized in section III.C.2 of this Fact Sheet. The Ocean Plan also includes water quality objectives for the ocean receiving water for bacterial characteristics, physical characteristics, chemical characteristics, biological characteristics, toxicity, and radioactivity.

Table B of the Ocean Plan includes the following water quality objectives for toxic pollutants and whole effluent toxicity:

i. 6-month median, daily maximum, and instantaneous maximum objectives for 21 chemicals and chemical characteristics, including total residual chlorine and chronic toxicity, for the protection of marine aquatic life;

ii. 30-day average objectives for 20 non-carcinogenic chemicals for the protection of human health;

iii. 30-day average objectives for 42 carcinogenic chemicals for the protection of human health; and

iv. Daily maximum objectives for acute toxicity and chronic toxicity.

The Ocean Plan is applicable to discharges to the Pacific Ocean. The discharges from the Facility to the Pacific Ocean include diesel engine cooling water from the stations in Buildings 1357 and 1362 and ROWPU product water from Discharge Point Nos. CW-002, CW-003, and RO-001. Representative monitoring of the diesel engine cooling water discharges was conducted at the stations in Buildings 186, 348, 499, 554, 1357, 1362, and1440 and was submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the application for a total of 16 sampling events. Although the discharge from the stations in Buildings 186, 348, 499, and 554 have been discontinued, the data from these stations is considered to be representative of the discharges of diesel engine cooling water at the Facility and was used to conduct the RPA.

Data for discharges of ROWPU product water was not available. Monitoring requirements for these discharges for the Ocean Plan constituents have been

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established in the Monitoring and Reporting Program to aid the Regional Water Board in determining if reasonable potential for these discharges to exceed water quality criteria exists. This Order may be reopened by the Regional Water Board for revisions as allowed in Provision VI.C.1.d (reopener), for the addition of effluent limitations, prohibitions, and additional monitoring requirements, based on the findings of the monitoring.

An RPA was conducted for the diesel engine cooling water discharges to the Pacific Ocean using all the available data. The table below summarizes the applicable water quality criteria/objectives for pollutants reported in detectable concentrations in the effluent. These criteria were used in conducting the RPA for this Order.

Table F-7. Applicable Ocean Plan Water Quality Objectives

Constituent	Selected Criteria	Ocean Plan Water Quality Criteria			
		6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average
	µg/L	µg/L	µg/L	µg/L	µg/L
Antimony	1,200	--	--	--	1,200
Arsenic	8	8	32	80	--
Cadmium	1	1	4	10	--
Chromium, Total	2	2	8	20	--
Copper	3	3	12	30	--
Lead	2	2	8	20	--
Mercury	0.04	0.04	0.16	0.4	--
Nickel	5	5	20	50	--
Selenium	15	15	60	150	--
Silver	0.7	0.7	2.8	7	--
Thallium	2	--	--	--	2
Zinc	20	20	80	200	--
Chlorodibromomethane	8.6	--	--	--	8.6
Chloroform	130	--	--	--	130
Dichlorobromomethane	6.2	--	--	--	6.2
Bis (2-ethylhexyl) Phthalate	3.5	--	--	--	3.5
Diethyl Phthalate	33,000	--	--	--	33,000
Dimethyl Phthalate	820,000	--	--	--	820,000
Di-n-butyl Phthalate	3,500	--	--	--	3,500
Fluoranthene	15	--	--	--	15
DDT[1]	0.00017	--	--	--	0.00017

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

c. **Dilution Credits.** Section 1.4.2 of the SIP establishes procedures for granting mixing zones and the assimilative capacity of the receiving water. Before establishing a dilution credit for a discharge, it must first be determined if, and how much, receiving water is available to dilute the discharge.

Section III.C.4 of the Ocean Plan allows for the use of dilution credits in the calculation of effluent limitations for constituents contained in Table B of the Ocean Plan. Additionally, the Ocean Plan specifies that "*for the purpose of this Plan, minimum initial dilution is the lowest average initial dilution within any single*

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month of the year. Dilution estimates shall be based on observed waste flow characteristics, observed receiving water density structure, and the assumption that no currents, of sufficient strength to influence the initial dilution process, flow across the discharge structure."

The Discharger has not submitted information regarding available dilution for the discharges from the Facility. Thus, the worst-case dilution is assumed to be zero to provide protection for the receiving water beneficial uses. The impact of assuming zero assimilative capacity within the receiving water is that discharge limitations are applied end-of-pipe with no allowance for dilution within the receiving water.

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3. Determining the Need for WQBELs

a. Federal regulations require effluent limitations for all pollutants that are or may be discharged at a level that will cause or have the reasonable potential to cause, or contribute to an in-stream excursion above a narrative or numerical water quality standard. Based on information submitted as part of the application, in studies, and as directed by monitoring and reporting programs, the Regional Water Board finds that the discharges summarized below have reasonable potential to cause or contribute to an in-stream excursion above a water quality standard at one or more of the discharge locations for arsenic, cadmium, chromium, copper, lead, mercury, nickel, silver, zinc, TCDD-equivalents, benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (ghi) perylene, benzo (k) fluoranthene, bis (2-ethylhexyl) phthalate, chrysene, dibenzo (a,h) anthracene, indeno (1,2,3-cd) pyrene, 4,4-DDE, and DDT.

The Regional Water Board conducted the RPA for discharges to the San Diego Bay in accordance with section 1.3 of the SIP.

The RPA for discharges to the Pacific Ocean was conducted in accordance with 40 CFR 122.44(d) and using guidance for statistically determining reasonable potential to exceed water quality objectives, as outlined in the *Technical Support Document for Water Quality-Based Toxics Control* (TSD; EPA/505/2-90-001, 1991) and the California Ocean Plan RPA Amendment that was adopted by the State Water Board on April 21, 2005. The statistical approach combines knowledge of effluent variability (as estimated by a coefficient of variation) with the uncertainty due to a limited number of effluent data points to estimate a maximum effluent value at a high level of confidence. This estimated maximum effluent value is based on a lognormal distribution of daily effluent values. Projected receiving water values (based on the estimated maximum effluent value or the reported maximum effluent value and minimum probable dilution) can then be compared to the appropriate objective to determine the potential for an exceedance of that objective and the need for an effluent limitation. The Ocean Plan RPA can yield three endpoints: 1) Endpoint 1, an effluent limitation is required and monitoring is required; 2) Endpoint 2, an effluent limitation is not required and the Regional Water Board may require monitoring; and 3) Endpoint 3, the RPA is inconclusive, monitoring is required, and an existing effluent

limitation may be retained or a permit reopener clause may be included to allow inclusion of an effluent limitation if future monitoring warrants inclusion.

The RPA for discharges to the Pacific Ocean was conducted using the RPcalc 2.0 software tool developed by the State Water Board for conducting an RPA, the applicable Table B water quality objectives, no allowed dilution, and the maximum concentrations of pollutants contained in the diesel engine cooling water discharge for which water quality objectives exist in Table B of the Ocean Plan.

A summary of the results for the parameters which demonstrated reasonable potential, for each applicable discharge, is provided in the table below.

Table F-8. Summary of RPA Results[1]

Discharge Location No.	Parameter	MEC µg/L	B µg/L	C µg/L	Reason
Steam Condensate (SC-001 through SC-066)	Copper, Total Recoverable	370	2.63	3.73	MEC > C
	Lead, Total Recoverable	22.80	0.43	8.52	MEC > C
	TCDD-Equivalents	5.72×10^{-8}	2.33×10^{-8}	1.40×10^{-8}	MEC & B > C
	Bis (2-ethylhexyl) Phthalate	6.28	0.0955	5.9	MEC > C
Diesel Engine Cooling Water (CW-001 and CW-004)	Copper, Total Recoverable	97	9.08	3.73	MEC & B > C
	Lead, Total Recoverable	23	2.65	8.52	MEC > C
	Mercury, Total Recoverable	0.44	0.02	0.051	MEC > C
	Zinc, Total Recoverable	150	13.50	85.62	MEC > C
	TCDD-Equivalents	7.15×10^{-7}	1.22×10^{-7}	1.40×10^{-8}	MEC & B > C
	4,4-DDE	0.0126	<0.001	0.00059	MEC > C
Diesel Engine Cooling Water (CW-002 and CW-003)	Arsenic, Total Recoverable	14	3[2]	8	MEC > C
	Cadmium, Total Recoverable	1.1	0[2]	1	MEC > C
	Chromium, Total Recoverable	3.695	0[2]	2	MEC > C
	Copper, Total Recoverable	97	2[2]	3	MEC > C
	Lead, Total Recoverable	23	0[2]	2	MEC > C
	Mercury, Total Recoverable	0.44	0.0005[2]	0.04	MEC > C
	Nickel, Total Recoverable	3.5	0[2]	5	[3]
	Zinc, Total Recoverable	150	8[2]	20	MEC > C
	DDT[4]	0.0126[5]	0[2]	0.00017	MEC > C
	TCDD-Equivalents	7.15×10^{-7}	0[2]	3.9×10^{-9}	MEC > C
Pier Boom Cleaning (BW-001)	Copper, Total Recoverable	52.08	5.22	3.73	MEC & B > C
	TCDD-Equivalents	2.88×10^{-7}	2.92×10^{-8}	1.40×10^{-8}	MEC & B > C
	Benzo (b) Fluoranthene	0.0710	0.0031	0.049	MEC > C

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Discharge Location No.	Parameter	MEC µg/L	B µg/L	C µg/L	Reason
	Benzo (k) Fluoranthene	0.057	0.0023	0.049	MEC > C
	Chrysene	0.1264	0.0032	0.049	MEC > C
Utility Vault and Manhole Dewatering (UV-001 through UV-036)	Arsenic, Total Recoverable	140	NA	36	MEC > C
	Copper, Total Recoverable	140	NA	3.73	MEC > C
	Lead, Total Recoverable	34	NA	8.52	MEC > C
	Mercury, Total Recoverable	0.068	NA	0.051	MEC > C
	Nickel, Total Recoverable	27	NA	8.28	MEC > C
	Silver, Total Recoverable	2.6	NA	2.24	MEC > C
	Zinc, Total Recoverable	380	NA	85.62	MEC > C
	Benzo (a) Anthracene	0.804	NA	0.049	MEC > C
	Benzo (a) Pyrene	0.724	NA	0.049	MEC > C
	Benzo (b) Fluoranthene	0.84	NA	0.049	MEC > C
	Benzo (k) Fluoranthene	0.609	NA	0.049	MEC > C
	Chrysene	0.76	NA	0.049	MEC > C
	Dibenzo (a,h) Anthracene	0.094	NA	0.049	MEC > C
	Indeno (1,2,3-cd) Pyrene	0.764	NA	0.049	MEC > C
Pier Cleaning (PW-001)	Arsenic, Total Recoverable	140.3	1.51	36	MEC > C
	Copper, Total Recoverable	119.3	0.79	3.73	MEC > C
	Mercury, Total Recoverable	0.2	<0.01	0.051	MEC > C
	Nickel, Total Recoverable	10.7	0.28	8.28	MEC > C
	Zinc, Total Recoverable	364.6	2.95	85.62	MEC > C
	TCDD-Equivalents	9.27×10^{-7}	1.15×10^{-8}	1.40×10^{-8}	MEC > C

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Discharge Location No.	Parameter	MEC µg/L	B µg/L	C µg/L	Reason
Boat Rinsing (BR-001 and BR-002)	Copper, Total Recoverable	102.86	4.98	3.73	MEC & B > C
	Lead, Total Recoverable	424.689	0.22	8.52	MEC > C
	Mercury, Total Recoverable	0.11	<0.1	0.051	MEC > C
	Nickel, Total Recoverable	17.653	0.358	8.28	MEC > C
	Zinc, Total Recoverable	522.009	6.053	85.62	MEC > C
	TCDD-Equivalents	2.76×10^{-5}	5.17×10^{-7}	1.40×10^{-8}	MEC & B > C
	Benzo (a) Anthracene	0.6764	0.0047	0.049	MEC > C
	Benzo (a) Pyrene	0.8165	0.0049	0.049	MEC > C
	Benzo (b) Fluoranthene	1.1084	0.0049	0.049	MEC > C
	Benzo (k) Fluoranthene	0.1177	0.0079	0.049	MEC > C
	Bis (2-ethylhexyl) Phthalate	816.369	1.4286	5.9	MEC > C
	Chrysene	1.5452	0.0107	0.049	MEC > C
	Dibenzo (a,h) Anthracene	0.1394	0.001	0.049	MEC > C
	Indeno (1,2,3-cd) Pyrene	0.6792	0.0043	0.049	MEC > C
Marine Mammal Enclosure Cleaning (ME-001)	Copper, Total Recoverable	6.4	2.62	3.73	MEC > C
	TCDD-Equivalents	4.00×10^{-8}	2.40×10^{-8}	1.40×10^{-8}	MEC & B > C

NA – Not Available
[1] MEC = Maximum Effluent Concentration
B = Background Concentration
C = Criterion
[2] From Table C of the Ocean Plan.
[3] Parametric RPA found the lognormal upper one-sided confidence bound (upper 95% confidence bound for the 95th population percentile with N = 16) of 8.3255 exceeds the criterion of 5 µg/L.
[4] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.
[5] Based on detection of 4,4-DDE.

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4. WQBEL Calculations

a. As shown in Table F-8, the Regional Water Board finds that discharges from utility vault and manhole dewatering have the reasonable potential to exceed water quality criteria for several priority pollutants. However, section V.C.3 of the Fact Sheet to Order No. 2006-0008-DWQ states that "*establishment of numeric effluent limitations for pollutants from utility vaults and underground structures is not feasible because: (1) utility companies have numerous short duration intermittent releases of water to surface waters from many different locations, and (2) treatment of all these releases to meet numeric effluent limitations would be impractical.*" Consistent with Order No. 2006-0008-DWQ and Order No. R9-2003-0008, the Regional Water Board is not establishing effluent limitations for utility vaults and manholes in this Order. However, as described in section VII.B.3.a of this Fact Sheet, this Order includes a provision requiring the Discharger to continue the implementation and maintenance of their Pollution

Prevention Plan (PLAN) which includes BMPs to reduce the discharge of pollutants from utility vault and manhole dewatering.

b. As shown in Table F-8, the Regional Water Board finds that discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning exhibit reasonable potential to exceed water quality criteria for a number of priority pollutants. However, as discussed in section IV.B.2.c of this Fact Sheet, the Regional Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning. In lieu of numeric effluent limitations, the Regional Water Board finds that the implementation of BMPs are appropriate. As described in section VII.B.3.b of this Fact Sheet, this Order includes a provision requiring the implementation of best management practices to control and abate the discharge of pollutants from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning.

c. The WQBEL for pH is based on the water quality objective contained in the Basin Plan, which states, "*In bays and estuaries the pH shall not be depressed below 7.0 nor raised above 9.0*."

d. As discussed in section III.C.3, above, steam condensate discharges are considered new discharges of elevated temperature wastes. The specific water quality objective for enclosed bays for new discharges contained in the Thermal Plan states that "*elevated temperature waste discharges shall comply with limitations necessary to assure protection of beneficial uses. The maximum temperature of waste discharges shall not exceed the natural temperature of the receiving waters by more than 20°F.*" This water quality objective is established as a WQBEL for discharges of steam condensate from Discharge Point Nos. SC-001 through SC-066 and is based on the requirements of the Thermal Plan.

e. **Effluent Limitation Calculations for Discharges to San Diego Bay.** Effluent limitations for copper, lead, mercury, zinc, TCDD-equivalents, bis (2-ethylhexyl) phthalate, and 4,4-DDE at Discharge Point Nos. SC-001 through SC-066, CW-001, and CW-004 were calculated in accordance with section 1.4 of the SIP. The following paragraphs describe the methodology used for calculating effluent limitations for these parameters.

In calculating maximum effluent limitations, the effluent concentration allowances were set equal to the criteria/standards/objectives.

$$ECA_{acute} = CMC \qquad ECA_{chronic} = CCC$$

For the human health, agriculture, or other long-term criterion/objective, a dilution credit can be applied. The ECA is calculated as follows:

$$ECA_{HH} = HH + D(HH - B)$$

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where:

ECA_{acute} = effluent concentration allowance for acute (1-hour average) toxicity criterion

$ECA_{chronic}$ = effluent concentration allowance for chronic (4-day average) toxicity criterion

ECA_{HH} = effluent concentration allowance for human health, agriculture, or other long-term criterion/objective

CMC = criteria maximum concentration (1-hour average)

CCC = criteria continuous concentration (4-day average, unless otherwise noted)

HH = human health, agriculture, or other long-term criterion/objective

D = dilution credit

B = maximum receiving water concentration

Acute and chronic toxicity ECAs were then converted to equivalent long-term averages (LTA) using statistical multipliers and the lowest is used. Additional statistical multipliers were then used to calculate the maximum daily effluent limitation (MDEL) and the average monthly effluent limitation (AMEL).

Human health ECAs are set equal to the AMEL and a statistical multiplier is used to calculate the MDEL.

LTA_{acute}

LTA_{acute}

$$AMEL = mult_{AMEL}\left[\min\left(M_A ECA_{acute}, M_C ECA_{chronic}\right)\right]$$

$$MDEL = mult_{MDEL}\left[\min\left(M_A ECA_{acute}, M_C ECA_{chronic}\right)\right]$$

$LTA_{chronic}$

$$MDEL_{HH} = \left(\frac{mult_{MDEL}}{mult_{AMEL}}\right) AMEL_{HH}$$

where: $mult_{AMEL}$ = statistical multiplier converting minimum LTA to AMEL

$mult_{MDEL}$ = statistical multiplier converting minimum LTA to MDEL

M_A = statistical multiplier converting CMC to LTA

M_C = statistical multiplier converting CCC to LTA

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WQBELs were calculated for copper, lead, mercury, zinc, TCDD-equivalents, bis (2-ethylhexyl) phthalate, and 4,4-DDE as follows in Tables F-9 through F-17, below.

Table F-9. WQBEL Calculations for Copper for Discharges of Steam Condensate (Discharge Point Nos. SC-001 through SC-066)

	Acute	Chronic
Criteria (µg/L) [1]	5.78	3.73
Dilution Credit	No Dilution	No Dilution
ECA	5.78	3.73
ECA Multiplier	0.14	0.26
LTA	0.81	0.96
AMEL Multiplier (95th%)	2.44	[2]
AMEL (µg/L)	**2.0**	[2]
MDEL Multiplier (99th%)	7.11	[2]
MDEL (µg/L)	**5.8**	[2]

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (Acute LTA < Chronic LTA)

Table F-10. WQBEL Calculations for Copper for Discharges of Diesel Engine Cooling Water (Discharge Point Nos. CW-001 and CW-004)

	Acute	Chronic
Criteria (µg/L) [1]	5.78	3.73
Dilution Credit	No Dilution	No Dilution
ECA	5.78	3.73
ECA Multiplier	0.19	0.35
LTA	1.11	1.31
AMEL Multiplier (95th%)	2.01	[2]
AMEL (µg/L)	**2.2**	[2]
MDEL Multiplier (99th%)	5.22	[2]
MDEL (µg/L)	**5.8**	[2]

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (Acute LTA < Chronic LTA)

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Table F-11. WQBEL Calculations for Lead in Discharges of Steam Condensate (Discharge Point Nos. SC-001 through SC-066)

	Acute	Chronic
Criteria (µg/L) [1]	220.82	8.52
Dilution Credit	No Dilution	No Dilution
ECA	220.82	8.52
ECA Multiplier	0.21	0.39
LTA	46.78	3.28
AMEL Multiplier (95th%)	[2]	1.91
AMEL (µg/L)	[2]	**6.3**
MDEL Multiplier (99th%)	[2]	4.72
MDEL (µg/L)	[2]	**15.5**

1 CTR Aquatic Life Criteria

2 Limitations based on chronic LTA (Chronic LTA < Acute LTA)

Table F-12. WQBEL Calculations for Lead in Discharges of Diesel Engine Cooling Water (Discharge Point Nos. CW-001 and CW-004)

	Acute	Chronic
Criteria (µg/L) [1]	220.82	8.52
Dilution Credit	No Dilution	No Dilution
ECA	220.82	8.52
ECA Multiplier	0.17	0.31
LTA	37.18	2.65
AMEL Multiplier (95th%)	[2]	2.18
AMEL (µg/L)	[2]	**5.8**
MDEL Multiplier (99th%)	[2]	5.94
MDEL (µg/L)	[2]	**15.8**

1 CTR Aquatic Life Criteria

2 Limitations based on chronic LTA (Chronic LTA < Acute LTA)

Table F-13. WQBEL Calculations for Mercury in Discharges of Diesel Engine Cooling Water (Discharge Point Nos. CW-001 and CW-004)

	Human Health
Criteria (µg/L)[1]	0.051
Dilution Credit	No Dilution
ECA	0.051
AMEL (µg/L)[2]	**0.051**
MDEL/AMEL Multiplier[3]	2.01
MDEL (µg/L)	**0.102**

1 CTR Criteria for Human Health (for Consumption of Organisms Only)

2 AMEL = ECA per section 1.4.B, Step 6 of SIP

3 Assumes sampling frequency n<=4. Calculated multiplier based on Step 6 of section 1.4 of the SIP.

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Table F-14. WQBEL Calculations for Zinc in Discharges of Diesel Engine Cooling Water (Discharge Point Nos. CW-001 and CW-004)

	Acute	Chronic
Criteria (µg/L) [1]	95.14	85.62
Dilution Credit	No Dilution	No Dilution
ECA	95.14	85.62
ECA Multiplier	0.21	0.39
LTA	20.16	32.97
AMEL Multiplier (95th%)	1.91	[2]
AMEL (µg/L)	**38.4**	[2]
MDEL Multiplier (99th%)	4.72	[2]
MDEL (µg/L)	**95.1**	[2]

1 CTR Aquatic Life Criteria

2 Limitations based on acute LTA (AcuteLTA < Chronic LTA)

Table F-15. WQBEL Calculations for TCDD-Equivalents in Discharges of Steam Condensate and Diesel Engine Cooling Water (Discharge Point Nos. SC-001 through SC-066, CW-001, and CW-004)

	Human Health
Criteria (µg/L)[1]	1.40×10^{-8}
Dilution Credit	No Dilution
ECA	1.40×10^{-8}
AMEL (µg/L)[2]	**1.4×10^{-8}**
MDEL/AMEL Multiplier[3]	2.01
MDEL (µg/L)	**2.8×10^{-8}**

1 CTR Criteria for Human Health (for Consumption of Organisms Only)

2 AMEL = ECA per section 1.4.B, Step 6 of SIP

3 Assumes sampling frequency n<=4. Calculated multiplier based on Step 6 of section 1.4 of the SIP.

Table F-16.WQBEL Calculations for Bis (2-ethylhexyl) Phthalate in Discharges of Steam Condensate (Discharge Point Nos. SC-001 through SC-066)

	Human Health
Criteria (µg/L)[1]	5.9
Dilution Credit	No Dilution
ECA	5.9
AMEL (µg/L)[2]	**5.9**
MDEL/AMEL Multiplier[3]	2.01
MDEL (µg/L)	**11.8**

1 CTR Criteria for Human Health (for Consumption of Organisms Only)

2 AMEL = ECA per section 1.4.B, Step 6 of SIP

3 Assumes sampling frequency n<=4. Calculated multiplier based on Step 6 of section 1.4 of the SIP.

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Table F-17.WQBEL Calculations for 4,4-DDE in Discharges of Diesel Engine Cooling Water (Discharge Point Nos. CW-001 and CW-004)

	Human Health
Criteria (µg/L)[1]	0.00059
Dilution Credit	No Dilution
ECA	0.00059
AMEL (µg/L)[2]	**0.00059**
MDEL/AMEL Multiplier[3]	2.01
MDEL (µg/L)	**0.00118**

[1] CTR Criteria for Human Health (for Consumption of Organisms Only)
[2] AMEL = ECA per section 1.4.B, Step 6 of SIP
[3] Assumes sampling frequency n<=4. Calculated multiplier based on Step 6 of section 1.4 of the SIP.

f. **Effluent Limitation Calculations for Discharges to the Pacific Ocean.** From the Table B water quality objectives of the Ocean Plan, effluent limitations are calculated according to the following equation:

$C_e = C_o + D_m (C_o - C_s)$ where,

C_e = the effluent limitation (µg/L)
C_o = the water quality objective (µg/L)
C_s = background seawater concentration (µg/L)
D_m = minimum probable initial dilution expressed as parts seawater per part wastewater

In the absence of available information to calculate dilution, the Regional Water Board assumed a D_m of 0 for the purposes of calculating WQBELs. In accordance with Table C of section III.C.4.a of the Ocean Plan, the Regional Water Board used a C_s of 0 µg/L for all Table B parameters, except the following:

Table F-18. Background Seawater Concentrations

Parameter	Units	Background Seawater Concentration (C_s)
Arsenic	µg/L	3
Copper	µg/L	2
Mercury	µg/L	0.0005
Silver	µg/L	0.16
Zinc	µg/L	8

As an example, the calculation of the effluent limitations for copper and DDT are shown below.

Water quality objectives from the Ocean Plan are:

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Table F-19. Copper and 4,4-DDE Ocean Plan Objectives

Parameter	6-Month Median	Daily Maximum	Instantaneous Maximum	30-Day Average
	µg/L	µg/L	µg/L	µg/L
Copper	3	12	30	--
DDT[1]	--	--	--	0.00017

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

Using the equation, $C_e = C_o + D_m (C_o – C_s)$, the following calculations were made before rounding to two significant digits:

Copper

$C_e = 3 + 0 (3 – 2) = 3$ (6-Month Median)
$C_e = 12 + 0 (12 – 2) = 3$ (Daily Maximum)
$C_e = 30 + 0 (30 – 2) = 30$ (Instantaneous Maximum)

DDT

$C_e = 0.00017 + 0 (0.00017 – 0) = 0.00017$ (30-Day Average)

Based on the implementation procedures described above, effluent limitations have been calculated for pollutants that demonstrate reasonable potential to exceed the water quality objectives contained in Table B of the Ocean Plan.

g. A summary of the applicable WQBELs are summarized below:

Table F-20. Summary of Water Quality-based Effluent Limitations for Discharges of Steam Condensate from Discharge Point Nos. SC-001 through SC-066

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	2.0	5.8	--	--
Lead, Total Recoverable	µg/L	6.3	15.5	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	2.8×10^{-8}	--	--
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	11.8	--	--
pH	standard units	--	--	7.0	9.0
Temperature	°F	--	--	--	[1]

[1] At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.

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Table F-21. Summary of Water Quality-based Effluent Limitations for Discharges of Diesel Engine Cooling Water from Discharge Point Nos. CW-001 and CW-004

Parameter	Units	Effluent Limitations			
		Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Copper, Total Recoverable	µg/L	2.2	5.8	--	--
Lead, Total Recoverable	µg/L	5.8	15.8	--	--
Mercury, Total Recoverable	µg/L	0.051	0.102	--	--
Zinc, Total Recoverable	µg/L	38.4	95.1	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	2.8×10^{-8}	--	--
4,4-DDE	µg/L	0.00059	0.00118	--	-
pH	standard units	--	--	7.0	9.0

Table F-22. Summary of Water Quality-based Effluent Limitations for Discharges of Diesel Engine Cooling Water from Discharge Point Nos. CW-002 and CW-003

Parameter	Units	Effluent Limitations				
		6-Month Median	Average Monthly	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Arsenic, Total Recoverable	µg/L	8	--	32	--	80
Cadmium, Total Recoverable	µg/L	1	--	4	--	10
Chromium, Total Recoverable	µg/L	2	--	8	--	20
Copper, Total Recoverable	µg/L	3	--	12	--	30
Lead, Total Recoverable	µg/L	2	--	8	--	20
Mercury, Total Recoverable	µg/L	0.04	--	0.16	--	0.4
Nickel, Total Recoverable	µg/L	5	--	20	--	50
Zinc, Total Recoverable	µg/L	20	--	80	--	200
TCDD-Equivalents	µg/L	--	3.9×10^{-9}	--	--	--
DDT[1]	µg/L	--	0.00017	--	--	--
pH	standard units	--	--	--	7.0	9.0

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

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5. Whole Effluent Toxicity (WET)

For compliance with the Basin Plan's narrative toxicity objective, this Order requires the Discharger to conduct whole effluent toxicity testing for acute toxicity, as specified in the Monitoring and Reporting Program (Attachment E section V.). This Order also contains effluent limitations for acute toxicity and requires the Discharger to implement best management practices to investigate the causes of, and identify corrective actions to reduce or eliminate effluent toxicity.

The acute toxicity effluent limitation established in Order No. R9-2003-0008 was established to implement the Basin Plan water quality objective for toxicity in receiving waters and was derived from, and is essentially the same as, the acute toxicity discharge standard contained in the 1974 State Water Board Water Quality Control Policy for the Enclosed Bays and Estuaries of California (Bays and Estuaries Policy) which applies to discharges exempted from the Bays and Estuaries Policy acute toxicity discharge standard prohibition of discharges of wastewaters and process waters. The Bays and Estuaries Policy acute toxicity discharge standard applied directly to wastes being discharged, similar to USEPA's technology-based effluent limitations, and was intended to be a minimum standard to prevent water quality degradation and protect beneficial uses of enclosed bays and estuaries.

During the renewal of the Discharger's NPDES permits for the Facility, NBSD, and NBPL, the Discharger challenged the acute toxicity limitation and has asserted that the acute toxicity limitation is not based on scientific data, that it is overly stringent for protecting water quality, and that diversion of all storm water runoff to the sanitary sewer is the only effective BAT/BCT for meeting the effluent limitation.

Due to the nature of stormwater runoff associated with industrial activity and in the absence of a numeric toxicity water quality objective for San Diego Bay from which numeric toxicity effluent limitations can be derived, the Regional Water Board maintains that use of the Bays and Estuaries Policy acute toxicity minimum discharge requirement is an appropriate approach to implement the Basin Plan narrative water quality objective for toxicity in receiving waters. Nonetheless, the Discharger's NPDES permits contained provisions which allowed the Discharger to recommend, after conducting a required study, alternative scientifically valid survival rates for acute exposure to discharges of storm water from industrial areas at the Discharger's facilities.

The Discharger was tasked with a study to develop a scientifically defensible, and appropriate, toxicity limitation for industrial storm water discharges from Naval facilities to San Diego Bay. The results of the study were summarized in a Final Report, *Storm Water Toxicity Evaluation Conducted at: Naval Station San Diego, Naval Submarine Base San Diego, Naval Amphibious Base Coronado, and Naval Air Station North Island*, dated May 2006.

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The Discharger's final recommendations included in the report are summarized below:

- The use of appropriate USEPA WET test methods and data evaluation when declaring a test result as toxic.
- Acknowledge of WET method variable and the minimum significant difference that laboratory testing can provide in declaring a toxic result.
- Consideration of realistic exposure conditions when using WET testing to infer toxicity in the receiving water.

In addition, the Discharger has submitted comments regarding the current acute toxicity requirements. Comments of significant importance are summarized below:

- The Discharger has requested that the existing storm water toxicity testing language be revised to require a statistical comparison of discharge toxicity results with control sample toxicity results using a student t-test, to determine whether a discharge is toxic or not.
- The Discharger has requested that the existing storm water toxicity testing language be revised to require the use of percent minimum significant difference, using the 10th and 75th percentiles as lower and upper bounds, respectively, to account for inherent variability of toxicity testing procedures to determine whether a discharge is toxic or not.
- The Discharger has requested that the existing storm water toxicity discharge specification language be revised according to two proposed alternatives that presumably consider realistic exposure conditions to infer toxicity in the receiving water.

Regional Water Board staff have previously stated in a memorandum to the Executive Officer dated August 22, 2006 that the Discharger's proposed toxicity alternatives not be adopted in their entirety and, "*Toxicity in storm water discharges should not be ignored just because the causative agent is diluted in bay water. Testing times should not be shortened to ensure that the variability inherent to storm water discharges is not causing low level toxicity that may be missed in an acute test.*"

Considering the study performed by the Discharger, comments received from the Discharger, and the interpretation of State regulations, the implementation of acute limits for storm water shall be based on a calculated statistical difference through the use of a student t-test, in survival between the 100 percent concentration of storm water and the control (receiving water). This method is preferable in that it takes into account the performance of the control, and defines statistical confidence in test results. This approach accounts for inherent variability of toxicity testing procedures to determine whether a discharge is toxic or not with the use of a percent minimum significant difference (PMSD). USEPA's guidance document recommends using the 10th and 90th percentile PMSD for a given test species for comparison with the PMSD of the discharge sample, and

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because the PMSD should be used in conjunction with the statistical comparison to controls, the use of the 75th percentile PMSD as suggested by the Discharger is not supported.

For this Order, the determination of Pass or Fail from a single-effluent-concentration (paired) acute toxicity test is determined using a one-tailed hypothesis test called a t-test. The objective of a Pass or Fail test is to determine if survival in the single treatment (100% effluent) is significantly different from survival in the control (0% effluent). Following Section 11.3 in the fifth edition of Methods for Measuring the Acute Toxicity of Effluents and Receiving Waters to Freshwater and Marine Organisms (EPA/821/R-02/012, 2002), the t statistic for the single-effluent concentration acute toxicity test shall be calculated and compared with the critical t set at the 5% level of significance. If the calculated t does not exceed the critical t, then the mean responses for the single treatment and control are declared "not statistically different" and the Discharger shall report "Pass" on the DMR form. If the calculated t does exceed the critical t, then the mean responses for the single treatment and control are declared "statistically different" and the Discharger shall report "Fail" on the DMR form. This Order requires additional toxicity testing if the effluent limitation for acute toxicity is reported as "Fail" as specified in the Monitoring and Reporting Program.

The use of a difference between a control and a critical concentration (100% in this case) is statistically defendable and protective of the Basin Plan's toxicity objective.

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D. Final Effluent Limitations

1. Final Effluent Limitations

Applicable technology-based effluent limitations and WQBELs for pH, described in sections IV.B and IV.C, have been applied in this Order. Both technology-based effluent limitations and WQBELs were applicable to the discharges (6.0 – 9.0 standard units and 7.0 – 9.0 standard units, respectively). To ensure the protection of water quality, the more stringent lower and upper limitations for pH have been applied as the final effluent limitations in this Order.

Discharges of steam condensate to the San Diego Bay from Discharge Point Nos. SC-001 through SC-066 shall not exceed the effluent limitations summarized below:

Table F-23. Effluent Limitations for Discharges of Steam Condensate from Discharge Point Nos. SC-001 through SC-066

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and Grease	mg/L	25	40	--	--	75
pH	pH units	--	--	--	7.0	9.0
Priority Pollutants						
Copper, Total Recoverable	µg/L	2.0	--	5.8	--	--

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Lead, Total Recoverable	µg/L	6.3	--	15.5	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	--	2.8×10^{-8}	--	--
Bis (2-ethylhexyl) Phthalate	µg/L	5.9	--	11.8	--	--
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Temperature	° F	--	--	--	--	[1]
Turbidity	NTU	75	100	--	--	225

[1] At no time shall any discharge be greater than 20° F over the natural temperature of the receiving water.

Discharges of diesel engine cooling water to San Diego Bay from Discharge Point Nos. CW-001 and CW-004 shall not exceed the effluent limitations summarized below:

Table F-24. Effluent Limitations for Discharges of Diesel Engine Cooling Water from Discharge Point Nos. CW-001 and CW-004

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and Grease	mg/L	25	40	--	--	75
pH	pH units	--	--	--	7.0	9.0
Priority Pollutants						
Copper, Total Recoverable	µg/L	2.2	--	5.8	--	--
Lead, Total Recoverable	µg/L	5.8	--	15.8	--	--
Mercury, Total Recoverable	µg/L	0.051	--	0.102	--	--
Zinc, Total Recoverable	µg/L	38.4	--	95.1	--	--
TCDD-Equivalents	µg/L	1.4×10^{-8}	--	2.8×10^{-8}	--	--
4,4-DDE	µg/L	0.00059	--	0.00118	--	--
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0
Turbidity	NTU	75	100	--	--	225

Discharges of diesel engine cooling water to the Pacific Ocean from Discharge Point Nos. CW-002 and CW-003 shall not exceed the effluent limitations summarized below:

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Table F-25. Effluent Limitations for Discharges of Diesel Engine Cooling Water from Discharge Point Nos. CW-002 and CW-003

Parameter	Units	Effluent Limitations					
		6-Month Median	Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants							
Oil and Grease	mg/L	--	25	40	--	--	75
pH	pH units	--	--	--	--	7.0	9.0
Ocean Plan Pollutants							
Arsenic, Total Recoverable	µg/L	8	--	--	32	--	80
Cadmium, Total Recoverable	µg/L	1	--	--	4	--	10
Chromium, Total Recoverable	µg/L	2	--	--	8	--	20
Copper, Total Recoverable	µg/L	3	--	--	12	--	30
Lead, Total Recoverable	µg/L	2	--	--	8	--	20
Mercury, Total Recoverable	µg/L	0.04	--	--	0.16	--	0.4
Nickel, Total Recoverable	µg/L	5	--	--	20	--	50
Zinc, Total Recoverable	µg/L	20	--	--	80	--	200
DDT[1]	µg/L	--	0.00017	--	--	--	--
TCDD-Equivalents	µg/L	--	3.9×10^{-9}	--	--	--	--
Non-Conventional Pollutants							
Settleable Solids	ml/L	--	1.0	1.5	--	--	3.0
Turbidity	NTU	--	75	100	--	--	225

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

Discharges of ROWPU product water to the Pacific Ocean and the San Diego Bay from Discharge Point No. RO-001 shall not exceed the effluent limitations summarized below:

Table F-26. Effluent Limitations for Discharges of ROWPU Product Water from Discharge Point No. RO-001

Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Conventional Pollutants						
Oil and Grease	mg/L	25	40	--	--	75
pH	pH units	--	--	--	7.0	9.0
Non-Conventional Pollutants						
Settleable Solids	ml/L	1.0	1.5	--	--	3.0

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Parameter	Units	Effluent Limitations				
		Average Monthly	Weekly Average	Maximum Daily	Instantaneous Minimum	Instantaneous Maximum
Turbidity	NTU	75	100	--	--	225

Discharges of storm water at Discharge Point Nos. NAS-001 through NAS-058, NAB-001 through NAB-052, and NOLF-001 through NOLF-003 shall achieve a rating of "Pass" for acute toxicity with compliance determined as specified in section VII.H of this Order.

2. Satisfaction of Anti-Backsliding Requirements

All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R9-2003-0008 and meet State and federal anti-backsliding requirements.

3. Satisfaction of Antidegradation Policy

Waste Discharge Requirements for the Discharger must conform with federal and state antidegradation policies provided at 40 CFR 131.12 and in State Board Resolution No. 68-16, Statement of Policy with Respect to Maintaining High Quality of Waters in California. The antidegradation policies require that beneficial uses and the water quality necessary to maintain those beneficial uses in the receiving waters of the discharge shall be maintained and protected, and, if existing water quality is better than the quality required to maintain beneficial uses, the existing water quality shall be maintained and protected unless allowing a lowering of water quality is necessary to accommodate important economic and social development or consistent with maximum benefit to the people of California. When a significant lowering of water quality is allowed by the Regional Water Board, an antidegradation analysis is required in accordance with the State Water Board' s Administrative Procedures Update (July 2, 1990), Antidegradation Policy Implementation for NPDES Permitting.

The Discharger reported in the application discharges of wastewater from pier boom cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning, which were not regulated under Order No. R9-2003-0008. The Regional Water Board conducted RPAs which indicate that these discharges have the reasonable potential to exceed water quality objectives. In lieu of numeric effluent limitations, this Order requires the Discharger to implement BMPs to control and abate the discharge of pollutants from the discharges. Due to the low volume and frequency of these discharges, the implementation of the proper BMPs is expected to sufficiently reduce the discharge of pollutants and the addition of Discharge Point Nos. BW-001, BR-001, BR-002, SR-001, SR-002, and ME-001 is not expected to negatively affect/impact the receiving water.

The Discharger also requested in the application to discharge up to 3,000 gallons of ROWPU brine, backwash, and product water to the Pacific Ocean and the San Diego Bay during training exercises that occur four times per year. The discharge of

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reverse osmosis brine was prohibited in Order No. R9-2003-0008. Due to the high concentrations of pollutants expected in discharges of reverse osmosis brine and backwash water, and because the Discharger has not submitted priority pollutant monitoring for these discharges, the discharge of ROWPU brine and backwash water is not authorized by this Order. However, due to the low volume and high quality of the reverse osmosis product water, the discharge of ROWPU product water from RO-001 is authorized by this Order and technology-based effluent limitations based on the Ocean Plan have been established. The addition of Discharge Point No. RO-001 is not expected to negatively affect/impact the receiving water. This Order requires priority pollutant monitoring, which shall be used to conduct a complete RPA. Should the discharge exhibit reasonable potential to exceed water quality objectives, this Order may be reopened and new effluent limitations added.

The Discharger has requested that two additional discharges of diesel engine cooling water from the pump stations at Buildings 1362 and 1440 (Discharge Point Nos. CW-003 and CW-004) be authorized to discharge. Previously, diesel engine cooling water was discharged from pump stations in Buildings 186, 499, 812, 1357, 348, and 554. However, the Discharger no longer discharges wastewater from the stations at Buildings 186, 499, 348, or 554. Considering the elimination of four discharges of diesel engine cooling water to the receiving water, and the fact that the additional effluent streams are similar to the current discharges of diesel engine cooling water, the addition of Discharge Point Nos. CW-003 and CW-004 for diesel engine cooling water is not expected to negatively affect/impact the receiving water. Additionally, this Order establishes WQBELs more stringent than established in Order No. R9-2003-0008 which shall be protective of water quality objectives.

The limitations and requirements of this Order are more stringent than established in Order No. R9-2003-0008. The permitted discharge is consistent with the antidegradation provisions of 40 CFR 131.12 and State Water Board Resolution No. 68-16. Compliance with these requirements will result in the use of best practicable treatment or control of the discharge. The impact on existing water quality will be insignificant.

4. Stringency of Requirements for Individual Pollutants

This Order contains both technology-based and water quality-based effluent limitations for individual pollutants. The technology-based effluent limitations applied in the Order consist of restrictions on oil and grease, suspended solids, settleable solids, turbidity, and pH as specified in Table A of the Ocean Plan; a requirement to continue to implement a PLAN for utility vault and manhole dewatering discharges; a requirement to develop and maintain a BMP Plan for discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning; and a requirement to continue to implement a SWPPP for toxic pollutants and hazardous substances in storm water runoff. These restrictions and requirements are discussed in section IV.B.2. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements. These limitations are not more stringent than required by the CWA.

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WQBELs have been scientifically derived to implement water quality objectives that protect beneficial uses. Both the beneficial uses and the water quality objectives have been approved pursuant to federal law and are the applicable federal water quality standards. To the extent that toxic pollutant WQBELs were derived from the CTR, the CTR is the applicable standard pursuant to section 131.38. The scientific procedures for calculating the individual WQBELs for priority pollutants for discharges to the San Diego Bay are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. The scientific procedures for calculating the individual WQBELs for constituents contained in Table B of the Ocean Plan for discharges to the Pacific Ocean are based on the Ocean Plan, which was approved by the USEPA on February 14, 2006. All beneficial uses and water quality objectives contained in the Basin Plan and the Ocean Plan were approved under state law and submitted to and approved by USEPA prior to May 30, 2000. Any water quality objectives and beneficial uses submitted to USEPA prior to May 30, 2000, but not approved by USEPA before that date, are nonetheless "*applicable water quality standards for purposes of the CWA*" pursuant to section 131.21(c)(1). Collectively, this Order's restrictions on individual pollutants are no more stringent than required to implement the requirements of the CWA.

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E. Interim Effluent Limitations

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL and 6-month median values shows that the Discharger may be unable to consistently comply with effluent limitations established in this Order for copper, lead, TCDD-equivalents, and bis (2-ethylhexyl) phthalate at Discharge Point Nos. SC-001 through SC-066; copper, lead, mercury, zinc, TCDD-equivalents, and 4,4-DDE at Discharge Point Nos. CW-001 and CW-004; and arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents at Discharge Point Nos. CW-002 and CW-003. As a result, this Order contains interim limitations for the parameters at Discharge Point Nos. SC-001 through SC-066, CW-001, and CW-004 and a compliance schedule that allows the Discharger until May 18, 2010 to comply with the final effluent limitations. This Order also contains interim limitations for the parameters at Discharge Point Nos. CW-002 and CW-003 and a compliance schedule that allows the Discharger until June 25, 2011, to comply with the final effluent limitations.

40 CFR section 131.38(e) provides conditions under which interim effluent limitations and compliance schedules may be issued. The SIP allows inclusion of an interim limitation with a specific compliance schedule included in an NPDES permit for priority pollutants if the limitation for the priority pollutant is based on CTR criteria and the Discharger demonstrates that it is infeasible to achieve immediate compliance with the effluent limitations. Based on existing data, it appears that it is infeasible for the Discharger to immediately comply with the CTR-based effluent limitations for copper, lead, TCDD-equivalents, and bis (2-ethylhexyl) phthalate at Discharge Point Nos. SC-001 through SC-066 and copper, lead, mercury, zinc, TCDD-equivalents, and 4,4-DDE at Discharge Point Nos. CW-001 and CW-004. Interim effluent limitations and compliance schedules are included in the Order for the parameters where data

indicates it is infeasible for the Discharger to achieve immediate compliance with the final effluent limitations.

The Basin Plan allows inclusion of an interim limitation with a specific compliance schedule in an NPDES permit if the Regional Water Board determines that, for an existing Discharger, achieving immediate compliance in a discharge with new or more stringent WQBELs that resulted from new knowledge on the characteristics and impacts of the discharge is infeasible. New knowledge about the characteristics and impacts of the discharge that can result in new or more stringent WQBELs includes situations where pollutants previously unregulated in an existing discharge are newly regulated because the new information indicates a reasonable potential for the discharge to exceed an applicable water quality objective in the receiving water. Based on existing data, it appears that it is infeasible for the Discharger to immediately comply with the Ocean Plan-based effluent limitations for arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents at Discharge Point Nos. CW-002 and CW-003. Interim effluent limitations and compliance schedules are included in the Order for parameters where data indicates it is infeasible for the Discharger to achieve immediate compliance with the final effluent limitations.

Pursuant to the SIP (section 2.2.1, Interim Requirements under a Compliance Schedule) and the Basin Plan, when compliance schedules are established in an Order, interim limitations must be included based on current treatment facility performance or existing permit limitations, whichever is more stringent to maintain existing water quality. There is insufficient data to perform a meaningful statistical analysis to develop interim limitations and effluent limitations were not established in Order No. R9-2003-0008. Thus, the individual MECs for each discharge location shall serve as the interim effluent limitation concentration for the constituents. However, in the event that the maximum daily effluent limitation and/or the instantaneous maximum effluent limitation is greater than the MEC for a parameter at a specific location, the maximum daily effluent limitation and/or instantaneous maximum effluent limitation is applicable immediately as the interim limitation (which is the case for the effluent limitations for bis (2-ethylhexyl) phthalate at Discharge Point Nos. SC-001 through SC-066 and arsenic, cadmium, chromium, and zinc at Discharge Point Nos. CW-003 and CW-004).

It should be noted that the Regional Water Board might take appropriate enforcement actions if interim limitations and requirements are not met.

The SIP requires that the Regional Water Board establish other interim requirements such as requiring the Discharger to develop a pollutant minimization plan and/or source control measures and participate in the activities necessary to achieve the final effluent limitations. This Order requires the Discharger to prepare and implement a pollution prevention plan for copper, lead, TCDD-equivalents, and bis (2-ethylhexyl) phthalate at Discharge Point Nos. SC-001 through SC-066; copper, lead, mercury, zinc, TCDD-equivalents, and 4,4-DDE at Discharge Point Nos. CW-001 and CW-004; and arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents at Discharge Point Nos. CW-002 and CW-003 in accordance with CWC section 13263.3(d)(2).

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The following interim limitations shall be effective until May 18, 2010, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Table F-27. Interim Effluent Limitations for Discharges of Steam Condensate at Discharge Point Nos. SC-001 through SC-066

Parameter	Units	Maximum Daily
Copper, Total Recoverable	µg/L	370
Lead, Total Recoverable	µg/L	22.8
TCDD-equivalents	µg/L	5.7×10^{-8}
Bis (2-ethylhexyl) Phthalate	µg/L	11.8

Table F-28. Interim Effluent Limitations for Discharges of Diesel Engine Cooling Water at Discharge Point Nos. CW-001 and CW-004

Parameter	Units	Maximum Daily
Copper, Total Recoverable	µg/L	97
Lead, Total Recoverable	µg/L	23
Mercury, Total Recoverable	µg/L	0.44
Zinc, Total Recoverable	µg/L	150
TCDD-equivalents	µg/L	7.15×10^{-8}
4,4-DDE	µg/L	0.0126

The following interim limitations shall be effective until June 25, 2011, after which, the Discharger shall demonstrate compliance with the final effluent limitations.

Table F-29. Interim Effluent Limitations for Discharges of Diesel Engine Cooling Water at Discharge Point Nos. CW-002 and CW-003

Parameter	Units	Maximum Daily	Instantaneous Maximum
Arsenic, Total Recoverable	µg/L	32	80
Cadmium, Total Recoverable	µg/L	4	10
Chromium, Total Recoverable	µg/L	8	20
Copper, Total Recoverable	µg/L	97	--
Lead, Total Recoverable	µg/L	23	--
Mercury, Total Recoverable	µg/L	0.44	--
Zinc, Total Recoverable	µg/L	150	200
DDT[1]	µg/L	0.0126	--
TCDD-Equivalents	µg/L	7.15×10^{-8}	--

[1] Applies to the sum of 4,4-DDT, 2,4-DDT, 4,4-DDE, 2,4-DDE, 4,4-DDD, and 2,4-DDD.

F. Land Discharge Specifications

[Not Applicable]

G. Reclamation Specifications

[Not Applicable]

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V. RATIONALE FOR RECEIVING WATER LIMITATIONS

A. Surface Water

Receiving water limitations in this Order are derived from the water quality objectives for bays and estuaries established by the Basin Plan (1994), the Bays and Estuaries Policy (1974), the California Toxics Rule (2000), and the State Implementation Policy (2005).

B. Groundwater

[Not Applicable]

VI. RATIONALE FOR MONITORING AND REPORTING REQUIREMENTS

40 CFR section 122.48 requires that all NPDES permits specify requirements for recording and reporting monitoring results. Water Code sections 13267 and 13383 authorizes the Regional Water Board to require technical and monitoring reports. The Monitoring and Reporting Program (MRP), Attachment E of this Order, establishes monitoring and reporting requirements to implement federal and state requirements. The following provides the rationale for the monitoring and reporting requirements contained in the MRP for this facility.

A. Influent Monitoring

[Not Applicable]

B. Effluent Monitoring

Pursuant to the requirements of 40 CFR §122.44(i)(2) effluent monitoring is required for all constituents with effluent limitations. Effluent monitoring is necessary to assess compliance with effluent limitations, assess the effectiveness of BMPs and pollution prevention plans, to assess the impacts of the discharge on the receiving water, and determine compliance with effluent limitations.

1. Steam Condensate Monitoring (Monitoring Locations SC-001 through SC-066)

a. Annual effluent flow monitoring has been revised to monthly to more accurately determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Annual effluent monitoring of total suspended solids has been revised to quarterly in order to better characterize the discharge of steam condensate from the Facility into the San Diego Bay.

c. Effluent limitations for oil and grease, settleable solids, turbidity, and pH are established in this Order based on Table A of the Ocean Plan. Annual monitoring for these parameters has been revised to quarterly in order to determine compliance with effluent limitations.

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d. The Regional Water Board finds that the steam condensate discharges are elevated temperature wastes. In order to determine the effects of the discharge on the beneficial uses of the San Diego Bay, annual monitoring for temperature has been revised to quarterly.

e. Monitoring data submitted by the Discharger during the term of Order No. R9-2003-0008 indicates that the discharge has the reasonable potential to exceed water quality criteria for bis (2-ethylhexyl) phthalate, copper, lead, and TCDD-equivalents. Monthly monitoring using grab samples is required to determine compliance with the applicable effluent limitations.

f. Monitoring once in Year One and once in Year Five of steam condensate discharges for the remaining CTR priority pollutants has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP. Monitoring for arsenic, cadmium, chromium, mercury, nickel, silver, and zinc are included in this CTR monitoring and are no longer specified individually in the MRP.

2. Diesel Engine Cooling Water Monitoring (Monitoring Locations CW-001 through CW-004)

a. Semi-annual effluent flow monitoring has been revised to quarterly to more accurately determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Semi-annual effluent monitoring of total petroleum hydrocarbons (diesel range), salinity, and total suspended solids has been revised to monthly in order to better characterize the discharge of diesel engine cooling water from the Facility into the San Diego Bay.

c. Effluent limitations for oil and grease, settleable solids, turbidity, and pH are established in this Order based on Table A of the Ocean Plan. Annual monitoring for these parameters has been revised to quarterly in order to determine compliance with effluent limitations.

d. The Regional Water Board finds that the discharges of diesel engine cooling water are thermal wastes. In order to determine the effects of the discharge on the beneficial uses of the San Diego Bay and determine compliance with Prohibition III.B, semi-annual monitoring for temperature has been revised to quarterly.

e. Semi-annual monitoring for arsenic, cadmium, chromium, copper, lead, mercury, nickel, and zinc has been revised to monthly and monthly monitoring for TCDD-equivalents and DDT has been established because the discharge has been determined to have reasonable potential to exceed water quality criteria for these parameters. Increased monitoring is necessary to better characterize the discharge of diesel engine cooling water from the Facility into the San Diego Bay, and to determine compliance with effluent limitations.

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f. Annual monitoring of diesel engine cooling water for the remaining CTR priority pollutants has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP. Annual monitoring for silver and polynuclear aromatic hydrocarbons (PAHs) are included in this annual CTR monitoring and are no longer specified individually in the MRP.

g. Table B of the Ocean Plan includes water quality objectives for a number of pollutants. In Order to determine if reasonable potential exists for the discharges to the Pacific Ocean to exceed the water quality objectives of the Ocean Plan, this Order establishes annual monitoring for ammonia, chlorine residual, chlorinated phenolics, phenolic compounds, and tributyltin. The remaining Table B pollutants will be included in the annual CTR monitoring.

3. Pier Boom Cleaning Monitoring (Monitoring Location BW-001)

a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of pier boom cleaning activities, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness of the BMPs, quarterly monitoring for the Table A parameters is established in this Order.

c. Monitoring data submitted by the Discharger for similar pier boom cleaning activities at NBSD and NBPL indicates that the discharge has the reasonable potential to exceed water quality criteria for copper, benzo (b) fluoranthene, benzo (k) fluoranthene, chrysene, and TCDD-equivalents. Quarterly monitoring using grab samples is required to better characterize the pier boom cleaning discharges from the Facility into the San Diego Bay, and to determine the effectiveness of the Discharger's BMPs.

d. The Discharger submitted monitoring data for similar pier boom cleaning activities at NBSD and NBPL. Monitoring once in Year One and once in Year Five of pier boom cleaning discharges for the remaining CTR priority pollutants has been included to accurately characterize the discharges at the Facility and to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

4. Utility Vault and Manhole Dewatering Monitoring (Monitoring Locations UV-001 through UV-036)

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a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Annual effluent monitoring of electrical conductivity, total petroleum hydrocarbons, and total suspended solids has been revised to quarterly in order to better characterize the discharge of utility vault and manhole dewatering from the Facility into the San Diego Bay.

c. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of utility vault and manhole dewatering, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness of the BMPs, quarterly monitoring for the Table A parameters is established in this Order.

d. Annual monitoring for arsenic, copper, lead, mercury, nickel, silver, and zinc has been revised to quarterly and quarterly monitoring for benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (k) fluoranthene, chrysene, dibenzo (a,h) anthracene, and indeno (1,2,3-cd) pyrene has been established because the discharge has been determined to have reasonable potential to exceed water quality criteria for these parameters. Increased monitoring is necessary to better characterize the discharge from utility vault and manhole dewatering at the Facility into the San Diego Bay, and to determine the effectiveness of the Discharger's BMPs.

e. Annual monitoring of utility vault and manhole dewatering discharges for the remaining CTR priority pollutants and TCDD-equivalents has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP. Annual monitoring for cadmium, chromium, and PAHs are included in this annual CTR monitoring and are no longer specified individually in the MRP.

5. Pier Washing Monitoring (Monitoring Location PW-001)

a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of pier washing activities, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness

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of the BMPs, quarterly monitoring for the Table A parameters is established in this Order.

c. Monitoring data submitted by the Discharger for similar pier washing activities at NBPL indicates that the discharge has the reasonable potential to exceed water quality criteria for arsenic, copper, mercury, nickel, and zinc. Quarterly monitoring using grab samples is required to better characterize the pier washing discharges from the Facility into the San Diego Bay, and to determine the effectiveness of the Discharger's BMPs.

d. The Discharger submitted monitoring data for similar pier washing activities at NBPL. Annual monitoring of pier washing discharges for the remaining CTR priority pollutants and TCDD-equivalents has been included to accurately characterize the discharges at the Facility and to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

6. ROWPU Product Water Monitoring (Monitoring Location RO-001)

a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Effluent limitations for oil and grease, settleable solids, turbidity, and pH are established in this Order based on Table A of the Ocean Plan. Quarterly monitoring for these parameters has established in order to determine compliance with effluent limitations.

c. Monitoring for CTR priority pollutants was not submitted in the Discharger's application and therefore an RPA for discharges of ROWPU product water could not be conducted. Monitoring once in Year One and once in Year Five of discharges of ROWPU product water for the remaining CTR priority pollutants has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

d. Table B of the Ocean Plan includes water quality objectives for a number of pollutants. In Order to determine if reasonable potential exists for the discharges to the Pacific Ocean to exceed the water quality objectives of the Ocean Plan, this Order establishes monitoring once in Year One and once in Year Five for ammonia, chlorine residual, chlorinated phenolics, phenolic compounds, and tributyltin. The remaining Table B pollutants will be included in the CTR monitoring once in Year One and once in Year Five.

7. Boat Rinsing Monitoring (Monitoring Locations BR-001 and BR-002)

a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only

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applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of boat rinsing activities, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness of the BMPs, quarterly monitoring for the Table A parameters is established in this Order.

c. The Regional Water Board finds that the boat rinsing discharges are elevated temperature wastes. In order to determine the effects of the discharge on the beneficial uses of the San Diego Bay, quarterly monitoring for temperature has been established in this Order.

d. Monitoring data submitted by the Discharger for similar boat rinsing activities at NBPL indicates that the discharge has the reasonable potential to exceed water quality criteria for copper, lead, mercury, nickel, zinc, , benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (k) fluoranthene, bis (2-ethylhexyl) phthalate, chrysene, dibenzo (a,h) anthracene, and indeno (1,2,3-cd) pyrene. Quarterly monitoring using grab samples is required to better characterize the boat rinsing discharges from the Facility into the San Diego Bay, and to determine the effectiveness of the Discharger's BMPs. Annual monitoring has been included for TCDD-equivalents.

e. The Discharger submitted monitoring data for similar boat rinsing activities at NBPL. Monitoring once in Year One and once in Year Five of boat rinsing discharges for the remaining CTR priority pollutants has been included to accurately characterize the discharges at the Facility and to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

8. Swimmer Rinsing Monitoring (Monitoring Locations SR-001 and SR-002)

a. Quarterly effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of the swimmer rinsing discharges, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness of the BMPs, quarterly monitoring for the Table A parameters is established in this Order.

c. Monitoring for CTR priority pollutants and TCDD-equivalents was not submitted in the Discharger's application and therefore an RPA for discharges from swimmer rinsing could not be conducted. Monitoring once in Year One and once

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in Year Five of discharges from swimmer rinsing for the remaining CTR priority pollutants and TCDD-equivalents has been included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

9. Marine Mammal Enclosure Cleaning Monitoring (Monitoring Location ME-001)

a. Annual effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Table A of the Ocean Plan includes technology-based requirements for oil and grease, settleable solids, turbidity, and pH. Although the Ocean Plan is only applicable to ocean discharges, the Regional Water Board finds that it can be used as a reference for discharges to the San Diego Bay, which has similar characteristics. Due to the nature of marine mammal enclosure cleaning activities, the Regional Water Board finds that the implementation of BMPs is more appropriate than establishing numeric effluent limitations. In order to determine the effectiveness of the BMPs, annual monitoring for the Table A parameters is established in this Order.

c. The Regional Water Board finds that the marine mammal enclosure cleaning discharges are elevated temperature wastes. In order to determine the effects of the discharge on the beneficial uses of the San Diego Bay, annual monitoring for temperature has been established in this Order.

d. Monitoring data submitted by the Discharger for similar marine mammal enclosure cleaning activities at NBPL indicates that the discharge has the reasonable potential to exceed water quality criteria for copper and TCDD-equivalents. Monitoring once in Year One and once in Year Five using grab samples is required to better characterize the marine mammal enclosure cleaning discharges from the Facility into the San Diego Bay, and to determine the effectiveness of the Discharger's BMPs.

e. The Discharger submitted monitoring data for similar marine mammal enclosure cleaning activities at NBPL. Monitoring once in Year One and once in Year Five of marine mammal enclosure cleaning discharges for the remaining CTR priority pollutants has been included to accurately characterize the discharges at the Facility and to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

10. Miscellaneous Discharge Monitoring (Monitoring Location MISC-001 through MISC-004)

a. Annual effluent flow monitoring has been established to determine the volume of effluent being discharged from the Facility into the San Diego Bay.

b. Monitoring once in Year One and once in Year Five of the miscellaneous discharges for the CTR priority pollutants and TCDD-equivalents has been

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included to determine if reasonable potential exists for the discharges to exceed water quality criteria, as specified in section 1.3 of the SIP.

C. Whole Effluent Toxicity Testing Requirements

For the first 4 years of the permit term, Order No. R9-2003-0008 required the Discharger to analyze at least one industrial storm water discharge event at a minimum of three representative locations for acute toxicity survival annually or to analyze industrial storm water discharges according to a toxicity study plan. After the 4th year of the permit term, Order No. R9-2003-0008 required the Discharger to analyze a representative sample from each area at NASNI and NAB at which industrial activities are conducted for acute toxicity during at least one storm water discharge event annually using a 96-hour static or continuous flow bioassay (toxicity) test of undiluted storm water runoff associated with industrial activity. Order No. R9-2003-0008 required the Discharger to use the testing protocol contained in the 2001 Ocean Plan.

This Order requires the Discharger to analyze a representative sample from each area at the Facility at which industrial activities are conducted for acute toxicity during at least one storm event annually using grab effluent samples and both acute and chronic toxicity during at least once in five years for non-storm water discharges using grab effluent samples. The Discharger submitted the Storm Water Toxicity Evaluation Conducted at Naval Station San Diego, Naval Submarine Base San Diego, Naval Amphibious Base Coronado, and Naval Air Station North Island in May 2006. Based on the findings of the study, the Regional Water Board finds that these requirements are appropriate.

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D. Receiving Water Monitoring

1. Surface Water

a. Monitoring of the receiving water is necessary to determine if the discharges from the Facility are impacting the receiving waters, applicable beneficial uses, and aquatic life.

b. Annual monitoring of the remaining CTR priority pollutants at a single location in the Pacific Ocean and the San Diego Bay outside the influence of all Facility discharges has been established to determine compliance with receiving water limitations and to help determine reasonable potential, as specified in section 1.3 of the SIP, for future permitting efforts.

c. Monthly temperature monitoring has been established in order to determine compliance with Prohibition III.B for diesel engine cooling waters and the effluent limitations for temperature for discharges of steam condensate, boat rinsing, and marine mammal enclosure cleaning.

2. Groundwater

[Not Applicable]

E. Other Monitoring Requirements

1. The discharge of contact storm water to the Pacific Ocean, the San Diego Bay, and the Tijuana River may contain pollutants from the surrounding area which could contribute to the exceedance of the water quality criteria/objectives of the receiving waters. Storm water monitoring requirements have been retained from Order No. R9-2003-0008 to determine the effects of storm water discharges on the receiving water and monitor the effectiveness of the SWPPP.

2. The Regional Harbor Monitoring Program is being developed to obtain critical ambient water quality data from the four harbors in the San Diego Region. The intent of regional monitoring activities is to maximize the efforts of all monitoring partners using a more cost-effective monitoring design and to best utilize the pooled scientific resources of the region. During these coordinated sampling efforts, the discharger's sampling and analytical effort may be reallocated to provide a regional assessment of the impact of the discharge of waste and storm water to the four harbors in the San Diego Region. Anticipated modifications to the monitoring program will be coordinated so as to provide a more comprehensive picture of the ecological and statistical significance of monitoring results and to determine cumulative impacts of various pollution sources. If predictable relationships among the biological, water quality and effluent monitoring variables can be demonstrated, it may be appropriate to decrease the discharger's sampling effort. Conversely, the monitoring program may be intensified if it appears that the objectives cannot be achieved through the discharger's existing monitoring program. These changes will improve the overall effectiveness of monitoring in the four harbors in the San Diego Region.

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VII. RATIONALE FOR PROVISIONS

A. Standard Provisions

Standard Provisions, which apply to all NPDES permits in accordance with 40 CFR section 122.41, and additional conditions applicable to specified categories of permits in accordance with 40 CFR section 122.42, are provided in Attachment D. The Discharger must comply with all standard provisions and with those additional conditions that are applicable under 40 CFR section 122.42.

40 CFR section 122.41(a)(1) and (b) through (n) establish conditions that apply to all State-issued NPDES permits. These conditions must be incorporated into the permits either expressly or by reference. If incorporated by reference, a specific citation to the regulations must be included in the Order. Section 123.25(a)(12) allows the state to omit or modify conditions to impose more stringent requirements. In accordance with section 123.25, this Order omits federal conditions that address enforcement authority specified in sections 122.41(j)(5) and (k)(2) because the enforcement authority under the Water Code is more stringent. In lieu of these conditions, this Order incorporates by reference Water Code section 13387(e).

B. Special Provisions

1. Reopener Provisions

a. The Order may be reopened and modified in accordance with NPDES regulations at 40 CFR Parts 122 and 124, as necessary, to include additional conditions or limitations based on newly available information or to implement any USEPA approved, new, State water quality objective.

This Order may be modified, revoked and reissued, or terminated for cause including, but not limited to, the following:

i. Violations of any terms or conditions of this Order

ii. Obtaining this Order by misrepresentation or failure to disclose fully all relevant facts.

iii. A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.

b. This Order may be re-opened and modified, to incorporate in accordance with the provisions set forth in 40 CFR Parts 122 and 124, to include requirements for the implementation of the watershed management approach.

c. This Order may be re-opened and modified, revoked, and reissued or terminated in accordance with the provisions of 40 CFR sections 122.44, 122.62 to 122.64, 125.62, and 125.64. Causes for taking such actions include, but are not limited to, failure to comply with any condition of this Order and permit, and endangerment to human health or the environment resulting from the permitted activity.

d. This Order may be re-opened and modified, to incorporate additional limitations, prohibitions, and requirements, based on the results of additional monitoring required by the MRP.

e. The filing of a request by the Discharger for modifications, 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.

f. **ROWPU Brine and Backwash Water Study.** This reopener allows the Regional Water Board to reopen the Order for the authorization to discharge ROWPU brine and backwash water based on a review of studies on the effects of these discharges on the receiving waters.

2. Special Studies and Additional Monitoring Requirements

a. Toxicity Reduction Requirements

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The Basin Plan contains a narrative toxicity objective that states, "*All waters shall be maintained free of toxic substances in concentrations that produce detrimental physiological responses in human, plant, animal, or aquatic life.*" (Basin Plan at page 3-29.) The storm water monitoring data from NASNI and NAB and from shipyards in the San Diego Region indicate that high concentrations of copper and zinc are toxic. This provision requires the Discharger to develop an Initial Investigative TRE Workplan in accordance with USEPA guidance which shall include steps the Discharger intends to follow if toxicity is measured above the effluent limitation for acute toxicity. This provision also includes requirements to initiate the TRE/TIE process if the results of acute toxicity testing exceed the effluent limitation for acute toxicity.

3. Best Management Practices and Pollution Prevention

a. **Pollution Prevention Plan (PLAN) for Utility Vault and Manhole Dewatering Discharges.** As discussed in sections IV.B.2.b and IV.C.4.b of this Fact Sheet, the Regional Water Board finds that numerical effluent limitations are not feasible for discharges from utility vault and manhole dewatering discharges. Federal Regulations at 40 CFR 122.44(k)(3) and (4) authorize the Regional Water Board to require BMPs to control or abate the discharge of pollutants when numeric effluent limitations are infeasible and when the practices are reasonably necessary to achieve effluent limitations and standards or to carry out the purposes and intent of the CWA.

The development of pollution prevention practices provides the flexibility necessary to establish controls which can appropriately address the various utility vault and manhole dewatering discharges. The pollution prevention practices have two major objectives:

i. To identify situations which allow water to collect in the vault or underground structure and lead to a discharge; and

ii. To describe and ensure the implementation of practices that will reduce pollutants in the discharge from normal operations of utility companies.

Similar to BMPs, pollution prevention practices are designed to prevent or control the discharge of pollutants. They may include a schedule of activities, prohibition of practices, maintenance procedures, or other management practices. A PLAN is a written document that describes the operator's activities to comply with the requirements of this Order. The Plan is intended to evaluate potential pollutant sources at the site and select and implement appropriate measures designed to prevent or control the discharge of pollutants. Order No. R9-2003-0008 incorporated the pertinent requirements of Order No. 2001-11-DWQ, including the requirement to develop and implement a PLAN that included BMPs to achieve BAT and BCT. According to the *Case Study for Utility Vault and Manhole Dewatering Discharges at Naval Base Point Loma, Naval Base San Diego, and Naval Base Coronado* submitted by the Discharger in May 2007, the Discharger has maintained and implemented the *Pollution Prevention Plan for*

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Utility Vault Dewatering Discharges as required by Order No. R9-2003-0008, which describes the types of discharges, prohibited discharges, pollution prevention practices and BMPs, and monitoring and inspections of utility vault and manhole discharges. Additionally, the case study states that the Discharger has implemented procedures to eliminate manhole dewatering discharges to surface waters and either pumps the water into an adjacent utility manhole or transfers the water to the sanitary sewer system. However, the Discharger acknowledges the potential for rare emergency situations that would require dewatering of a utility vault or manhole onto the ground surface.

Order No. 2006-0008-DWQ includes additional specifications for PLANs for dischargers of utility and manhole dewatering discharges. This Order incorporates the additional specifications from Order No. 2006-0008-DWQ. The Discharger is required to maintain and implement their PLAN in accordance with the requirements of Provision VI.C.3.a of this Order. For assistance in developing the PLAN, the Discharger may refer to the *California Stormwater BMP Handbook – Industrial/Commercial (January 2003 Edition*), published by the California Stormwater Quality Association, which includes references the Discharger may find useful.

b. **BMP Plan for Pier Boom Cleaning, Pier Cleaning, Boat Rinsing, Swimmer Rinsing, and Marine Mammal Enclosure Cleaning Discharges.** Due to the nature of activities associated with discharges of pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning, it is impractical to collect and treat the associated wastewaters prior to discharge. Therefore, the Regional Water Board finds that it is not feasible to establish numeric effluent limitations for pollutants in discharges from pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning. In accordance with 40 CFR 122.44(k)(3) and (4), the Regional Water Board finds that the implementation of BMPs in lieu of numeric effluent limitations are appropriate. This Order requires the Discharger to develop and implement a BMP Plan that includes, at a minimum, the requirements contained in Attachment I to prevent, or minimize the potential for, the release of pollutants to waters of the State and waters of the United States.

c. **Storm Water Pollution Prevention Plan (SWPPP).** Prior to the adoption of Order No. 2003-0008, the storm water discharges at the Facility were regulated by the State Water Board's General Order for Discharges of Storm Water Associated with industrial Activities Excluding Construction Activities (Order No. 97-03-DWQ, NPDES No. CAG000001). Order No. 97-03-DWQ found that numeric effluent limitations for storm water are infeasible. To carry out the purpose and intent of the CWA, Order No. 97-03-DWQ and subsequently Order No. R9-2003-0008 required the Discharger to develop and implement a SWPPP, as authorized by CWA section 304(e) and section 402(p), for toxic pollutants and hazardous substances, and for the control of storm water discharges. Consistent with Order No. 97-03-DWQ and Order No. R9-2003-0008, this Order requires the Discharger to continue to implement and regularly update an adequate SWPPP as specified in Attachment G.

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d. **Benchmark Values.** The USEPA adopted the *Final Reissuance of National Pollutant Discharge Elimination System (NPDES) Storm Water, Multi-Sector General Permit for Industrial Activities, Federal Register, Monday, October 30, 2000* (Multi-Sector Permit) which can be used to evaluate the significance of the chemical concentrations in the Facility's storm water discharges to the Pacific Ocean, San Diego Bay, and Tijuana River.

Sector R of the Multi-Sector Permit includes requirements for ship and boat building or repair yards. According to the Multi-Sector Permit (pages 64766-69), when the industrial storm water discharge has concentrations greater than the USEPA Benchmark Values (page 64767, Table 3), the industrial facility is required to increase monitoring frequencies. Additionally, the Multi-Sector Permit states that the facility operators should review and modify their SWPPP and BMPs at their facility to try to improve the quality of the storm water discharge when discharge concentrations are greater than the benchmark values. The benchmark values for copper and zinc are 63.6 µg/L and 117 µg/L, respectively.

While the benchmark values are not enforceable numerical limitations, they are used to indicate concentrations of concern and to alert the regulated discharger to take actions to lower the concentrations in its discharge. When comparing the chemical concentrations identified in the NASNI and NAB storm water discharges to the benchmark values, the Regional Water Board finds that concentrations often exceed the benchmark values for copper and zinc. The discharge of industrial storm water containing copper and zinc concentrations greater than the benchmark values is a significant concern.

Order No. R9-2003-0008 included monitoring requirements for determining the quality of the industrial storm water discharges and required the Discharger to perform an evaluation of the discharges. Whenever the analysis of an industrial storm water discharge from a particular catchment basin contained copper concentrations greater than the benchmark values of 63.6 µg/L or zinc concentrations greater than 117 µg/L, the Discharger was required to perform the following tasks:

i. Review and modify the SWPPP as necessary to reduce the concentrations of copper and zinc;
ii. After modifying the SWPPP, sample and analyze the next two storm water runoff events; and
iii. Document the review and the modifications to the SWPPP, and document the sampling analysis.

Monitoring data over the term of R9-2003-0008 demonstrated that significant levels of copper and zinc continue to be present in the storm water discharges from the Facility, with concentrations ranging up to 1,200 µg/L of copper and 4,600 µg/L of zinc. Due to the elevated levels of copper and zinc, and consistent with Order No. 2003-0008, this Order retains the requirements to monitor storm water discharges and modify the SWPPP as necessary.

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e. **Evaluation and Minimization Plan for Copper and Zinc in Storm Water.** Order No. R9-2003-0008 included requirements for the Discharger to maintain and implement a SWPPP, as well as additional requirements to be implemented when the concentrations of copper and zinc in discharges of storm water from the Facility exceeded specific benchmark values. Despite these efforts, high concentrations of copper and zinc persist in storm water discharges. This Order requires the Discharger to prepare an evaluation and minimization plan to address sources of copper and zinc in the storm water discharges from the Facility.

f. **CWC section 13263.3(d)(2) Pollution Prevention Plans.** Section 13263.3 of the California Water Code states that pollution prevention should be the first step in the hierarchy for reducing pollution and managing wastes. Further, section 13263.3 (d)(1)(D) states that a Regional Water Board may require a Discharger to complete and implement a pollution prevention plan the Regional Water Board determines that pollution prevention is necessary to achieve a water quality objective. The results of the RPAs detailed in section IV.C.3 of this Fact Sheet indicate the Discharger has the reasonable potential to exceed water quality objectives for arsenic, cadmium, chromium, copper, lead, mercury, zinc, TCDD-equivalents, bis (2-ethylhexyl) phthalate, 4,4-DDE, and DDT, and that pollution prevention is necessary to achieve water quality objectives for these constituents. The Discharger shall develop and implement a Pollution Prevention Plan for arsenic, cadmium, chromium, copper, lead, mercury, zinc, TCDD-equivalents, bis (2-ethylhexyl) phthalate, 4,4-DDE, and DDT, which at a minimum, meets the requirements outlined in CWC section 13263.3(d)(2).

The minimum requirements for the pollution prevention plans include the following:

i. An analysis of one or more of the pollutants, as directed by the State Water Board, a Regional Water Board, or a POTW, that the Facility discharges into water or introduces into POTWs, a description of the sources of the pollutants, and a comprehensive review of the processes used by the discharger that result in the generation and discharge of the pollutants.

ii. An analysis of the potential for pollution prevention to reduce the generation of the pollutants, including the application of innovative and alternative technologies and any adverse environmental impacts resulting from the use of those methods.

iii. A detailed description of the tasks and time schedules required to investigate and implement various elements of pollution prevention techniques.

iv. A statement of the Discharger's pollution prevention goals and strategies, including priorities for short-term and long-term action.

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v. A description of the Discharger's existing pollution prevention methods.

vi. A statement that the Discharger's existing and planned pollution prevention strategies do not constitute cross media pollution transfers unless clear environmental benefits of such an approach are identified to the satisfaction of the State Water Board, the Regional Water Board, or the POTW, and information that supports that statement.

vii. Proof of compliance with the Hazardous Waste Source Reduction and Management Review Act of 1989 (Article 11.9 (commencing with Section 25244.12) of Chapter 6.5 of Division 20 of the Health and Safety Code) if the Discharger is also subject to that act.

viii. An analysis, to the extent feasible, of the relative costs and benefits of the possible pollution prevention activities.

ix. A specification of, and rationale for, the technically feasible and economically practicable pollution prevention measures selected by the Discharger for implementation.

4. Construction, Operation, and Maintenance Specifications

The construction, operation, and maintenance specifications have been retained from Order No. R9-2003-0008.

5. Special Provisions for Municipal Facilities (POTWs Only)

[Not Applicable]

6. Other Special Provisions

The disposal specifications have been retained from Order No. R9-2003-0008.

7. Compliance Schedules

a. Compliance Schedules for Final Effluent Limitations for Arsenic, Cadmium, Chromium, Copper, Lead, Mercury, Zinc, Bis (2-ethylhexyl) Phthalate, TCDD-Equivalents, 4,4-DDE, and DDT

On December 30, 2008, the Discharger submitted a letter demonstrating that it is infeasible for the Navy to achieve immediate compliance with the proposed final effluent limitations for copper, lead, Bis(2-ehtylhexyl)phthalate (DEHP) and TCDD Equivalents for the steam condensate discharges to San Diego Bay and for copper, lead, mercury, zinc, 4,4-DDE, and TCDD equivalents for the cooling water discharges to San Diego Bay.

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These pollutants have been quantified in the steam condensate discharges (SC-001 through SC-066) and cooling water discharges (CW-002 and CW-003) through point source discharge analyses performed in accordance with Order No. R9-2003-0008 and analyses performed to support the NPDES permit renewal application. Results of these analyses were submitted to the Regional Board. The Regional Board finds that the data indicates that the Discharger cannot immediately meet applicable water quality criteria at Discharge Point Nos. SC-001 through SC-066, CW-001, and CW-004.

The SIP allows the Regional Board to establish a compliance schedule in an NPDES Permit based on an existing discharger's request and demonstration that it is infeasible for the discharger to achieve immediate compliance with a CTR criterion, or an effluent limitation based on a CTR criterion.

The SIP states that the compliance schedule shall contain a final compliance date based on the shortest practicable time required to achieve compliance but in no case exceed from the effective date of the SIP ten years to establish and comply with CTR criterion-based limitations. The effective date of the SIP is May 18, 2000. Therefore, any compliance schedule based on the SIP must not exceed beyond May 18, 2010.

The Discharger's December 30, 2008 letter states that the discharge has been evaluated and the source for the steam condensate pollutants is primarily from the steam condensate piping. The quay wall and buildings at NBC which utilize miles of steam lines do not currently posses steam condensate return systems. Navy ships and buildings require steam service for various operations. The only practical option to meeting the final effluent limits as proposed would be to eliminate the discharges by installing a condensate return system. Although an estimate to eliminate this discharge is still being generated, the costs are expected to be in the millions of dollars and require several years to complete. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

The Discharger's December 30, 2008 letter states that the discharge has been evaluated and the source for the cooling water pollutants is primarily from the diesel engines cooling systems, the base potable water supply, or San Diego Bay water. The diesel engine pumps, which are cooled by single pass cooling water, supply water pressure to the fire sprinkler systems in adjacent buildings. The only practical option to meeting the final effluent limits as proposed would be to eliminate the discharges by installing closed cooling systems or replacing the diesel engines with electric motors. Although an estimate to eliminate this discharge is still being generated, the costs are expected to be substantial and require several years to plan and complete. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

The Regional Water Board grants the Navy request for the maximum allowed compliance schedule for the Discharger to come into compliance with the final effluent limitations at Discharge Point Nos. SC-001 through SC-066, CW-001,

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and CW-004 because the compliance schedule is less than the several years that are required to plan and complete the elimination of the discharge, as stated by the Navy. Therefore, a compliance schedule for the Discharger to achieve compliance with final effluent limitations has been granted to the Discharger in accordance with the SIP. By May 18, 2010, the Discharger shall comply with the final effluent limitations for copper, lead, Bis(2-ehtylhexyl)phthalate (DEHP) and TCDD Equivalents for the steam condensate discharges to San Diego Bay and for copper, lead, mercury, zinc, 4,4-DDE, and TCDD equivalents for the cooling water discharges to San Diego Bay.

On December 30, 2008, the Discharger submitted a letter demonstrating that it is infeasible for the Navy to achieve immediate compliance with the proposed final effluent limitations for arsenic, cadmium, chromium, copper, lead, mercury, nickel, zinc, DDT and TCDD equivalents for the cooling water discharges to the Pacific Ocean. These pollutants have been quantified in the cooling water discharges (CW-002 and CW-003) through point source discharge analyses performed in accordance with Order No. R9-2003-0008 and analyses performed to support the NPDES permit renewal application. Results of these analyses were submitted to the Regional Board. The Regional Board finds that the data indicates that the Discharger cannot immediately meet applicable water quality criteria at Discharge Points Nos. CW-002 and CW-003.

The State Board's Policy for Compliance Schedules in NPDES Permits (Compliance Schedule Policy) authorizes the Regional Board to include a compliance schedule in a permit for an existing discharger to implement a new, revised, or newly interpreted limitation more stringent than the limitation previously imposed where the Regional Board determines that the discharger has complied with the application requirements of the Compliance Schedule Policy and has demonstrated that the discharger needs additional time to implement actions to comply with the limitation.

The Compliance Schedule Policy specifies that the compliance schedule must require compliance as soon as possible. The Compliance Schedule Policy also states that the duration of the compliance schedule may not exceed ten years from the date of adoption, revision, or new interpretation of the applicable water quality objective or criterion in a water quality standard. The water quality objectives of concern for the discharge points No. CW-002 and CW-003 are from the Ocean Plan that was approved on February 14, 2006. Therefore, any compliance schedule based on water quality objectives from the Ocean Plan must not exceed beyond February 14, 2016.

The Discharger's December 30, 2008 letter states that the discharge has been evaluated and the source for these pollutants is primarily from the diesel engine cooling systems, or the base potable water supply. The diesel engines pumps, which are cooled by single pass cooling water, supply water pressure to the fire sprinkler systems in adjacent buildings. The only practical option to meeting the

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final effluent limits as proposed would be to eliminate the discharges by installing closed cooling systems or replacing the diesel engines with electric motors. Although an estimate to eliminate this discharge is still being generated, the costs are expected to be substantial and require several years to plan and complete. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

Instead of the maximum allowed compliance schedule of approximately six years and eight months (February 14, 2016), The Regional Water Board finds that three years from the adoption date of this Order is practicable for the Discharger to come into compliance with the final effluent limitations at Discharge Point Nos. CW-002 and CW-003 because only several years are required to plan and complete the elimination of the discharge, as stated by the Navy. Therefore, a compliance schedule for the Discharger to achieve compliance with final effluent limitations has been granted to the Discharger in accordance with the Compliance Schedule Policy. By June 10, 2012, the Discharger shall comply with the final effluent limitations for arsenic, cadmium, chromium, copper, lead, mercury, zinc, DDT, and TCDD-equivalents at Discharge Point No. CW-002 and CW-003.

The Discharger has requested intake credits for discharges using San Diego Bay water because the receiving water concentration may be higher than the proposed Final Effluent Limitations. The Discharger may submit a report as detailed in section 1.4.4 of the SIP demonstrating that the required conditions are met for intake water credits. Where the conditions are met, the Regional Board may establish effluent limitations allowing the Facility to discharge a mass and concentration of the intake water pollutant that is no greater than the mass and concentration found in the Facility's intake water.

b. **Pollution Prevention Plan**

As part of the interim requirements required under section 2.2 of the SIP and the Basin Plan, the Discharger shall prepare and implement a pollution prevention plan for arsenic, cadmium, chromium, copper, lead, mercury, zinc, bis (2-ethylhexyl) phthalate, TCDD-equivalents, 4,4-DDE, and DDT, in accordance with CWC section 13263.3(d)(2) to help implement and track efforts by the Discharger to comply with the final effluent limitations for those parameters. The minimum requirements for the pollution prevention plan are outlined in this Fact Sheet, Attachment F, section VII.B.3.f. The Discharger is required to submit a work plan and time schedule for preparation of the pollution prevention plan shall be completed and submitted to the Regional Water Board **within 3 months of the effective date of this Order**. The Pollution Prevention Plan shall be completed and submitted to the Regional Water Board **within nine (9) months of the effective date of this Order**, and progress reports shall be submitted in accordance with the Monitoring and Reporting Program.

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VIII. PUBLIC PARTICIPATION

The Regional Water Board is considering the issuance of WDRs that will serve as a NPDES permit for the United States Department of the Navy, Naval Base Coronado. As a step in the WDR adoption process, the Regional Water Board staff has developed tentative WDRs. The Regional Water Board encourages public participation in the WDR adoption process.

A. Notification of Interested Parties

The Regional Water Board has notified the Discharger and interested agencies and persons of its intent to prescribe waste discharge requirements for the discharge and has provided them with an opportunity to submit their written comments and recommendations. Notification for the first draft was provided through the following: Published in the San Diego Union-Tribune on May 19, 2008, posted on the Regional Board website on May 20, 2008, and sent by mail on May 20, 2008. Notification for this red-line strike-out draft was provided through the following: Published in the San Diego Union-Tribune on May 5, 2009. Posted on the Regional Board website and sent by mail and e-mail on May 4, 2009.

B. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments must be submitted either in person or by mail to the Executive Office at the Regional Water Board at the address above on the cover page of this Order.

To be fully responded to by staff and considered by the Regional Water Board, written comments must be received at the Regional Water Board offices by 5:00 p.m. on June 3, 2009.

C. Public Hearing

The Regional Water Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: **June 10, 2009**
Time: **9:00 A.M.**
Location: **Regional Water Quality Control Board, San Diego Region**
Board Meeting Room
9174 Sky Park Court, Suite 100
San Diego, CA 92123

Interested persons are invited to attend. At the public hearing, the Regional Water Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be provided in writing.

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Please be aware that dates and venues may change. Our Web address is www.waterboards.ca.gov/sandiego where you can access the current agenda for changes in dates and locations.

D. Waste Discharge Requirements Petitions

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Water Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Water Board's action to the following address:

State Water Resources Control Board
Office of Chief Counsel
P.O. Box 100, 1001 I Street
Sacramento, CA 95812-0100

E. Information and Copying

The Report of Waste Discharge (RWD), related documents, tentative effluent limitations and special provisions, comments received, and other information are on file and may be inspected at the Regional Water Board' s address above at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Regional Water Board by calling (858) 467-2952.

F. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Water Board, reference this facility, and provide a name, address, and phone number.

G. Additional Information

Requests for additional information or questions regarding this Order should be directed to Vicente Rodriguez at (858) 627-3940.

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ATTACHMENT G – STORM WATER POLLUTION PREVENTION PLAN REQUIREMENTS

I. Implementation Schedule

A storm water pollution prevention plan (SWPPP) shall be developed and implemented for each installation discharging industrial storm water as identified in the Report of Waste Discharge by the Discharger for the Facility.

The Discharger shall continue to implement its existing SWPPP. The Discharger shall implement any necessary revisions to its SWPPP to comply with the requirements.

II. Objectives

A. The Discharger's SWPPP shall be prepared to achieve these objectives:

1. To identify and evaluate sources of pollutants associated with industrial activities that may affect the quality of the Facility's industrial storm water discharges and authorized non-storm water discharges;

2. To identify, describe, and implement site-specific Best Management Practices (BMPs) to reduce or prevent pollutants associated with industrial activities in storm water discharges and authorized non-storm water discharges;

3. To identify and implement timely revisions and/or updates to the SWPPP.

B. To achieve the SWPPP objectives, the Discharger shall prepare a written Facility-specific SWPPP in accordance with all applicable SWPPP requirements of this attachment. The SWPPP shall include all required maps, descriptions, schedules, checklists, and relevant copies or specific references to other documents that satisfy the requirements of this attachment[1].

III. Planning and Organization

A. SWPPP Checklist

Upon completing the Facility SWPPP, the Discharger shall prepare the SWPPP Checklist (Item A-1) located at the end of this section. For each requirement listed, the Discharger shall identify the page number where the requirement is located in the SWPPP (or the title, page number, and location of any reference documents), the implementation date or last revision date, and any SWPPP requirements that may not be applicable to the Facility.

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[1] Item A-2, located at the end of this attachment, summarizes the typical development and implementation steps necessary to achieve the described objectives.

B. Pollution Prevention Team

1. The SWPPP shall identify specific individuals and their positions within the Facility organization as members of a storm water pollution prevention team responsible for developing the SWPPP, assisting the Facility manager in SWPPP implementation and revision, and conducting all monitoring program activities required in Attachment E of this Order.

2. The SWPPP shall clearly identify the responsibilities, duties, and activities of each team member.

3. The SWPPP shall identify the responsibilities, duties, and activities of each team member.

4. The SWPPP shall identify, as appropriate, alternative individuals to perform the required SWPPP and monitoring program activities when team members are temporarily unavailable (due to vacation, illness, out of town meetings, etc.).

C. Review Other Requirements and Existing Facility Plans

1. The SWPPP shall be developed, implemented, and revised as necessary to be consistent with any applicable municipal, State, and Federal requirement that pertains to the requirements of this Order. For example, a municipal storm water management agency may require specific BMP implementation activities.

2. The SWPPP may incorporate or reference the elements of the Discharger's existing plans, procedures, or regulatory compliance documents that contain storm water pollution control practices or otherwise relate to the requirements of this Order. For example, facilities subject to Federal Spill Prevention Control and Countermeasures' requirements should already have instituted a plan to control spills of certain hazardous materials, or facilities subject to regional air quality emission controls may already have evaluated industrial activities that emit dust or particulate pollutants.

IV. Site Map

The SWPPP shall include a site map. The site map shall be provided on an 8 ½ x 11 inch or larger sheet and include notes, legends, north arrow, and other data as appropriate to ensure that the site map is clear and understandable. If necessary, the Discharger may provide the required information on multiple site maps. The following information shall be included on the site map:

A. Outlines of the Facility boundary, storm water drainage areas within the Facility boundary, and portions of any drainage area impacted by discharges from surrounding areas. Include the flow direction of each drainage area; on-site surface water bodies; areas of soil erosion; and location(s) of near-by water bodies (such as rivers, lakes, wetlands, etc.) or municipal storm drain inlets that may receive the Facility's storm water discharges and authorized non-storm water discharges.

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B. The location of the storm water collection and conveyance system, associated points of discharge, and direction of flow. Include any structural control measures that affect storm water discharges, authorized non-storm water discharges, and run-on. Examples of structural control measures are catch basins, berms, detention ponds, secondary containment, oil/water separators, diversion barriers, etc.

C. The outline of all impervious areas of the Facility, 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 VI.A.4 below, have occurred.

E. Areas of industrial activity. Identify 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 and disposal areas, dust or particulate generating areas, cleaning and reusing areas, and other areas of industrial activity which are potential pollutant sources.

F. For NASNI and NAB, identify the boundaries of the *high-risk areas*.

V. List of Significant Materials

The SWPPP 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. The materials list shall include raw materials, intermediate products, final or finished products, recycled materials, and waste or disposed materials.

VI. Description of Potential Pollutant Sources

A. For each area identified in section IV.E, the SWPPP shall include a narrative description of the Facility's industrial activities, potential pollutant sources, and potential pollutants that could be exposed to storm water or authorized non-storm water discharges. At a minimum, the following industrial activities shall be described as applicable:

1. Industrial Processes

   Describe each industrial process including the manufacturing, cleaning, maintenance, recycling, disposal, or other activities related to the process. Include the type, characteristics, and approximate quantity of significant materials used in or resulting from the process. Areas protected by containment structures and the corresponding containment capacity shall be identified and described.

2. Material Handling and Storage Areas

   Describe each handling and storage area including the type, characteristics, and quantity of significant materials handled or stored, description of the shipping,

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receiving, and loading procedures, and the spill or leak prevention and response procedures. Areas protected by a containment structure and the corresponding containment capacity shall be identified and described.

3. Dust and Particulate Generating Activities

   Describe all industrial activities that generate dust or particulates that may be deposited within the Facility's boundaries. Include their discharge locations and the type, characteristics, and quality of dust and particulate pollutants that may be deposited within the Facility's boundaries. Identify the primary areas of the Facility where dust and particulate pollutants would settle.

4. Significant Spills and Leaks

   Identify and describe materials that spill or leak in significant quantities in storm water discharges or non-storm water discharges upon adoption of this Order. Include toxic chemicals (listed in 40 CFR Part 302) that have been discharged to storm water as reported in USEPA Form R, and oil and hazardous substances in excess of reportable quantities (see 40 CFR Parts 110, 117, and 302).

   The description shall include the location, 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 may be exposed to storm water or non-storm water discharges; and the preventative measures taken to ensure spills or leaks of the material do no reoccur.

5. Non-Storm Water Discharges

   a. The Discharger shall inspect the Facility to identify all non-storm water discharges, sources, and drainage areas. All drains (inlets and outlets) shall be evaluated to identify whether they connect to the storm drain system.

   b. All non-storm water discharges shall be described. The description shall include the source, quantity, frequency, and characteristics of the non-storm water discharges and associated drainage area and shall identify whether the discharge is an authorized or unauthorized non-storm water discharge in accordance with section XI. Examples of unauthorized non-storm water discharges are rinse and wash water (whether detergents are used or not, contact and non-contact cooling water, boiler blow-down, etc.

6. Soil Erosion

   Describe the Facility locations where soil erosion may occur as a result of industrial activity, storm water discharges associated with industrial activity, or authorized non-storm water discharges..

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VII. Assessment of Potential Pollutant Sources

A. The SWPPP shall include a narrative assessment of all industrial activities and potential pollutant sources as described in accordance with section VI. To determine the likelihood that significant materials will be exposed to storm water or authorized non-storm water discharges, the assessment shall include consideration of the quantity, characteristics, and locations of each significant material handled, produced, stored, recycled, or disposed; the direct and indirect pathways that significant materials may be exposed to storm water or authorized non-storm water discharges; history of spills or leaks; non-storm water discharges; prior sampling; visual observation, and inspection records; discharges from adjoining areas; and the effectiveness of existing BMPs to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

B. Based upon the assessment above, the SWPPP shall identify any areas of industrial activity and corresponding pollutant sources where significant materials are likely to be exposed to storm water or authorized non-storm water discharges and where additional BMPs are necessary to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

VIII. Storm Water Best Management Practices

A. The SWPPP shall include a narrative description of BMPs implemented at the Facility. The BMPs, when developed and implemented, shall be effective in reducing or preventing pollutants in storm water discharges and authorized non-storm water discharges.

The BMPs narrative description shall include:

1. The type of pollutants the BMPs are designed to reduce or prevent.
2. The frequency, time(s) of day, or conditions when the BMPs are scheduled for implementation.
3. The locations within each area of industrial activity or pollutant source where the BMPs shall be implemented.
4. Identification of the person and/or position responsible for implementing the BMPs.
5. The procedures, including maintenance procedures, and/or instructions to implement the BMPs.
6. The equipment and tools necessary to implement the BMPs.

B. The Discharger shall consider non-structural BMPs for implementation at the Facility. Non-structural BMPs generally consist of processes, prohibitions, procedures, training, schedule of activities, etc., that prevent pollutants associated with industrial activity from contact with storm water discharges and authorized non-

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storm water discharges. Below is a list of non-structural BMPs that shall be considered:

1. Good Housekeeping

   Good housekeeping generally consists of practical procedures to maintain a clean and orderly facility.

2. Preventative Maintenance

   Preventative maintenance includes regular inspection and maintenance of storm water structural controls (i.e., catch basins, oil/water separators, etc.) as well as other facility equipment and systems.

3. Spill Response

   This includes spill clean-up procedures and necessary clean-up equipment based upon the quantities and locations of significant materials that may spill or leak.

4. Material Handling and Storage

   This includes all procedures to minimize the potential for spills and leaks and to minimize exposure to significant materials to storm water and authorized non-storm water discharges.

5. Employee Training Program

   This includes the development of a program to train personnel responsible for implementing the various compliance activities of this Order including BMPs implementation, inspections and evaluations, monitoring activities, and storm water compliance management. The training program shall include:

   a. A description of the training program and any training manuals or training materials.

   b. A discussion of the appropriate training frequency.

   c. A discussion of the appropriate personnel to receive training.

   d. A training schedule.

   e. Documentation of all completed training classes and the personnel who received training.

6. Waste Handling/Recycling

   This includes the procedures or processes to handle, store, or dispose of waste or recyclable materials.

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7. Record Keeping and Internal Reporting

   This includes the 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 Facility personnel.

8. Erosion Control and Site Stabilization

   This includes a description of 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 control devices.

9. Inspections

   Periodic visual inspections of the Facility are necessary to ensure that the SWPPP addresses any significant changes to the Facility's operations or BMP implementation procedures.

   a. A minimum of four quarterly visual inspections of all areas of industrial activity and associated potential pollutant sources shall be completed each reporting year. The annual comprehensive site compliance evaluation described in section IX may substitute for one of the quarterly inspections.

   b. Tracking and follow-up procedures shall be described to ensure appropriate corrective actions and/or SWPPP revisions are implemented.

   c. A summary of the corrective actions and SWPPP revisions resulting from quarterly inspections shall be reported in the annual report.

   d. Dischargers shall certify in the annual report that each quarterly visual inspection was completed.

   e. All corrective actions and SWPPP revisions shall be implemented in accordance with sections X.D and X.E.

10. Quality Assurance

    This includes the management procedures to ensure that the appropriate staff adequately implements all elements of the SWPPP and Monitoring Program.

C. Structural BMPs

Where non-structural BMPs identified in section VIII.B above are not effective, structural BMPs shall be considered. Structural BMPs typically consist of structural devices that reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges. Below is a list of structural BMPs that shall be considered:

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1. Overhead Coverage

   This includes structures that protect materials, chemicals, and pollutant sources from contact with storm water and authorized non-storm water discharges.

2. Retention Ponds

   This includes basins, ponds, surface impoundments, bermed areas, etc., that do no allow storm water to discharge from the Facility.

3. Control Devices

   This includes berms or other devices that channel or route run-on and runoff away from pollutant sources.

4. Secondary Containement Structures

   This includes containment structures around storage tanks and other areas that collect any leaks or spills.

5. Treatment

   This includes inlet controls, infiltration devices, oil/water separators, detention ponds, vegetative swales, etc., which reduce the pollutants in storm water discharges and authorized non-storm water discharges.

D. The SWPPP shall include a summary identifying each area of industrial activity and associated pollutant sources, pollutants, and BMPs in a table similar to Item A-3 at the end of this attachment.

IX. Annual Comprehensive Site Compliance Evaluation

The Discharger shall conduct one comprehensive site compliance evaluation (evaluation) in each reporting period (July 1 – June 30). Evaluations shall be conducted no less than 8 months from each other. The SWPPP 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 areas of industrial activity and associated potential pollutant sources for evidence of, or the potential for, pollutants entering the drainage system. A visual inspection of equipment needed to implement the SWPPP.

C. A review and evaluation of all BMPs, both structural and non-structural, for each area of industrial activity and associated potential pollutant sources to determine whether the BMPs are properly designed, implemented, and are effective in reducing and preventing pollutants in storm water discharges and authorized non-storm water discharges.

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D. An evaluation report that includes:

1. Identification of personnel performing the evaluation,

2. Date(s) of the evaluation,

3. Summary and implementation dates of all significant corrective actions and SWPPP revisions for the reporting year

4. Schedule for implementing any incomplete corrective actions and SWPPP revisions,

5. Any incidents of non-compliance and the corrective actions taken, and

6. A certification that the Discharger has completed the quarterly inspections specified in section VIII.B.9, above and that the Discharger is complying with this Order.

7. The evaluation report shall be submitted as part of the annual report, retained for at least 5 years, and signed and certified in accordance with Standard Provision V.B of Attachment D of this Order.

X. SWPPP General Requirements

A. The SWPPP shall be retained at the Facility and made available upon request of a representative of the Regional Water Board, USEPA, or local storm water management agency (local agency).

B. Upon notification by the Regional Water Board and/or local agency that the SWPPP does not meet one or more of the minimum requirements of this attachment, the Discharger shall revise the SWPPP and implement additional BMPs that are effective in reducing and eliminating pollutants in storm water discharges and authorized non-storm water discharges. As requested, the Discharger shall provide an implementation schedule and/or completion certification to the Regional Water Board and/or local agency.

C. The SWPPP shall be revised, as appropriate, and implemented prior to changes in industrial activities, which;

1. May significantly increase the quantities of pollutants in storm water discharges; or

2. Cause a new area of industrial activity at the Facility to be exposed to storm water; or

3. Begin an industrial activity that would introduce a new pollutant source at the Facility.

D. The Discharger shall revise the SWPPP and implement the appropriate BMPs in a timely manner and in no case more than 90 days after a Discharger determines that the SWPPP is in violation of any Order requirement.

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E. When any part of the SWPPP is infeasible to implement by the deadlines specified above due to proposed significant structural changes, the Discharger shall:

1. Submit a report to the Regional Water Board that:

a. Identifies the portion of the SWPPP that is infeasible to implement by the deadline;

b. Provides justification for a time extension, provides a schedule for completing and implementing that portion of the SWPPP; and

c. Describes the BMPs that will be implemented in the interim period to reduce or prevent pollutants in storm water discharges and authorized non-storm water discharges.

2. Comply with any request by the Regional Water Board to modify the report required in Subsection i above, or provide certification that the SWPPP revisions have been implemented.

F. The SWPPP shall be provided, upon request, to the Regional Water Board, USEPA, local agency, or Compliance Inspection Designees. The Regional Water Board under section 308(b) of the Clean Water Act considers the SWPPP a report that shall be available to the public.

G. Monitoring Methods

1. The SWPPP shall include a description of the following items:

a. Visual observation locations, visual observation procedures, and visual observation follow-up and tracking procedures.

b. Sampling locations and sample collection procedures. This shall include procedures for sample collection, storage, preservation, and shipping to the testing lab to assure that consistent quality control and quality assurance is maintained.

c. Identification of the analytical methods and related method detection limits (if applicable) used to detect pollutants in storm water discharges, including a justification that the method detection limits are adequate.

TENTATIVE DRAFT

XI. Authorized Non-Storm Water Discharges Special Requirements

A. The following non-storm water discharges are authorized provided they satisfy the conditions of Subsection B., below:

1. Fire-hydrant flushing;

2. Potable water sources, including potable water related to the operation, maintenance, or testing of potable water systems;

3. Drinking fountain water; atmospheric condensate, including refrigeration, air conditioning, and compressor condensate;

4. Irrigation drainage and landscape watering;

5. Natural springs, groundwater, and foundation and footage drainage; and

6. Seawater infiltration where the seawater is discharged back into the sea water source.

B. The non-storm water discharges identified in subsection a above are authorized by this Order if all the following conditions are satisfied:

1. The non-storm water discharges comply with this Order.

2. The non-storm water discharges comply with local agency ordinances and requirements.

3. BMPs are specifically included in the SWPPP to: (1) prevent or reduce the contact of non-storm water discharges with significant materials or equipment, and (2) minimize, to the extent practicable, the flow or volume of non-storm water discharges.

4. The non-storm water discharges do not contain significant quantities of pollutants.

5. The monitoring program includes quarterly visual observations of non-storm water discharges and sources to ensure adequate BMP implementation and effectiveness.

6. The non-storm water discharges are reported and described in the annual report.

C. This Regional Water Board or local agency may establish additional monitoring and reporting requirements for any non-storm water discharge authorized by this Order.

D. Discharges from fire fighting activities are authorized by this Order and are not subject to the conditions of section XI.B.

TENTATIVE DRAFT

ITEM A-1

STORM WATER POLLUTION PREVENTION PLAN CHECKLIST

Facility Name _____

WDID# _____

FACILITY CONTACT
Name _____
Title _____
Company _____
Street Address _____
City, State _____
ZIP _____

CONSULTANT CONTACT
Name _____
Title _____
Company _____
Street Address _____
City, State _____
ZIP _____

Storm Water Pollution Prevention Plan	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Signed Certification			
Pollution Prevention Team			
Existing Facility Plans			
Facility Site Map(s)			
Facility Boundaries			
Drainage areas			
Direction of flow			
On-site water bodies			
Areas of soil erosion			
Nearby water bodies			
Municipal storm drain inlets			
Points of discharges			
Structural control measures			
Impervious areas (paved areas, buildings, covered areas, roofed areas			
Location of directly exposed materials			
Location of significant spills and leaks			
Storage areas / Storage tanks			
Shipping and receiving areas			
Fueling areas			
Vehicle and equipment storage and maintenance			
Material handling / Material processing			
Waste treatment / Waste Disposal			
Dust generation / Particulate generation			
Cleaning areas / Rinsing areas			
Other areas of industrial activities			
For the NAVSTA, high risk area			
List of Significant Materials			
For each material listed:			
Storage location			
Receiving and shipping location			
Handling location			
Quantity			
Frequency			

TENTATIVE DRAFT

Storm Water Pollution Prevention Plan	Not Applicable	SWPPP Page # or Reference Location	Date Implemented or Last Revised
Description of Potential Pollution Sources			
Industrial Processes			
Material handling and storage areas			
Dust and particulate generating activities			
Significant spills and leaks			
Non-storm water discharges			
Soil Erosion			
Assessment of Potential Pollutant Sources			
Areas likely to be sources of pollutants			
Pollutants likely to be present			
Storm Water Best Management Practices			
Non-Structural BMPs			
Good Housekeeping			
Preventative Maintenance			
Spill Response			
Material Handling and Storage			
Employee Training			
Waste Handling / Waste Recycling			
Recordkeeping and Internal Reporting			
Erosion Control and Site Stabilization			
Inspections			
Quality Assurance			
Structural BMPs			
Overhead Coverage			
Retention Ponds			
Control Devices			
Secondary Containment Structures			
Treatment			
Industrial Activity BMPs/Pollutant Summary			
Annual Comprehensive Site Compliance Evaluation			
Review of visual observations, inspections, and sampling analysis			
Visual inspection of potential pollution sources			
Review and evaluation of BMPs			
Evaluation Report			

TENTATIVE DRAFT

ITEM A-2

FIVE PHASES FOR DEVELOPING AND IMPLEMENTING INDUSTRIAL STORM WATER POLLUTION PREVENTION PLANS

PLANNING AND ORGANIZATION

*Form Pollution Prevention Team
*Review other plans

ASSESSMENT PHASE

*Develop a site map
*Identify potential pollutant sources
*Inventory of materials and chemicals
*List significant spills and leaks
*Identify non-storm water discharges
*Assess pollutant risks

BEST MANAGEMENT PRACTICES IDENTIFICATION PHASE

*Non-structural BMPs
*Structural BMPs
*Select activity and site-specific BMPs

IMPLEMENTATION PHASE

*Train employees
*Implement BMPs
*Collect and review records

EVALUATION/MONITORING

*Conduct annual site evaluation
*Review monitoring information
*Evaluate BMPs
*Review and revise SWPPP

TENTATIVE DRAFT

ITEM A-3
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	- Use spill and overflow protection - Minimize run-on of storm water into the fueling area - Cover fueling area - Use dry cleanup methods rather than hosing down area - Implement proper spill prevention control program - Implement adequate preventative maintenance program to prevent tank and line leaks - Inspect fueling areas regularly to detect problems before they occur - Train employees on proper fueling, cleanup, and spill response techniques
		Spills caused by topping off fuel tanks	fuel oil	
		Hosing or washing down fuel area	fuel oil	
		Leaking storage tanks	fuel oil	
		Rainfall running off fuel area, and rainfall running onto and off fueling area	fuel oil	

ADMINISTRATIVE DRAFT
TENTATIVE
DRAFT
DRAFT

ATTACHMENT H – POLLUTION PREVENTION PLAN (PLAN) REQUIREMENTS FOR UTILITY VAULT AND MANHOLE DEWATERING DISCHARGES

TENTATIVE DRAFT

I. If an exceedance(s) of a receiving water limitation defined in section V.A of this Order, expressed either narrative or numerically, has been identified by the Discharger or the Regional Water Board as a result of a discharge from utility vault or manhole dewatering, either of the following actions shall be undertaken to ensure compliance with this Order:

A. The Discharger shall submit a new PLAN, which demonstrates to the satisfaction of the Regional Water Board that the Discharger is fully in compliance with the provision contained in section VI.C.3.b of this Order and implementation of the PLAN will prevent future exceedance(s) of the receiving water limitations; or

B. The Discharger shall develop and submit a revised PLAN to the Regional Water Board, with new or revised PPPs, to prevent future exceedance(s). The Discharger shall implement such PPPs and document the progress of implementation and the effectiveness thereof in the annual report.

II. The PLAN shall include, to the extent possible, at least the following items:

A. Provisions for scheduled discharges, unscheduled discharges, reservoir discharges (if any), and emergency operation discharges.

B. **Pollution Prevention Team**. The PLAN shall identify a specific individual or individuals as members of a Pollution Prevention Team that are responsible for developing the PLAN and assisting in its implementation, maintenance, and revision. The PLAN shall clearly identify the responsibilities of each team member. The activities and responsibilities of the team shall address all aspects of the PLAN.

C. **Description of Potential Pollutant Sources.** Each PLAN shall provide a description of potential sources that may add significant amounts of pollutants to discharges. Each PLAN shall identify all activities and significant materials that may potentially be significant pollutant sources. Each PLAN shall include at a minimum:

1. **Drainage Map.** Provide a map showing the essential features of the distribution system for the service area within this Regional Water Board's boundary and showing the corresponding surface waters to which water may be discharged.

2. **Inventory of Exposed Materials.** Include an inventory of the types of materials handled at the site that potentially may be exposed to precipitation. Such inventory shall include a description of significant materials that have been handled, treated, stored, or disposed of in a manner to allow exposure to storm water from the previous 3 years and the present; method and location of onsite storage or disposal; materials management practices employed to minimize contact of materials with sotrm water runoff from the previous 3 years and the present; the location and description of existing structural and nonstructural control measures to reduce

pollutants in storm water runoff; and a description of any treatment the storm water receives.

3. **Spills and Leaks**. Include a list of significant spills and significant leaks of toxic or hazardous pollutants that occurred at areas exposed to precipitation or that otherwise enter the discharge stream from the previous 3 years and the present. The list shall be updated as appropriate.

4. **Risk Identification and Summary of Potential Pollutant Sources.** Include a narrative description of the potential pollutant sources, such as from significant dust or particulate generating processes. The description shall specifically list any significant potential source of pollutants at the site and, for each potential source; any pollutant or pollutant parameter (e.g., oil and grease) of concern shall be identified.

D. **Measures and Controls.** The Discharger shall develop a description of PPPs appropriate for the site(s), and implement such controls. The appropriateness and priorities of PPPs in a PLAN must reflect identified potential sources of pollutants at the site. Also, the Discharger should discuss the advantages and limitations of the PPP. If relavant, include a structural diagram. The description of wastewater management controls shall address the following minimum components, including a schedule for implementing such controls:

1. **Good Housekeeping.** Maintain areas that may contribute pollutants to discharges so that they are kept clean and orderly. Store and contain liquid materials in such a manner that if the container is ruptured, the contents will not discharge, flow, or be washed into the storm drainage system, surface water, or groundwater.

2. **Preventative Maintenance.** Inspect and maintain wastewater management devices as well as inspect and test site equipment and systems to uncover conditions that could cause breakdowns or failures resulting in discharges of pollutants to surface waters, and ensure appropriate maintenance of such equipment and systems.

3. **Spill Prevention and Response Procedures.** Identify areas where potential spills, which can contribute pollutants to discharge, can occur and their accompanying drainage points. Specify material handling procedures, storage requirements, and use of equipment. Make accessible to the appropriate personnel the procedures for cleaning up spills identified in the PLAN. Note that if the spilled material is hazardous, then the cleanup materials used are also hazardous and should be disposed of properly. For large spills, a private spill cleanup company or Hazmat may be necessary.

4. **Inspections.** Identify qualified personnel, by name or by job title, to inspect designated equipment and areas of the site, and ensure that appropriate actions are taken in response to the inspections. Maintain records of inspections. Inventory and inspect each discharge point during dry weather.

TENTATIVE DRAFT

5. **Employee Training.** Train employees to implement activities identified in the PLAN. Address topics such as spill response, good housekeeping, and material management practices. Identify how often training will take place.

6. **Record Keeping and Internal Reporting Procedures.** Federal Regulations require that any oil spill to a water body be reported to the National Response Center at (800) 424-8802 (24 hours). The Discharger shall report spills to the appropriate local agency, such as the fire department, to assist in cleanup. Provide a description of incidents (such as spills or other discharges), along with other information describing the quality and quantity of discharges. Document patterns in time of occurrence, mode of dumping, responsible parties, date and time of incident, weather conditions, duration and cause of spill/leak/discharge, response procedures, resulting environmental problems, and persons notified. Document inspections and maintenance activities and maintain records of such activities. Include the date and time the inspection was performed, the name of the inspector, and the items inspected. If problems are noted, include the corrective action required and the date the action was taken.

7. **Sediment and Erosion Control.** Identify areas that, due to topography, activities, or other factors, have a high potential for significant soil erosion, and identify structural, vegetative, and/or stabilization measures to be used to limit erosion.

8. **Management Runoff.** Include a narrative consideration of the appropriateness of traditional storm water management practices (practices other than those that control the generation or source(s) of pollutants) used to divert, infiltrate, reuse, or otherwise manage runoff in a manner that reduces pollutants in discharges from the site. The PLAN shall provide measures that the Discharger determines to be reasonable and appropriate measures.

E. **Comprehensive Site Compliance Evaluation.** Qualified personnel shall conduct site compliance evaluations upon each discharge event. Such evaluations shall provide:

1. The Discharger shall visually inspect for evidence of, or the potential for, pollutants entering the receiving water. Evaluate measures to reduce pollutant loadings to determine whether they are adequate and properly implemented in accordance with the terms of this Order or whether additional control measures are needed. Ensure that structural wastewater management measures, sediment and erosion control measures, and other structural PPPs identified in the PLAN are operating correctly. Perform a visual inspection of equipment needed to implement the PLAN, such as spill response equipment.

2. Based on the results of the evaluation, the Discharger shall revise, as appropriate, the description of potential pollutant sources identified in the PLAN in accordance with section II.C above and PPPs identified in the PLAN with section II.D within 2 weeks of such evaluation and shall provide timely implementation of any changes to the PLAN.

TENTATIVE DRAFT

3. Write and retain for 3 years, a report summarizing the scope of the evaluation, personnel making the evaluation, the date(s) of the evaluation, major observations relating to the implementation of the PLAN, and actions taken in accordance with section II.D.2, above. Identify any incidents of noncompliance or certify that the site(s) is in compliance with the PLAN and this Order. The report shall be signed in accordance with the signatory requirements of Standard Provision V.B. of Attachment D.

F. Additional requirements include:

1. The PLAN shall be designed to comply with BAT/BCT and to ensure compliance with water quality standards.

2. The Discharger shall amend the PLAN whenever there is a change in construction, operation, or maintenance, when such amendment is necessary to ensure compliance with BAT/BCT and receiving water limitations. The PLAN shall also be amended if it is in violation of any conditions of this Order or has not achieved the general objective of controlling pollutants in discharges to surface waters. The Discharger shall submit the amended plan to the Regional Water Board.

3. The PLAN and any amendments thereto shall be certified in accordance with the signatory requirements of Standard Provision V.B. of Attachment D.

TENTATIVE DRAFT

ATTACHMENT I – BEST MANAGEMENT PRACTICES PLAN FOR PIER BOOM CLEANING, PIER CLEANING, BOAT RINSING, SWIMMER RINSING, AND MARINE MAMMAL ENCLOSURE CLEANING DISCHARGES

TENTATIVE DRAFT

I. Implementation

The Discharger shall develop and implement a Best Management Practices (BMP) Plan which achieves the objectives and the specific requirements listed below. A copy of the BMP Plan shall be submitted to the Regional Water Board. The BMP Plan shall be implemented as soon as possible but no later than 1 year from the effective date of this Order.

II. Purpose

Through implementation of the BMP Plan, the Discharger shall prevent or minimize the generation and the potential for the release of pollutants from the Facility to the waters of the United States through normal operations and ancillary activities.

III. Objectives

The Discharger shall develop and amend the BMP Plan consistent with the following objectives for the control of pollutants:

A. The number and quantity of pollutants and the toxicity of effluent generated, discharged or potential discharged at the Facility shall be minimized by the Discharger to the extent feasible by managing each waste stream in the most appropriate manner.

B. Under the BMP Plan, and any Standard Operating Procedures (SOPs) included in the BMP Plan, the Discharger shall ensure proper operation and maintenance of the Facility.

C. The Discharger shall establish specific objectives for the control of pollutants by conducting the following evaluations:

1. Each component or system shall be examined for its waste minimization opportunities and its potential for causing a release of significant amounts of pollutants to waters of the United States due to equipment failure, improper operation, and natural phenomena such as rain or snowfall, etc. The examination shall include all normal operations and ancillary activities related to pier boom cleaning, pier cleaning, boat rinsing, swimmer rinsing, and marine mammal enclosure cleaning.

2. Where experience indicates a reasonable potential for equipment failure, natural condition, or other circumstances to result in significant amounts of pollutants reaching surface waters, the program should include a prediction of the direction,

rate of flow and total quantity of pollutants which could be discharged from the Facility as a result of each condition or circumstance.

IV. Requirements

The BMP Plan shall be consistent with the objectives in Part 3 above and the general guidance contained in the publication entitled *Guidance Manual for Developing Best Management Practices (BMPs)* (USEPA, 1993) or any subsequent revisions to the guidance document. The BMP Plan shall:

A. Be documented in narrative form, shall include any necessary plot plans, drawings or maps, and shall be developed in accordance with good engineering practices. The BMP Plan shall be organized and written with the following structure:

1. Name and location of the activity.
2. Statement of BMP policy.
3. Structure, functions, and procedures of the BMP Committee.
4. Specific management practices and standard operating procedures to achieve the above objectives, including, but not limited to, the following:
   a. Modification of equipment, facilities, technology, processes, and procedures,
   b. Reformulation or redesign of products,
   c. Substitution of materials, and
   d. Improvement in management, inventory control, materials handling or general operational phases of the facility.
5. Risk identification and assessment.
6. Reporting of BMP incidents.
7. Materials compatibility.
8. Good housekeeping.
9. Preventative maintenance.
10. Inspections and records.
11. Security.
12. Employee training.

TENTATIVE DRAFT

B. Include the following provisions concerning BMP Plan review:

1. Be reviewed by engineering staff and manager.

2. Be reviewed and endorsed by the Discharger's BMP Committee.

3. Include a statement that the above reviews have been completed and that the BMP Plan fulfills the requirements set forth in this Order. The statement shall be certified by the dated signatures of each BMP Committee member.

C. Establish specific BMPs to meet the objectives identified in section III, addressing each component or system capable of generating or causing a release of significant amounts of pollutants, and identifying specific preventative or remedial measures to be implemented.

D. Establish specific BMPs or other measures which ensure that the following specific requirements are met:

1. At no time shall any discharge from boat rinsing or marine mammal enclosure cleaning be greater than 20°F over the natural temperature of the receiving water.

2. Ensure that the discharge of pollutants including, but not limited to, copper, TCDD-equivalents, benzo (b) fluoranthene, benzo (k) fluoranthene, and chrysene from pier boom cleaning is reduced to levels that do not exceed water quality objectives.

3. Ensure that the discharge of pollutants including, but not limited to, arsenic, copper, mercury, nickel, zinc, and TCDD-equivalents from pier cleaning is reduced to levels that do not exceed water quality objectives.

4. Ensure that the discharge of pollutants including, but not limited to, copper, lead, mercury, nickel, zinc, TCDD-equivalents, benzo (a) anthracene, benzo (a) pyrene, benzo (b) fluoranthene, benzo (k) fluoranthene, bis (2-ethylhexyl) phthalate, chrysene, dibenzo (a,h) anthracene, and indeno (1,2,3-cd) pyrene from boat rinsing is reduced to levels that do not exceed water quality objectives.

5. Ensure that the discharge of pollutants including, but not limited to, copper and TCDD-equivalents from marine mammal enclosure cleaning is reduced to levels that do not exceed water quality objectives.

6. Ensure that the discharge of pollutants from swimmer rinsing is reduced to levels that do not exceed water quality objectives.

V. Documentation

The Discharger shall maintain a copy of the BMP Plan at the Facility and shall make it available to the Regional Water Board upon request. All offices of the Discharger which are required to maintain a copy of the NPDES permit shall also maintain a copy of the BMP Plan.

TENTATIVE DRAFT

VI. BMP Plan Modification

The Discharger shall amend the BMP Plan whenever there is a change in the facility or in the operation of the facility which materially increases the generation of pollutants or their release or potential release to the receiving waters. The Discharger shall also amend the BMP Plan, as appropriate, when operations covered by the BMP Plan change. Any such changes to the BMP Plan shall be consistent with the objectives and specific requirements listed above. All changes in the BMP Plan shall be reported to the Regional Water Board in writing.

VII. Modification for Ineffectiveness

At any time, if the BMP Plan proves to be ineffective in achieving the general objective of preventing and minimizing the generation of pollutants and their release and potential release to the receiving waters and/or the specific requirements above, the Order and/or the BMP Plan shall be subject to modification to incorporate revised BMP requirements.

TENTATIVE DRAFT