Linda S. Adams
*Secretary for*
*Environmental Protection*

# California Regional Water Quality Control Board

## San Diego Region

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Arnold Schwarzenegger
*Governor*

ITEM 9
DOC. NO. 2

**TENTATIVE ORDER NO. ~~R9-2008-0061~~R9-2009-0100**
**NPDES NO. CA0109169**

**WASTE DISCHARGE REQUIREMENTS**
**FOR THE**
**UNITED STATES DEPARTMENT OF THE NAVY**
**NAVAL BASE SAN DIEGO**
**SAN DIEGO COUNTY**
**DISCHARGE TO THE SAN DIEGO BAY**

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 San Diego |
| **Facility Address** | ~~937 N. Harbor Drive, Box 81~~3455 Senn Road, Building 72 |
| | San Diego, CA ~~92132-0058~~ 91236-5084 |
| | 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° 41' 9" N | 117° 7' 57" W | San Diego Bay |
| SC-002 | Steam Condensate | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| SC-003 | Steam Condensate | 32° 41' 7" N | 117° 8' 1" W | San Diego Bay |
| SC-004 | Steam Condensate | 32° 41' 7" N | 117° 8' 2" W | San Diego Bay |
| SC-005 | Steam Condensate | 32° 41' 5" N | 117° 8' 3" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-006 | Steam Condensate | 32° 41' 5" N | 117° 8' 5" W | San Diego Bay |
| SC-007 | Steam Condensate | 32° 41' 4" N | 117° 8' 5" W | San Diego Bay |
| SC-008 | Steam Condensate | 32° 41' 3" N | 117° 8' 6" W | San Diego Bay |
| SC-009 | Steam Condensate | 32° 41' 4" N | 117° 8' 5" W | San Diego Bay |
| SC-010 | Steam Condensate | 32° 41' 5" N | 117° 8' 4" W | San Diego Bay |
| SC-011 | Steam Condensate | 32° 41' 5" N | 117° 8' 3" W | San Diego Bay |
| SC-012 | Steam Condensate | 32° 41' 6" N | 117° 8' 1" W | San Diego Bay |
| SC-013 | Steam Condensate | 32° 41' 7" N | 117° 8' 0" W | San Diego Bay |
| SC-014 | Steam Condensate | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| SC-015 | Steam Condensate | 32° 41' 9" N | 117° 7' 57" W | San Diego Bay |
| SC-016 | Steam Condensate | 32° 41' 7" N | 117° 7' 55" W | San Diego Bay |
| SC-017 | Steam Condensate | 32° 41' 4" N | 117° 7' 51" W | San Diego Bay |
| SC-018 | Steam Condensate | 32° 41' 2" N | 117° 7' 50" W | San Diego Bay |
| SC-019 | Steam Condensate | 32° 41' 1" N | 117° 7' 51" W | San Diego Bay |
| SC-020 | Steam Condensate | 32° 41' 1" N | 117° 7' 51" W | San Diego Bay |
| SC-021 | Steam Condensate | 32° 41' 0" N | 117° 7' 53" W | San Diego Bay |
| SC-022 | Steam Condensate | 32° 40' 58" N | 117° 7' 56" W | San Diego Bay |
| SC-023 | Steam Condensate | 32° 40' 58" N | 117° 7' 56" W | San Diego Bay |
| SC-024 | Steam Condensate | 32° 40' 56" N | 117° 7' 59" W | San Diego Bay |
| SC-025 | Steam Condensate | 32° 40' 56" N | 117° 7' 59" W | San Diego Bay |
| SC-026 | Steam Condensate | 32° 40' 57" N | 117° 7' 57" W | San Diego Bay |
| SC-027 | Steam Condensate | 32° 40' 57" N | 117° 7' 57" W | San Diego Bay |
| SC-028 | Steam Condensate | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| SC-029 | Steam Condensate | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| SC-030 | Steam Condensate | 32° 41' 0" N | 117° 7' 51" W | San Diego Bay |
| SC-031 | Steam Condensate | 32° 41' 2" N | 117° 7' 48" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-032 | Steam Condensate | 32° 41' 2" N | 117° 7' 48" W | San Diego Bay |
| SC-033 | Steam Condensate | 32° 41' 3" N | 117° 7' 47" W | San Diego Bay |
| SC-034 | Steam Condensate | 32° 41' 1" N | 117° 7' 41" W | San Diego Bay |
| SC-035 | Steam Condensate | 32° 40' 58" N | 117° 7' 42" W | San Diego Bay |
| SC-036 | Steam Condensate | 32° 40' 56" N | 117° 7' 44" W | San Diego Bay |
| SC-037 | Steam Condensate | 32° 40' 56" N | 117° 7' 45" W | San Diego Bay |
| SC-038 | Steam Condensate | 32° 40' 55" N | 117° 7' 47" W | San Diego Bay |
| SC-039 | Steam Condensate | 32° 40' 53" N | 117° 7' 49" W | San Diego Bay |
| SC-040 | Steam Condensate | 32° 40' 52" N | 117° 7' 51" W | San Diego Bay |
| SC-041 | Steam Condensate | 32° 40' 51" N | 117° 7' 53" W | San Diego Bay |
| SC-042 | Steam Condensate | 32° 40' 52" N | 117° 7' 51" W | San Diego Bay |
| SC-043 | Steam Condensate | 32° 40' 53" N | 117° 7' 49" W | San Diego Bay |
| SC-044 | Steam Condensate | 32° 40' 54" N | 117° 7' 46" W | San Diego Bay |
| SC-045 | Steam Condensate | 32° 40' 56" N | 117° 7' 44" W | San Diego Bay |
| SC-046 | Steam Condensate | 32° 40' 57" N | 117° 7' 42" W | San Diego Bay |
| SC-047 | Steam Condensate | 32° 40' 58" N | 117° 7' 40" W | San Diego Bay |
| SC-048 | Steam Condensate | 32° 40' 57" N | 117° 7' 38" W | San Diego Bay |
| SC-049 | Steam Condensate | 32° 40' 55" N | 117° 7' 36" W | San Diego Bay |
| SC-050 | Steam Condensate | 32° 40' 53" N | 117° 7' 35" W | San Diego Bay |
| SC-051 | Steam Condensate | 32° 40' 52" N | 117° 7' 36" W | San Diego Bay |
| SC-052 | Steam Condensate | 32° 40' 51" N | 117° 7' 38" W | San Diego Bay |
| SC-053 | Steam Condensate | 32° 40' 50" N | 117° 7' 39" W | San Diego Bay |
| SC-054 | Steam Condensate | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| SC-055 | Steam Condensate | 32° 40' 49" N | 117° 7' 41" W | San Diego Bay |
| SC-056 | Steam Condensate | 32° 40' 48" N | 117° 7' 42" W | San Diego Bay |
| SC-057 | Steam Condensate | 32° 40' 48" N | 117° 7' 43" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-058 | Steam Condensate | 32° 40' 47" N | 117° 7' 44" W | San Diego Bay |
| SC-059 | Steam Condensate | 32° 40' 46" N | 117° 7' 45" W | San Diego Bay |
| SC-060 | Steam Condensate | 32° 40' 46" N | 117° 7'46" W | San Diego Bay |
| SC-061 | Steam Condensate | 32° 40' 45" N | 117° 7' 46" W | San Diego Bay |
| SC-062 | Steam Condensate | 32° 40' 46" N | 117° 7' 45" W | San Diego Bay |
| SC-063 | Steam Condensate | 32° 40' 47" N | 117° 7' 44" W | San Diego Bay |
| SC-064 | Steam Condensate | 32° 40' 48" N | 117° 7' 41" W | San Diego Bay |
| SC-065 | Steam Condensate | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| SC-066 | Steam Condensate | 32° 40' 50" N | 117° 7' 39" W | San Diego Bay |
| SC-067 | Steam Condensate | 32° 40' 50" N | 117° 7' 38" W | San Diego Bay |
| SC-068 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| SC-069 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| SC-070 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| SC-071 | Steam Condensate | 32° 40' 51" N | 117° 7' 33" W | San Diego Bay |
| SC-072 | Steam Condensate | 32° 40' 51" N | 117° 7' 33" W | San Diego Bay |
| SC-073 | Steam Condensate | 32° 40' 49" N | 117° 7' 31" W | San Diego Bay |
| SC-074 | Steam Condensate | 32° 40' 47" N | 117° 7' 30" W | San Diego Bay |
| SC-075 | Steam Condensate | 32° 40' 46" N | 117° 7' 31" W | San Diego Bay |
| SC-076 | Steam Condensate | 32° 40' 45" N | 117° 7' 33" W | San Diego Bay |
| SC-077 | Steam Condensate | 32° 40' 44" N | 117° 7' 34" W | San Diego Bay |
| SC-078 | Steam Condensate | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| SC-079 | Steam Condensate | 32° 40' 42" N | 117° 7' 37" W | San Diego Bay |
| SC-080 | Steam Condensate | 32° 40' 41" N | 117° 7' 36" W | San Diego Bay |
| SC-081 | Steam Condensate | 32° 40' 40" N | 117° 7' 40" W | San Diego Bay |
| SC-082 | Steam Condensate | 32° 40' 40" N | 117° 7' 40" W | San Diego Bay |
| SC-083 | Steam Condensate | 32° 40' 41" N | 117° 7' 38" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-084 | Steam Condensate | 32° 40' 42" N | 117° 7' 36" W | San Diego Bay |
| SC-085 | Steam Condensate | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| SC-086 | Steam Condensate | 32° 40' 44" N | 117° 7' 34" W | San Diego Bay |
| SC-087 | Steam Condensate | 32° 40' 44" N | 117° 7' 32" W | San Diego Bay |
| SC-088 | Steam Condensate | 32° 40' 45" N | 117° 7' 31" W | San Diego Bay |
| SC-089 | Steam Condensate | 32° 40' 41" N | 117° 7' 24" W | San Diego Bay |
| SC-090 | Steam Condensate | 32° 40' 40" N | 117° 7' 26" W | San Diego Bay |
| SC-091 | Steam Condensate | 32° 40' 38" N | 117° 7' 28" W | San Diego Bay |
| SC-092 | Steam Condensate | 32° 40' 36" N | 117° 7' 32" W | San Diego Bay |
| SC-093 | Steam Condensate | 32° 40' 35" N | 117° 7' 34" W | San Diego Bay |
| SC-094 | Steam Condensate | 32° 40' 34" N | 117° 7' 36" W | San Diego Bay |
| SC-095 | Steam Condensate | 32° 40' 35" N | 117° 7' 33" W | San Diego Bay |
| SC-096 | Steam Condensate | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| SC-097 | Steam Condensate | 32° 40' 38" N | 117° 7' 28" W | San Diego Bay |
| SC-098 | Steam Condensate | 32° 40' 39" N | 117° 7' 26" W | San Diego Bay |
| SC-099 | Steam Condensate | 32° 40' 40" N | 117° 7' 24" W | San Diego Bay |
| SC-100 | Steam Condensate | 32° 40' 36" N | 117° 7' 21" W | San Diego Bay |
| SC-101 | Steam Condensate | 32° 40' 35" N | 117° 7' 19" W | San Diego Bay |
| SC-102 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| SC-103 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| SC-104 | Steam Condensate | 32° 40' 33" N | 117° 7' 22" W | San Diego Bay |
| SC-105 | Steam Condensate | 32° 40' 32" N | 117° 7' 24" W | San Diego Bay |
| SC-106 | Steam Condensate | 32° 40' 31" N | 117° 7' 25" W | San Diego Bay |
| SC-107 | Steam Condensate | 32° 40' 30" N | 117° 7' 27" W | San Diego Bay |
| SC-108 | Steam Condensate | 32° 40' 29" N | 117° 7' 28" W | San Diego Bay |
| SC-109 | Steam Condensate | 32° 40' 28" N | 117° 7' 29" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-110 | Steam Condensate | 32° 40' 27" N | 117° 7' 31" W | San Diego Bay |
| SC-111 | Steam Condensate | 32° 40' 27" N | 117° 7' 32" W | San Diego Bay |
| SC-112 | Steam Condensate | 32° 40' 26" N | 117° 7' 33" W | San Diego Bay |
| SC-113 | Steam Condensate | 32° 40' 25" N | 117° 7' 33" W | San Diego Bay |
| SC-114 | Steam Condensate | 32° 40' 26" N | 117° 7' 32" W | San Diego Bay |
| SC-115 | Steam Condensate | 32° 40' 28" N | 117° 7' 29" W | San Diego Bay |
| SC-116 | Steam Condensate | 32° 40' 29" N | 117° 7' 28" W | San Diego Bay |
| SC-117 | Steam Condensate | 32° 40' 30" N | 117° 7' 25" W | San Diego Bay |
| SC-118 | Steam Condensate | 32° 40' 31" N | 117° 7' 23" W | San Diego Bay |
| SC-119 | Steam Condensate | 32° 40' 32" N | 117° 7' 22" W | San Diego Bay |
| SC-120 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| SC-121 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| SC-122 | Steam Condensate | 32° 40' 30" N | 117° 7' 15" W | San Diego Bay |
| SC-123 | Steam Condensate | 32° 40' 28" N | 117° 7' 14" W | San Diego Bay |
| SC-124 | Steam Condensate | 32° 40' 28" N | 117° 7' 15" W | San Diego Bay |
| SC-125 | Steam Condensate | 32° 40' 26" N | 117° 7' 17" W | San Diego Bay |
| SC-126 | Steam Condensate | 32° 40' 25" N | 117° 7' 19" W | San Diego Bay |
| SC-127 | Steam Condensate | 32° 40' 24" N | 117° 7' 21" W | San Diego Bay |
| SC-128 | Steam Condensate | 32° 40' 23" N | 117° 7' 22" W | San Diego Bay |
| SC-129 | Steam Condensate | 32° 40' 22" N | 117° 7' 25" W | San Diego Bay |
| SC-130 | Steam Condensate | 32° 40' 20" N | 117° 7' 27" W | San Diego Bay |
| SC-131 | Steam Condensate | 32° 40' 20" N | 117° 7' 27" W | San Diego Bay |
| SC-132 | Steam Condensate | 32° 40' 21" N | 117° 7' 25" W | San Diego Bay |
| SC-133 | Steam Condensate | 32° 40' 23" N | 117° 7' 22" W | San Diego Bay |
| SC-134 | Steam Condensate | 32° 40' 24" N | 117° 7' 21" W | San Diego Bay |
| SC-135 | Steam Condensate | 32° 40' 25" N | 117° 7' 19" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-136 | Steam Condensate | 32° 40' 26" N | 117° 7' 17" W | San Diego Bay |
| SC-137 | Steam Condensate | 32° 40' 27" N | 117° 7' 14" W | San Diego Bay |
| SC-138 | Steam Condensate | 32° 40' 26" N | 117° 7' 13" W | San Diego Bay |
| SC-139 | Steam Condensate | 32° 40' 24" N | 117° 7' 11" W | San Diego Bay |
| SC-140 | Steam Condensate | 32° 40' 11" N | 117° 7' 19" W | San Diego Bay |
| SC-141 | Steam Condensate | 32° 40' 11" N | 117° 7' 22" W | San Diego Bay |
| SC-142 | Steam Condensate | 32° 40' 9" N | 117° 7' 23" W | San Diego Bay |
| SC-143 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| SC-144 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| SC-145 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| SC-146 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| SC-147 | Steam Condensate | 32° 40' 2" N | 117° 7' 10" W | San Diego Bay |
| SC-148 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| SC-149 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| SC-150 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| SC-151 | Steam Condensate | 32° 39' 52" N | 117° 7' 11" W | San Diego Bay |
| SC-152 | Steam Condensate | 32° 39' 50" N | 117° 7' 23" W | San Diego Bay |
| SC-153 | Steam Condensate | 32° 39' 52" N | 117° 7' 11" W | San Diego Bay |
| SC-154 | Steam Condensate | 32° 39' 48" N | 117° 7' 8" W | San Diego Bay |
| SC-155 | Steam Condensate | 32° 39' 46" N | 117° 7' 7" W | San Diego Bay |
| SC-156 | Steam Condensate | 32° 39' 45" N | 117° 7' 9" W | San Diego Bay |
| SC-157 | Steam Condensate | 32° 39' 45" N | 117° 7' 10" W | San Diego Bay |
| SC-158 | Steam Condensate | 32° 39' 45" N | 117° 7' 13" W | San Diego Bay |
| SC-159 | Steam Condensate | 32° 39' 45" N | 117° 7' 15" W | San Diego Bay |
| SC-160 | Steam Condensate | 32° 39' 45" N | 117° 7' 17" W | San Diego Bay |
| SC-161 | Steam Condensate | 32° 39' 45" N | 117° 7' 19" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| SC-162 | Steam Condensate | 32° 39' 44" N | 117° 7' 20" W | San Diego Bay |
| SC-163 | Steam Condensate | 32° 39' 44" N | 117° 7' 22" W | San Diego Bay |
| SC-164 | Steam Condensate | 32° 39' 43" N | 117° 7' 24" W | San Diego Bay |
| SC-165 | Steam Condensate | 32° 39' 43" N | 117° 7' 22" W | San Diego Bay |
| SC-167 | Steam Condensate | 32° 39' 43" N | 117° 7' 20" W | San Diego Bay |
| SC-168 | Steam Condensate | 32° 39' 43" N | 117° 7' 19" W | San Diego Bay |
| SC-169 | Steam Condensate | 32° 39' 44" N | 117° 7' 17" W | San Diego Bay |
| SC-170 | Steam Condensate | 32° 39' 44" N | 117° 7' 15" W | San Diego Bay |
| SC-171 | Steam Condensate | 32° 39' 44" N | 117° 7' 13" W | San Diego Bay |
| SC-172 | Steam Condensate | 32° 39' 44" N | 117° 7' 10" W | San Diego Bay |
| SC-173 | Steam Condensate | 32° 39' 44" N | 117° 7' 9" W | San Diego Bay |
| SC-174 | Steam Condensate | 32° 39' 44" N | 117° 7' 7" W | San Diego Bay |
| SC-175 | Steam Condensate | 32° 40 49" N | 117° 7' 31" W | San Diego Bay |
| BW-001 | Boom Cleaning[1] | 32° 40' 24" N | 117° 7' 1" W | San Diego Bay |
| UV-001 | Utility Vault & Manhole Dewatering[2] | 32° 41' 1" N | 117° 1' 39" W | San Diego Bay |
| UV-002 | Utility Vault & Manhole Dewatering[2] | 32° 40' 9" N | 117° 7' 15" W | San Diego Bay |
| UV-003 | Utility Vault & Manhole Dewatering[2] | 32° 42' 16" N | 117° 6' 54" W | San Diego Bay |
| UV-004 | Utility Vault & Manhole Dewatering[2] | 32° 40' 29" N | 117° 7' 14" W | San Diego Bay |
| UV-005 | Utility Vault & Manhole Dewatering[2] | 32° 40' 36" N | 117° 7' 19" W | San Diego Bay |
| UV-006 | Utility Vault & Manhole Dewatering[2] | 32° 40' 41" | 117° 7' 22" W | San Diego Bay |
| UV-007 | Utility Vault & Manhole Dewatering[2] | 32° 40' 52" N | 117° 7' 13" W | San Diego Bay |
| UV-008 | Utility Vault & Manhole Dewatering[2] | 32° 40' 49" N | 117° 7' 23" W | San Diego Bay |
| UV-009 | Utility Vault & Manhole Dewatering[2] | 32° 41' 0" N | 117° 7' 29" W | San Diego Bay |
| UV-010 | Utility Vault & Manhole Dewatering[2] | 32° 40' 49" N | 117° 6' 54" W | San Diego Bay |
| UV-011 | Utility Vault & Manhole Dewatering[2] | 32° 40' 5" N | 117° 7' 6" W | San Diego Bay |
| UV-012 | Utility Vault & Manhole Dewatering[2] | 32° 41' 29" N | 117° 7' 42" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| UV-013 | Utility Vault & Manhole Dewatering[2] | 32° 41' 3" N | 117° 7' 48" W | San Diego Bay |
| UV-014 | Utility Vault & Manhole Dewatering[2] | 32° 41' 0" N | 117° 7' 52" W | San Diego Bay |
| UV-015 | Utility Vault & Manhole Dewatering[2] | 32° 40' 58" N | 117° 7' 57" W | San Diego Bay |
| WT-001 | Weight Test Water[3] | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| WT-002 | Weight Test Water[3] | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| WT-003 | Weight Test Water[3] | 32° 40' 55" N | 117° 7' 46" W | San Diego Bay |
| WT-004 | Weight Test Water[3] | 32° 40' 48" N | 117° 7' 41" W | San Diego Bay |
| WT-005 | Weight Test Water[3] | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| WT-006 | Weight Test Water[3] | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| WT-007 | Weight Test Water[3] | 32° 40' 30" N | 117° 7' 26" W | San Diego Bay |
| WT-008 | Weight Test Water[3] | 32° 40' 24:" N | 117° 7' 20" W | San Diego Bay |
| WT-009 | Weight Test Water[3] | 32° 40' 9" N | 117° 7' 19" W | San Diego Bay |
| WT-010 | Weight Test Water[3] | 32° 39' 60" N | 117° 6' 18" W | San Diego Bay |
| WT-012 | Weight Test Water[3] | 32° 39' 51" N | 117° 7' 17" W | San Diego Bay |
| WT-013 | Weight Test Water[3] | 32° 39' 44" N | 117° 7' 15" W | San Diego Bay |
| NBSD-001 | Industrial Storm Water | 32° 41' 1" N | 117° 7' 42" W | San Diego Bay |
| NBSD-002 | Industrial Storm Water | 32° 40' 56" N | 117° 7' 38" W | San Diego Bay |
| NBSD-003 | Industrial Storm Water | 32° 40' 50" N | 117° 7' 33" W | San Diego Bay |
| NBSD-004 | Industrial Storm Water | 32° 40' 47" N | 117° 7' 30" W | San Diego Bay |
| NBSD-005 | Industrial Storm Water | 32° 40' 44" N | 117° 7' 27' W | San Diego Bay |
| NBSD-006 | Industrial Storm Water | 32° 40' 41" N | 117° 7' 25" W | San Diego Bay |
| NBSD-007 | Industrial Storm Water | 32° 40' 36" N | 117° 7' 21" W | San Diego Bay |
| NBSD-008 | Industrial Storm Water | 32° 40' 22" N | 117° 7' 6" W | San Diego Bay |
| NBSD-009 | Industrial Storm Water | 32° 40' 25" N | 117° 7' 1" W | San Diego Bay |
| NBSD-010 | Industrial Storm Water | 32° 40' 26" N | 117° 6' 59" W | San Diego Bay |
| NBSD-011 | Industrial Storm Water | 32° 40' 29" N | 117° 6' 55" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| NBSD-012 | Industrial Storm Water | 32° 40' 23" N | 117° 6' 57" W | San Diego Bay |
| NBSD-013 | Industrial Storm Water | 32° 40' 18" N | 117° 7' 6" W | San Diego Bay |
| NBSD-014 | Industrial Storm Water | 32° 40' 15" N | 117° 7' 9" W | San Diego Bay |
| NBSD-015 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 17" W | San Diego Bay |
| NBSD-016 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 20" W | San Diego Bay |
| NBSD-017 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 23" W | San Diego Bay |
| NBSD-018 | Industrial Storm Water | 32° 40' 9" N | 117° 7' 23" W | San Diego Bay |
| NBSD-019 | Industrial Storm Water | 32° 40' 8" N | 117° 7' 21" W | San Diego Bay |
| NBSD-020 | Industrial Storm Water | 32° 40' 8" N | 117° 7' 11" W | San Diego Bay |
| NBSD-021 | Industrial Storm Water | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| NBSD-022 | Industrial Storm Water | 32° 39' 55" N | 117° 7' 9" W | San Diego Bay |
| NBSD-023 | Industrial Storm Water | 32° 40' 30" N | 117° 6' 52" W | San Diego Bay |
| NBSD-024 | Industrial Storm Water | 32° 40' 15" N | 117° 6' 55" W | San Diego Bay |
| NBSD-025 through NBSD-043 | Industrial Storm Water | 32° 40' 30" N | 117° 6' 54" W | San Diego Bay |
| NBSD-044 | Industrial Storm Water | 32° 41' 7" N | 117° 8' 0" W | San Diego Bay |
| NBSD-045 through NBSD-068 | Industrial Storm Water | 32° 40' 47" N | 117° 7' 1" W | San Diego Bay |
| NBSD-069 through NBSD-090 | Industrial Storm Water | 32° 40' 60" N | 117° 7' 53" W | San Diego Bay |
| NBSD-091 through NBSD-120 | Industrial Storm Water | 32° 40' 54" N | 117° 7' 46" W | San Diego Bay |
| NBSD-121 through NBSD-142 | Industrial Storm Water | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| NBSD-143 through NBSD 161 | Industrial Storm Water | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| NBSD-162 through NBSD-187 | Industrial Storm Water | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| NBSD-188 through NBSD-212 | Industrial Storm Water | 32° 40' 30" N | 117° 7' 26" W | San Diego Bay |
| NBSD-213 through NBSD-214 | Industrial Storm Water | 32° 40' 23" N | 117° 7' 21" W | San Diego Bay |
| NBSD-215 | Industrial Storm Water | 32° 40' 9" N | 117° 7' 22" W | San Diego Bay |
| NBSD-216 through NBSD-239 | Industrial Storm Water | 32° 40' 1" N | 117° 7' 9" W | San Diego Bay |
| NBSD-240 through NBSD-263 | Industrial Storm Water | 32° 39' 51" N | 117° 7' 16" W | San Diego Bay |

| Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|
| NBSD-264 | Industrial Storm Water | 32° 39' 44" N | 117° 7' 16" W | San Diego Bay |
| NBSD-265 | Industrial Storm Water | 32° 39' 39" N | 117° 7' 6" W | San Diego Bay |
| NBSD-266 | Industrial Storm Water | 32° 39' 41" N | 117° 7' 7' W | San Diego Bay |
| ~~BC-001~~ | ~~Industrial Storm Water~~ | ~~32° 42' 49"~~ | ~~117° 10' 24"~~ | ~~San Diego Bay~~ |
| ~~BC-002~~ | ~~Industrial Storm Water~~ | ~~32° 42' 53"~~ | ~~117° 10' 24"~~ | ~~San Diego Bay~~ |
| NGD-001 | Deflooding water/Salt water rinse | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| NGD-002 | Deflooding water/Salt Water Rinse | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| NGD-003 | Caisson ballast dewatering | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| NGD-004 | Emergency fire suppression/Saltwater supply | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| NGDSW-010 | Industrial Storm Water | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| NGDSW-011 | Industrial Storm Water | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |

[1] Boom, mooring, and fender cleaning discharges can occur at any pier where oil booms are installed. However, boom cleaning typically occurs along the quay wall in front of the Waterfront Operations facility. The discharge point identified in the table is located at the Waterfront Operations facility.

[2] The discharge points identified in the table represent electrical utility vaults that could potentially discharge to the San Diego Bay. Potential discharge points for discharges associated with manhole dewatering could occur at numerous locations within the Facility.

[3] Weight test water discharges can occur at any pier where ships are moored. The discharge points identified in the table represent the location of the operational piers at the Facility.

## Table 3. Administrative Information

| | |
|---|---|
| This Order was adopted by the Regional Water Quality Control Board on: | **August 12, 2009** ~~**June 25, 2008**~~ |
| This Order shall become effective on: | **September 1, 2009** ~~**June 25, 2008**~~ |
| This Order shall expire on: | **September 1, 2014** ~~**June 25, 2013**~~ |
| 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: | **March 5, 2014** ~~**December 27, 2012**~~ |

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 August 12, 2009~~June 25, 2008~~.

**TENTATIVE**

John Robertus, Executive Officer

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## List of Tables

## List of Attachments

## 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 San Diego |
| **Facility Address** | ~~937 N. Harbor Drive, Box 81~~3455 Senn Road, Building 72 |
| | San Diego, CA ~~92132-0058~~91236-5084 |
| | San Diego County |
| **Facility Contact, Title, and Phone** | ~~Robert Chichester, Water Program Manager, (619) 532-2261~~ Mark Edson, Installation Environmental Program Manager, (619) 556-1532 |
| **Mailing Address** | Same as Facility Address |
| **Type of Facility** | Naval Base |
| **Facility Design Flow** | Not Applicable |

## 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. R9-2002-0169 and National Pollutant Discharge Elimination System (NPDES) Permit No. CA0109169. The Discharger submitted a Report of Waste Discharge, dated June 18, 2007, and applied for a NPDES permit renewal to discharge steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; weight test water; and miscellaneous discharges associated with facility maintenance at numerous discharge locations from Naval Base San Diego, hereinafter Facility. The application was deemed complete on March 27, 2008.

The Discharger is also currently discharging pursuant to Order No. R9-2003-0265 and NPDES Permit No. CA0107867. The Discharger submitted a Report of Waste Discharge (ROWD), July 2, 2008, and applied for a NPDES permit renewal to discharge saltwater supply system water, graving dock flood dewater, and graving dock caisson gate ballast water, and industrial storm water from numerous discharge locations in the US Navy Graving Dock.

Historically, the Discharger was initially issued a permit for the Graving Dock, and then later for the Facility, but the two were never combined. It is appropriate for the Graving Dock to be combined into the Facility's permit because the Graving Dock is located in the same geographical location.

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 installations in the San Diego area. These installations are aligned into three major naval bases, including the Facility, Naval Base Coronado (NBC), and Naval Base Point Loma (NBPL). The Facility is comprised of the following installations: Naval Base San Diego – main base (NBSD; formerly known as Naval Station San Diego or NAVSTA), Broadway Complex, Mission Gorge Recreational Facility (MGRF; also known as Admiral Baker Field), and the Naval Medical Center, San Diego (NMCSD).

Of the four installations aligned under the Facility, only NBSD ~~and the Broadway Complex have~~ has discharges subject to NPDES permitting.

Wastewater is discharged from Discharge Point Nos. SC-001 through SC-175 (steam condensate), BW-001 (pier boom, fender, and mooring cleaning), UV-001 through UV-015 (utility vault and manhole dewatering), WT-001 through WT-013 (weight test water),

NBSD-001 through NBSD-266 (industrial storm water), ~~BC-001 and BC-002 (industrial storm water)~~ to the San Diego Bay, a water of the United States. See Table 2 on the cover page for discharge location information.

The Discharger also operates a graving dock, at which ship modification, repair, and maintenance activities are performed. Discharges from the Facility to the San Diego Bay include saltwater supply system water, graving dock flood dewater, and graving dock caisson gate ballast water, and industrial storm water.

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.

**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

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

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).

**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) |
|---|---|---|
| SC-001 through SC-175, BW-001, UV-001 through UV-015, WT-001 through WT-013, NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~ and NGD-001; NGD-002; NGD-003; NGD-004; NGDSW-011; and NGDSW-012 | San Diego Bay | Existing:<br>Industrial service supply (IND); navigation (NAV); contact water recreation (REC1); non-contact water recreation (REC2); commercial and sport fishing (COMM); preservation of biological habitats of special significance (BIOL); estuarine habitat (EST); wildlife habitat (WILD); preservation of rare, threatened or endangered species (RARE); marine habitat (MAR); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPWN); shellfish harvesting (SHELL) |

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). Portions of the San Diego Bay including the 32nd Street San Diego Naval Station; San Diego Bay Shoreline, near Chollas Creek; San Diego Bay Shoreline, North of 24th Street Marine Terminal; and San Diego Bay Shoreline, 7th Street Channel are adjacent to NBSD. These portions of the San Diego Bay are listed in the 303(d) list as impaired for benthic community

effects and sediment toxicity. In addition, portions of the San Diego Bay including the San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers and the San Diego Bay, G Street Pier are adjacent to the Broadway Complex. The San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers is listed in the 303(d) list as impaired for benthic community effects, indicator bacteria, and sediment toxicity. The San Diego Bay Shoreline, G Street Pier is listed in the 303(d) list as impaired for indicator bacteria. No applicable TMDL has been adopted by the Regional Water Board and approved by USEPA.

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 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 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 chronic toxicity control. Requirements of this Order implement the SIP. The SIP is not applicable to 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, fender, and mooring 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 of the Fact Sheet. This Order's technology-based pollutant restrictions implement the minimum, applicable federal technology-based requirements.

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 are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin 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.

Sediment monitoring requirements have been carried over from Order No. R9-2003-0265 to determine compliance with receiving water objectives and to determine the impacts of the operation on the surrounding sediment and biota. Storm water monitoring requirements have been carried over from Order No. R9-2003-0265 to determine the effectiveness of the best management practices (BMP) Plan and determine compliance with receiving water objectives. Operational monitoring requirements have been carried over from Order No. R9-2003-0265 to determine the effective of the BMP Plan and ensure that appropriate BMPs are properly implemented.

**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.

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) states that a Regional Water Board may require a discharger to complete and implement a pollution prevention plan if that discharger significantly contributes, or has the potential to significantly contribute, to the creation of toxic hot spots. The results of a reasonable potential analysis detailed in Attachment F to this Order (Fact Sheet) indicate the Discharger has potential to contribute to the creation of toxic hot spots for cadmium, copper, nickel, silver, and zinc in San Diego Bay. This Order requires the Discharger to develop and implement a pollution prevention plan for cadmium, copper, nickel, silver, and zinc to help reduce pollutants in the wastewaters to levels below water quality criteria and obtain consistent compliance with effluent limitations.

**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.

**THEREFORE, IT IS HEREBY ORDERED**, that this Order supercedes Order No. R9-2002-0169 and Order No. R9-2003-0265 ~~is rescinded upon the effective date of this Order~~ 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.

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

**C.** 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.

**D.** 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.

**E.** 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.

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

**G.** The discharge of sewage, except as noted in the Basin Plan Waste Discharge Prohibitions, to San Diego Bay is prohibited.

**H.** The discharge of the first flush of storm water runoff from high risk areas is prohibited, except if the pollutants in the discharge are reduced to the extent that compliance with the effluent limitations specified in section IV.A.3. of this Order is achieved and demonstrated through testing. The discharge of the remainder of the storm water must also achieve compliance with the effluent limitations specified in this Order, but only needs to be demonstrated twice per year, unless under accelerated testing.

**I.** The discharges of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to San Diego Bay is prohibited.

**J.** The discharge of rubbish, refuse, debris, materials of petroleum origin, waste zinc plates, abrasives, primer, paint, paint chips, solvents, and marine fouling organisms, and the deposition of such wastes at any place where they could eventually be discharged is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations and discharges that result from floating booms that were installed for "Force Protection" purposes. Rubbish and refuse include, but are not limited to, any cans, bottles, paper, plastic, vegetable matter, or dead animals deposited or caused to be deposited by man.

**K.** The discharge of materials of petroleum origin in sufficient quantities to be visible is prohibited.

**L.** The discharge or bypassing of untreated waste to San Diego Bay is prohibited. This prohibition does not apply to non-contact cooling water, miscellaneous low volume water, and fire protection water streams which comply with the requirements of this Order for elevated temperature waste discharges and which do not contain pollutants or waste other than heat.

**M.** The discharge of polychlorinated biphenyl compounds, such as those used for transformer fluid, is prohibited.

**N.** The discharge of wastes and pollutants from underwater operations, such as underwater paint and coating removal and underwater hull cleaning, is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from

unpainted and uncoated surfaces by underwater operations, or to discharges that result from the cleaning of floating booms that were installed for "Force Protection" purposes.

**O.** 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.

~~**G.**The discharge of the first ¼ inch (first flush) of storm water runoff from high risk areas[1] is prohibited.~~

[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 exposure to precipitation and runoff.~~

# IV. EFFLUENT LIMITATIONS AND DISCHARGE SPECIFICATIONS

## A. Effluent Limitations – Discharge Point Nos. SC-001 through SC-175 and WT-001 through WT-013

### 1. Final Effluent Limitations – Discharge Point Nos. SC-001 through SC-175

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. SC-001 through SC-175, with compliance measured at Monitoring Location Nos. SC-001 through SC-175 as described in the attached Monitoring and Reporting Program (MRP):

**Table 6. 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 | 2.9 | -- | 5.8 | -- | -- |
| Lead, Total Recoverable | µg/L | 7.0 | -- | 14.0 | -- | -- |
| Mercury, Total Recoverable | µg/L | 0.051 | -- | 0.102 | -- | -- |
| Zinc, Total Recoverable | µg/L | 47.4 | -- | 95.1 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | -- | $2.8 \times 10^{-8}$ | -- | -- |
| ***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. WT-001 through WT-013

The Discharger shall maintain compliance with the following effluent limitations at Discharge Point Nos. WT-001 through WT-013, with compliance measured at Monitoring Location Nos. WT-001 through WT-013 as described in the attached MRP:

**Table 7. Summary of Effluent Limitations for Weight Test 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 |
| ***Priority Pollutants*** | | | | | | |
| Copper, Total Recoverable | µg/L | 2.9 | -- | 5.8 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | -- | $2.8 \times 10^{-8}$ | -- | -- |
| ***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. NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~ NGDSW-010, and NGDSW-011**

Discharges of storm water at Discharge Point Nos. NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~ NGDSW-010, and NGDSW-011 shall achieve a rating of "Pass" for acute toxicity with compliance determined as specified in section VII.H of this Order.

~~**4.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 at Discharge Point Nos. SC-001 through SC-175, with compliance measured at Monitoring Location Nos. SC-001 through SC-175 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 8. Interim Effluent Limitations for Steam Condensate~~**

| ~~Parameter~~ | ~~Units~~ | ~~Maximum Daily~~ |
|---|---|---|
| ~~Copper, Total Recoverable~~ | ~~µg/L~~ | ~~130~~ |
| ~~Lead, Total Recoverable~~ | ~~µg/L~~ | ~~18.8~~ |
| ~~Mercury, Total Recoverable~~ | ~~µg/L~~ | ~~0.15~~ |
| ~~Zinc, Total Recoverable~~ | ~~µg/L~~ | ~~250~~ |
| ~~TCDD-equivalents~~ | ~~µg/L~~ | ~~$4.4 \times 10^{-8}$~~ |

~~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. WT-001 through WT-013, with compliance measured at~~

~~Monitoring Location Nos. WT-001 through WT-013 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 9. Interim Effluent Limitations for Weight Test Water~~**

| ~~Parameter~~ | ~~Units~~ | ~~Maximum Daily~~ |
|---|---|---|
| ~~Copper, Total Recoverable~~ | ~~µg/L~~ | ~~26.3~~ |
| ~~TCDD equivalents~~ | ~~µg/L~~ | ~~$6.3 \times 10^{-8}$~~ |

## 4. Final Effluent Limitations – Discharge Point Nos. NGD-001 and NDG-002

The Discharger shall maintain compliance with the following effluent limitations for graving dock deflooding water and salt water rinse water at Discharge Point Nos. 001 and 002, with compliance measured at Monitoring Location Nos. NGD-001 and NGD-002 as described in the attached Monitoring and Reporting Program (MRP):

**Table 8. Effluent Limitations - Discharge Point Nos. NGD-001 and NGD-002**

| Parameter | Units | Effluent Limitations | | | |
|---|---|---|---|---|---|
| | | Average Monthly | Weekly Average | Maximum Daily | 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 | pH units | -- | -- | -- | [1] |
| Temperature | °F | -- | -- | -- | [2] |
| Copper, Total Recoverable | µg/L | 2.88 | -- | 5.78 | -- |
| Acute Toxicity | Pass/ Fail | -- | -- | -- | [3] |

[1] Within limits of 7.0 – 9.0 at all times.
[2] At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.
[3] Discharges shall achieve a rating of "Pass" for acute toxicity based on a t-test with compliance determined as specified in section VII.H. of this Order.

## 5. Final Effluent Limitations – Discharge Point No. NGD-003

The Discharger shall maintain compliance with the following effluent limitations for caisson ballast dewatering at Discharge Point No. NGD-003, with compliance measured at Monitoring Location No. NGD-003 as described in the attached Monitoring and Reporting Program (MRP):

**Table 9. Effluent Limitations - Discharge Point No. NGD-003**

| Parameter | Units | Effluent Limitations | | | |
|---|---|---|---|---|---|
| | | Average Monthly | Weekly Average | Maximum Daily | 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 | pH units | -- | -- | -- | [1] |
| Temperature | °F | -- | -- | -- | [2] |
| Cadmium, Total Recoverable | µg/L | 7.66 | -- | 15.38 | -- |
| Copper, Total Recoverable | µg/L | 2.88 | -- | 5.78 | -- |
| Nickel, Total Recoverable | µg/L | 6.78 | -- | 13.60 | -- |
| Silver, Total Recoverable | µg/L | 1.12 | -- | 2.24 | -- |
| Zinc, Total Recoverable | µg/L | 47.42 | -- | 95.14 | -- |
| Acute Toxicity | Pass/ Fail | -- | -- | -- | [3] |
| Chronic Toxicity | TUc | -- | -- | -- | 1[4] |

[1] Within limits of 7.0 – 9.0 at all times.
[2] At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.
[3] Discharges shall achieve a rating of "Pass" for acute toxicity based on a t-test with compliance determined as specified in section VII.H. of this Order.
[4] Discharges shall achieve a rating of 1 TUc for chronic toxicity with compliance determined as specified in section VII.I. of this Order.

## 6. Final Effluent Limitations – Discharge Point No. NGD-004

The Discharger shall maintain compliance with the following effluent limitations for emergency fire suppression water and salt water supply water at Discharge Point No. 004, with compliance measured at Monitoring Location No. NGD-004 as described in the attached Monitoring and Reporting Program (MRP):

### Table 10. Effluent Limitations - Discharge Point No. NGD-004

| Parameter | Units | Effluent Limitations | | | |
|---|---|---|---|---|---|
| | | Average Monthly | Weekly Average | Maximum Daily | 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 | pH units | -- | -- | -- | [1] |
| Temperature | °F | -- | -- | -- | [2] |
| Copper, Total Recoverable | µg/L | 2.88 | -- | 5.78 | -- |
| Nickel, Total Recoverable | µg/L | 6.78 | -- | 13.60 | -- |
| Silver, Total Recoverable | µg/L | 1.12 | -- | 2.24 | -- |
| Zinc, Total Recoverable | µg/L | 46.92 | -- | 94.14 | -- |
| Acute Toxicity | Pass/ Fail | -- | -- | -- | [3] |
| Chronic Toxicity | TUc | -- | -- | -- | 1[4] |

[1] Within limits of 7.0 – 9.0 at all times.
[2] At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.
[3] Discharges shall achieve a rating of "Pass" for acute toxicity based on a t-test with compliance determined as specified in section VII.H. of this Order.
[4] Discharges shall achieve a rating of 1 TUc for chronic toxicity with compliance determined as specified in section VII.I. of this Order.

## 7. 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 at Discharge Point Nos. SC-001 through SC-175, with compliance measured at Monitoring Location Nos. SC-001 through SC-175 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 ~~8~~11. Interim Effluent Limitations for Steam Condensate**

| Parameter | Units | Maximum Daily |
|---|---|---|
| Copper, Total Recoverable | µg/L | 130 |
| Lead, Total Recoverable | µg/L | 18.8 |
| Mercury, Total Recoverable | µg/L | 0.15 |
| Zinc, Total Recoverable | µg/L | 250 |
| TCDD-equivalents | µg/L | $4.4 \times 10^{-8}$ |

~~d.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. WT-001 through WT-013, with compliance measured at Monitoring Location Nos. WT-001 through WT-013 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 9. Interim Effluent Limitations for Weight Test Water~~**

| ~~Parameter~~ | ~~Units~~ | ~~Maximum Daily~~ |
|---|---|---|
| ~~Copper, Total Recoverable~~ | ~~µg/L~~ | ~~26.3~~ |
| ~~TCDD equivalents~~ | ~~µg/L~~ | ~~$6.3 \times 10^{-8}$~~ |

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. NGD-001 through NGD-004, with compliance measured at the corresponding Monitoring Location Nos. NGD-001 through NGD-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**

| Discharge Location No. | Pollutant | Units | Maximum Daily |
|---|---|---|---|
| NGD-001 and NGD-002 Deflooding Water | Copper | µg/L | 11.1 |
| NGD-003 Caisson Ballast Dewatering | Cadmium | µg/L | 30 |
| | Copper | µg/L | 40 |
| | Nickel | µg/L | 50 |
| | Silver | µg/L | 10.1 |
| | Zinc | µg/L | 120 |
| NGD-004 Saltwater System Supply Water | Copper | µg/L | 213 |
| | Nickel | µg/L | 79.7 |
| | Silver | µg/L | 5.65 |
| | Zinc | µg/L | 771 |

## B. Land Discharge Specifications

**[Not Applicable]**

## C. Reclamation Specifications

**[Not Applicable]**

# 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

~~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 ~~10~~13. Receiving Water Turbidity Objectives**

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

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, plan, 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. Thermal Characteristics**

Discharges from the Facility shall not exceed the natural temperature of the receiving waters by more than 20°F.

**8. Other Water Quality Objectives**

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

**B. Groundwater Limitations**

**[Not Applicable]**

## 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 September 1, 2014~~June 25, 2013~~, 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.

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 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:

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

~~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 unless they follow the exact same format of USEPA Form 3320-1.

## 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.

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. **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.

g. **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.

**(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-015 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.

b. **Best Management Practices (BMP) Plan for Pier Boom, Fender, ~~and~~ Mooring Cleaning Discharges, and Graving Dock.**

The Discharger shall develop and implement a BMP Plan for discharges from pier boom, fender, and mooring cleaning (Discharge Point No. BW-001) and shall continue to implement a BMP Plan for discharges from the Graving Dock 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.

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**

**b.** 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.

**c.** 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.

**d.** 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.

**5. Special Provisions for Municipal Facilities (POTWs Only)**

**[Not Applicable]**

**6. Other Special Provisions**

**e.** 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, Mercury, Zinc, and TCDD-Equivalents**

i. By May 18, 2010, the Discharger shall comply with the final effluent limitations at Discharge Point Nos. SC-001 through SC-175 for copper, lead, mercury, zinc, and TCDD-equivalents. Data submitted by the Discharger over the term of Order No. R9-2002-0169 indicates that the Discharger cannot immediately meet applicable water quality criteria. ~~Because this compliance schedule is greater than 1 year, in accordance with the section 2.2.1 of the SIP, the Discharger shall submit semi-annual progress reports in accordance with the Monitoring and Reporting Program.~~

1. By September 12, 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, mercury, zinc, 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**.

~~b.**Compliance Schedules for Final Effluent Limitations for Weight Test Water Discharges of Copper and TCDD-Equivalents**~~

~~i.By May 18, 2010, the Discharger shall comply with the final effluent limitations at Discharge Point Nos. WT-001 through WT-013 for copper and TCDD-equivalents. Data submitted by the Discharger over the term of Order No. R9-2002-0169 indicates that the Discharger cannot immediately meet applicable water quality criteria. Because this compliance schedule is greater than 1 year, in accordance with the section 2.2.1 of the SIP, the Discharger shall submit semi-annual progress reports in accordance with the Monitoring and Reporting Program.~~

~~ii.**Pollution Prevention Plan.** The Discharger shall prepare and implement a pollution prevention plan for weight test water discharges for copper 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**.~~

b. **Compliance Schedules for Final Effluent Limitations for Cadmium, Copper, Nickel, Silver, and Zinc**

i. By May 18, 2010, the Discharger shall comply with the final effluent limitations for cadmium, copper, nickel, silver, and zinc. Data submitted by the Discharger over the term of Order No. R9-2003-0265 indicates that the Discharger can not immediately meet applicable water quality criteria.

1. By September 12, 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 cadmium, copper, nickel, silver, and zinc, 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**,

and progress reports shall be submitted in accordance with the Monitoring and Reporting Program.

## 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 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 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 Table A 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 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.

## I. Chronic Toxicity.

The chronic toxicity of undiluted discharges to San Diego Bay which consist of effluent discharge prior to reaching the receiving water shall not exceed 1 TUc, except where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc. Where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc, the chronic toxicity of undiluted discharges to San Diego Bay which consists of effluent discharge prior to reaching the receiving water shall not exceed the chronic toxicity of San Diego Bay water at the intake location. (In the absence of test results

demonstrating otherwise, it will be assumed that the chronic toxicity in San Diego Bay water at the intake location does not exceed 1 TUc).

## J. Mass Emission Rate.

1. When applicable, the mass emission rate (MER), in pounds per day, shall be obtained from the following calculation for any calendar day:

   Mass Emission Rate (lbs/day) = 8.34 x Q x C

   In which Q and C are the appropriate flow rate in MGD and the constituent concentration in mg/L (i.e., either calendar monthly average or daily value), respectively, and 8.34 is a conversion factor. If a composite sample is taken, then C is the concentration measured in the composite sample and Q is the average flow rate occurring during the period over which the samples are composited.

2. When the concentration of a constituent in an effluent sample is determined to be "ND" or "DNQ", the corresponding MER determined from that sample concentration shall also be reported as "ND" or "DNQ".

# ATTACHMENT A – DEFINITIONS

**Arithmetic Mean ($\mu$)**
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: $\Sigma x$ 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 ($\sigma$)**
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;

$\mu$ 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

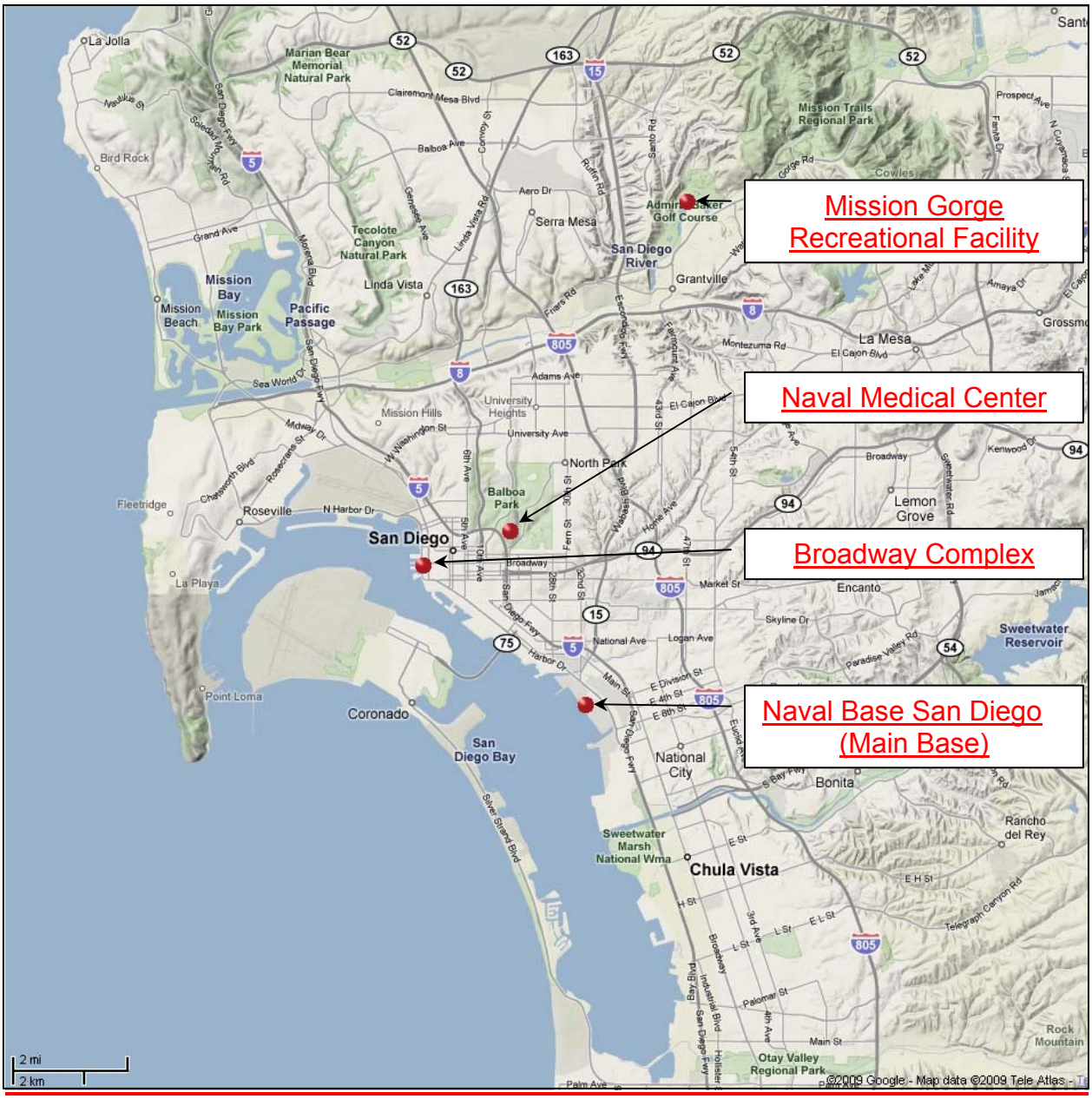
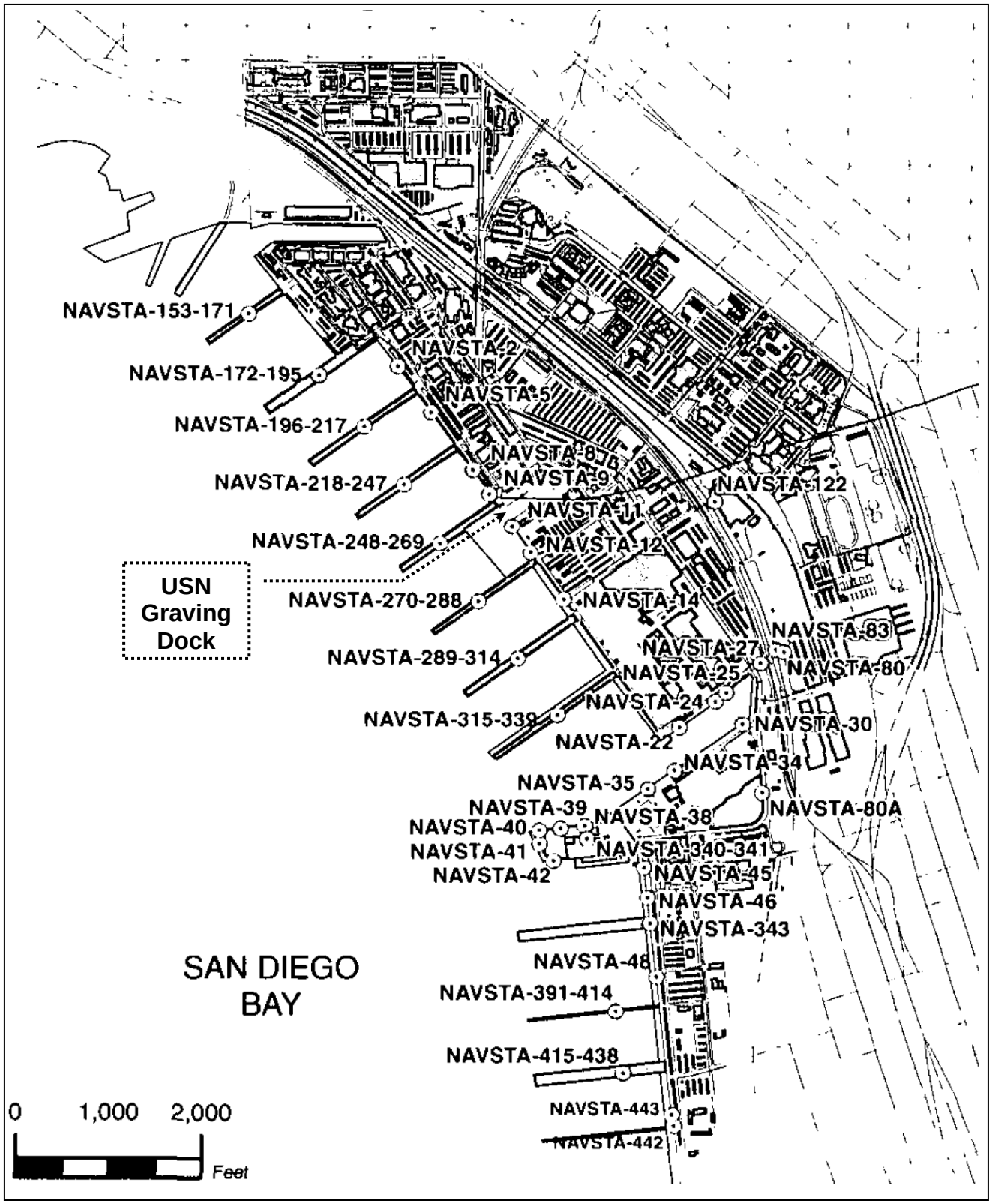


**Figure B-2. Industrial Storm Water Discharges At NBSD and USN Graving Dock ~~the Broadway Complex~~**



## Figure B-3. Steam Condensate Discharges at NBSD

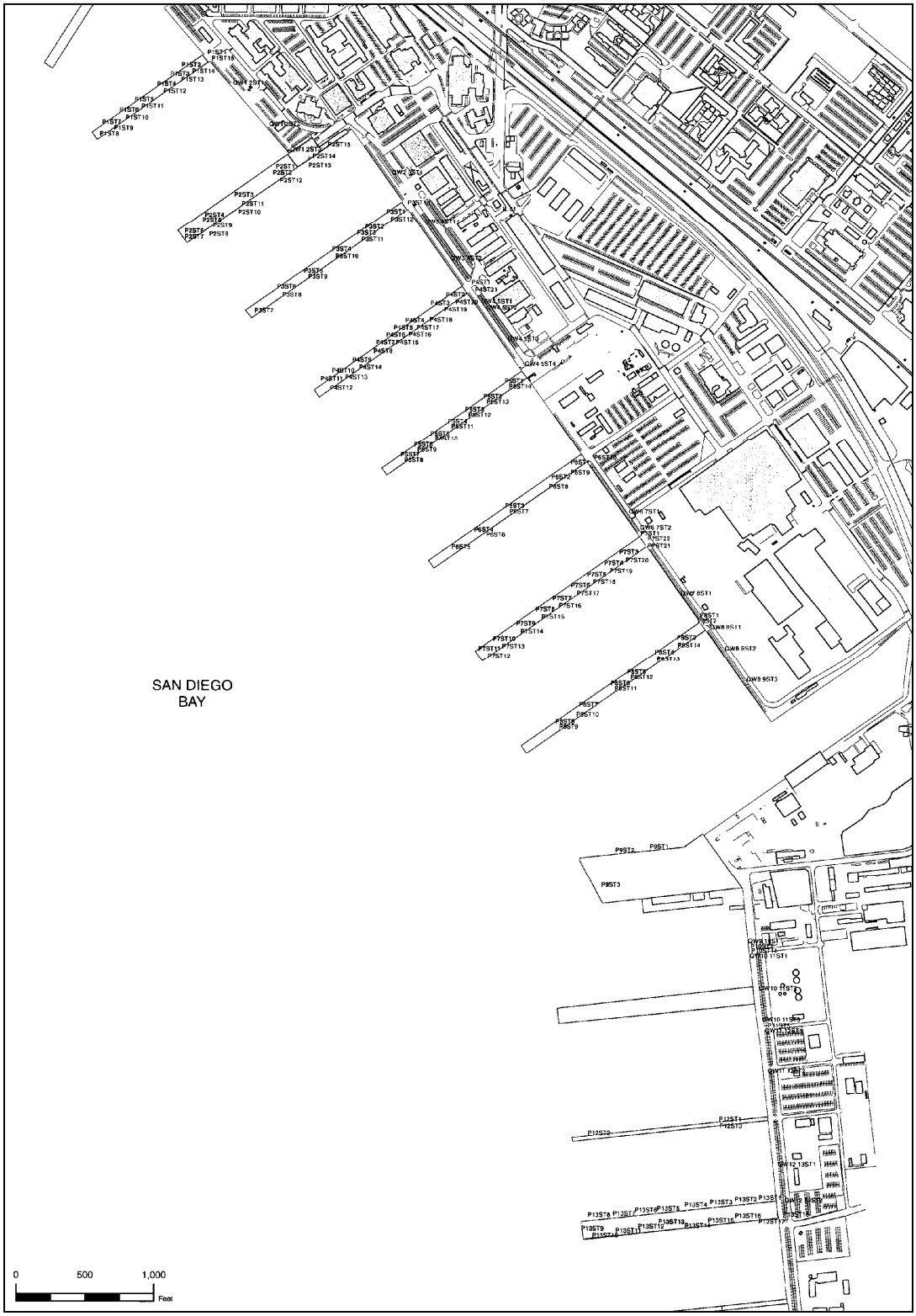
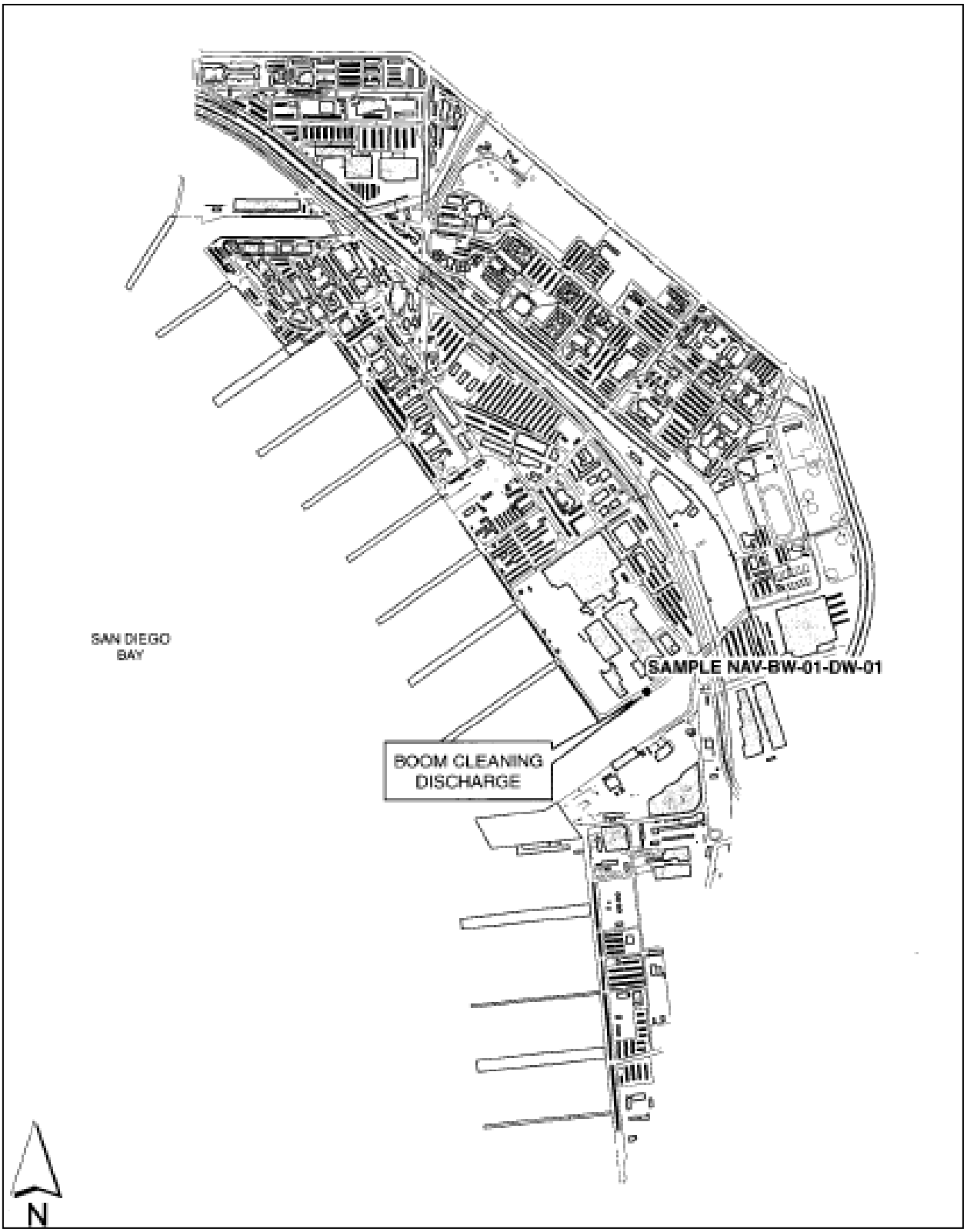


**Figure B-4. Pier Boom, Fender, and Mooring Cleaning Discharges at NBSD**



## Figure B-5. Utility Vault and Manhole Dewatering Discharges at NBSD

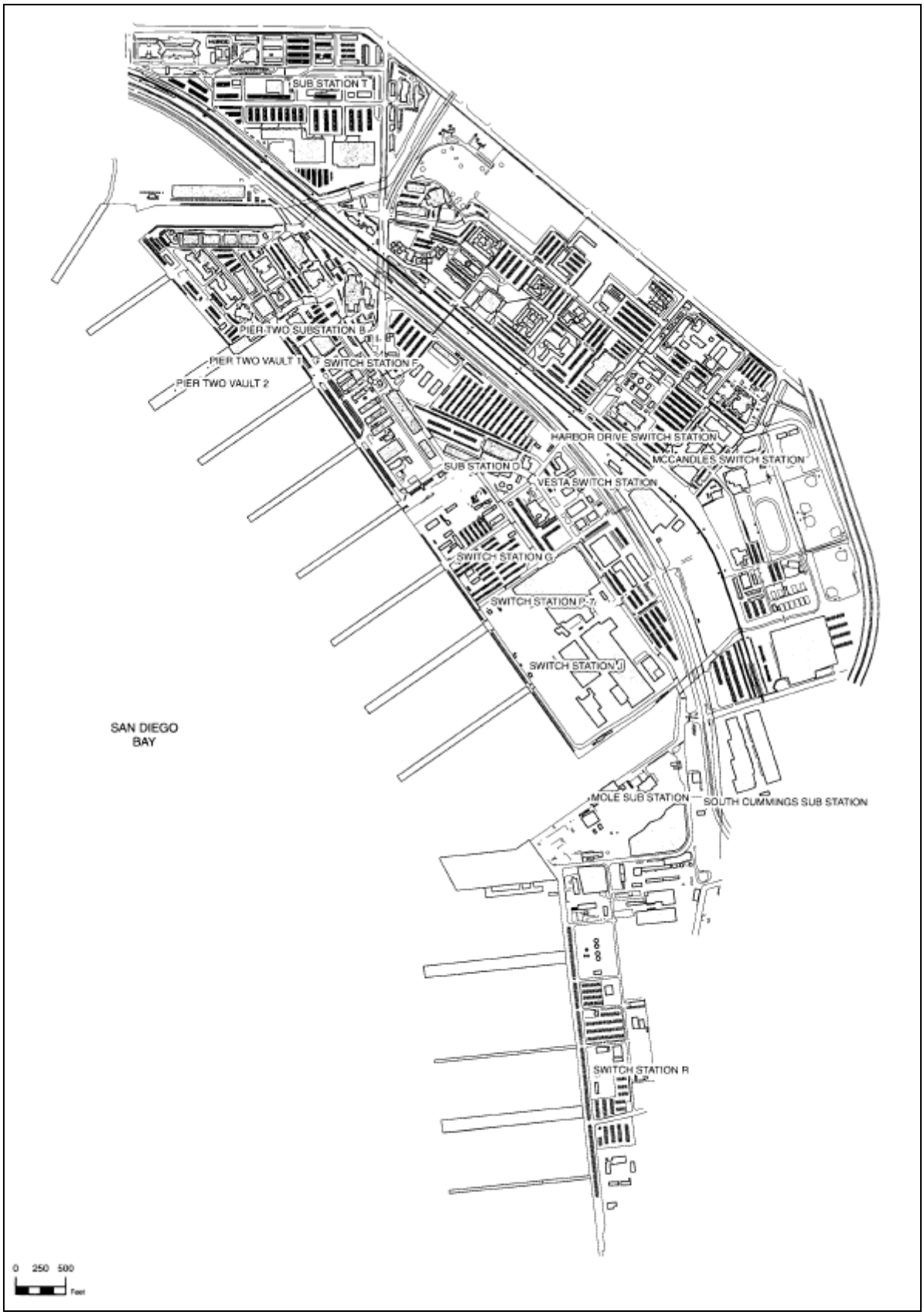
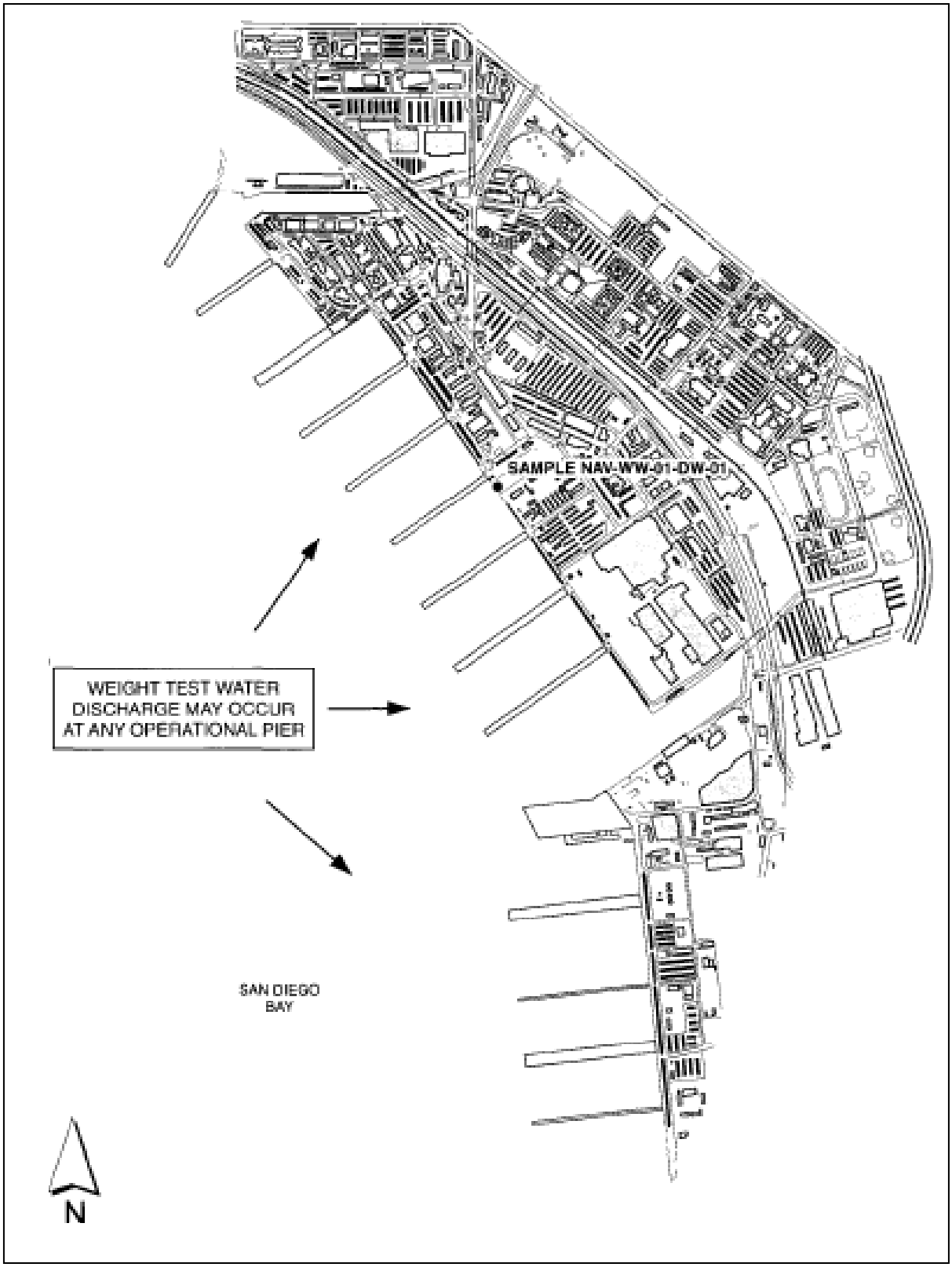
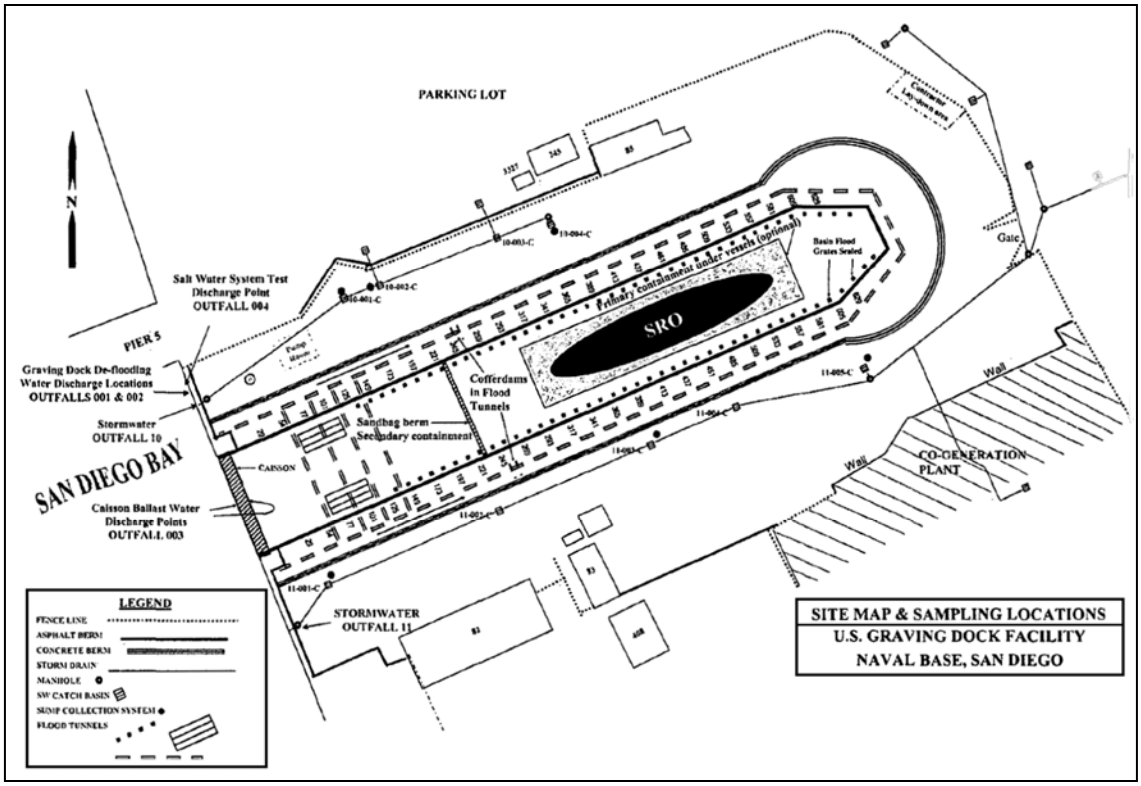


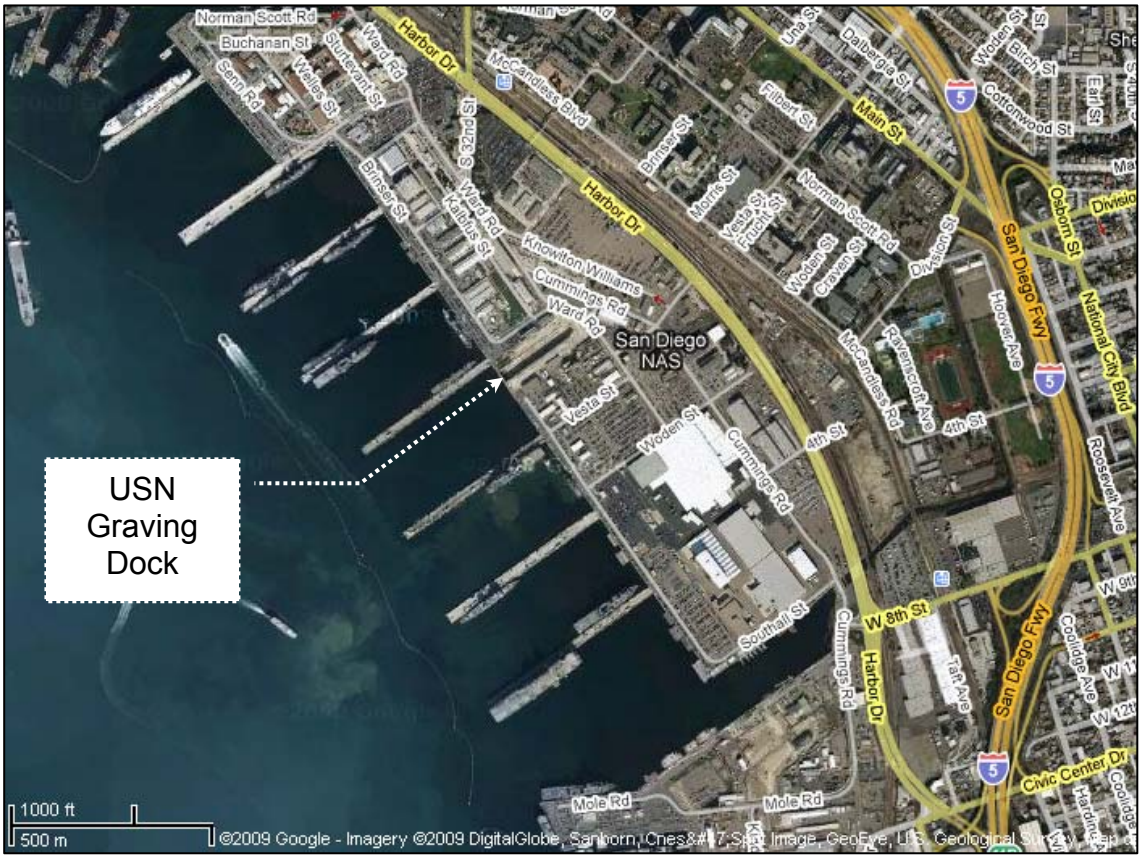
**Figure B-6. Weight Test Water Discharges at NBSD**



## Figure B-7. USN Graving Dock at NBSD

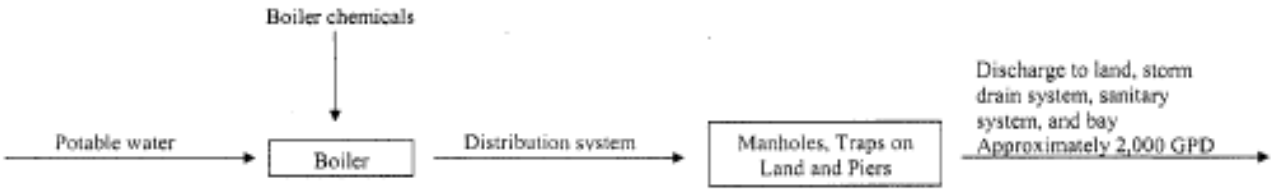



## Figure B-8. USN Graving Dock at NBSD

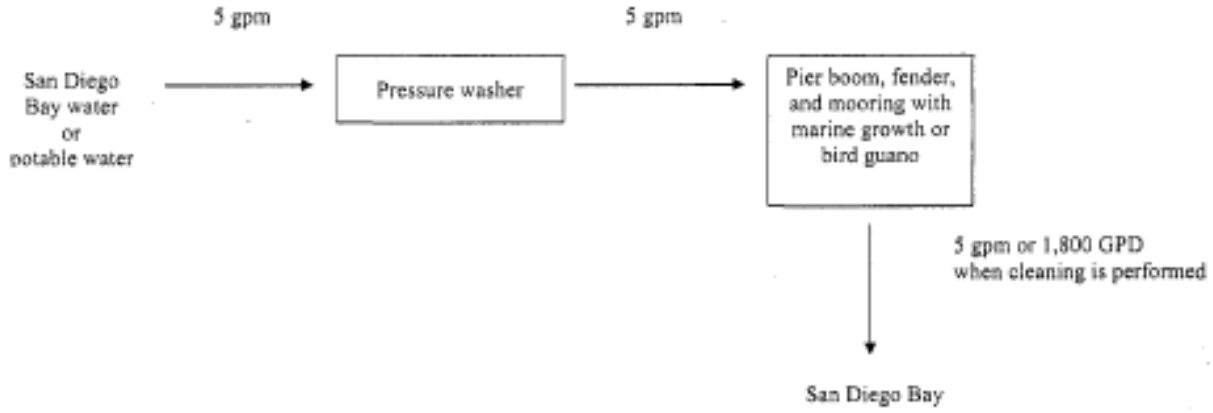


## ATTACHMENT C – FLOW SCHEMATIC

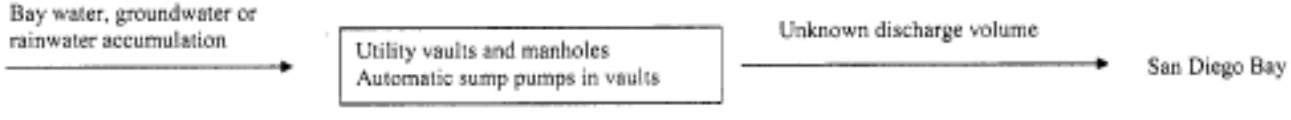
### Figure C-1. Steam Condensate Discharge Line Drawing



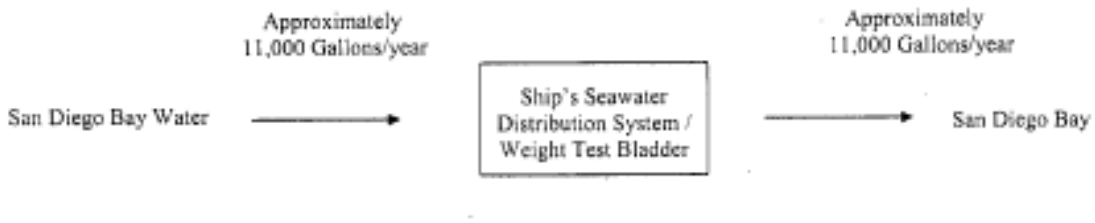

### Figure C-2. Pier Boom, Fender, and Mooring Cleaning Line Drawing




### Figure C-3. Utility Vault and Manhole Dewatering Line Drawing



## Figure C-4. Weight Test Water Line Drawing



# 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).)

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).)

**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).)

**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).)

**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 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 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)):

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 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).)

# ATTACHMENT E – MONITORING AND REPORTING PROGRAM

## Table of Contents



## List of Tables

## 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.

### 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 Part 136, Guidelines Establishing Test Procedures for the Analysis of Pollutants under the Clean Water Act as amended, unless other test procedures are specified in ~~Order No. R9-2008-0061~~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 ~~Order No. R9-2008-0061~~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 ~~Order No. R9-2008-0061~~this Order and this MRP, and records of all data used to complete the application for ~~Order No. R9-2008-0061~~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 ~~Order No. R9-2008-0061~~this Order at the time monitoring reports are submitted. The reports shall contain the information listed in Attachment D, section V.E of ~~Order No. R9-2008-0061~~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 ~~Order No. R9-2008-0061~~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.

## 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-175 | SC-001 through SC-175 | A location where a representative sample of the steam condensate discharge can be obtained. |
| BW-001 | BW-001 | A location where a representative sample of the pier boom, fender, and mooring cleaning discharge can be obtained. |
| UV-001 through UV-015 | UV-001 through UV-015 | A location where a representative sample of the utility vault and manhole dewatering discharge can be obtained. |
| WT-001 through WT-013 | WT-001 through WT-013 | A location where a representative sample of the weight test water 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. |
| NBSD-001 through NBSD-266 | NBSD-001 through NBSD-266 | A location where a representative sample of the industrial storm water discharge from NBSD can be obtained. |
| ~~BC-001 and BC-002~~ | ~~BC-001 and BC-001~~ | ~~A location where a representative sample of the industrial storm water discharge from the Broadway Complex can be obtained.~~ |
| NGD-001 | NGD-001 | A location where a representative sample of the graving dock deflooding and salt water rinse can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |
| NGD-002 | NGD-002 | A location where a representative sample of the graving dock deflooding and salt water rinse can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |

| Discharge Location No. | Monitoring Location Name | Monitoring Location Description |
|---|---|---|
| NGD-003 | NGD-003 | A location where a representative sample of the caisson ballast dewatering can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |
| NGD-004 | NGD-004 | A location where a representative sample of the emergency fire suppression and saltwater supply system can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |
| NGDSW-010 | NGDSW-010 | A location where a representative sample of stormwater can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |
| NGDSW-011 | NGDSW-011 | A location where a representative sample of stormwater can be obtained just prior to, or during the discharge into the Bay: 30º 40' 45" N; 117º 7' 30" W |
| -- | RSW-001 | A location where a representative sample of the San Diego Bay 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-175

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-175 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 | Estimate |
| ***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*** | | | | |
| Copper, Total Recoverable | µg/L | Grab | 1/Month | [1,2] |
| Lead, Total Recoverable | µg/L | Grab | 1/Month | [1] |
| Mercury, Total Recoverable | µg/L | Grab | 1/Month | [1] |
| Zinc, Total Recoverable | µg/L | Grab | 1/Month | [1] |
| TCDD-Equivalents[3] | µg/L | Grab | 1/Month | [1] |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Remaining Priority Pollutants | µg/L | Grab | 1 in Year One<br>1 in Year Five<br>~~1/Year~~ | [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 | [1,4] |
| Chronic Toxicity | TUc | Grab | 1/five year permit cycle | [1,4] |

[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.

[4] As specified in section V of this MRP.

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

### B. Monitoring Location BW-001

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

**Table E-3. Effluent Monitoring for Pier Boom, Fender, and Mooring Cleaning**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Flow | GPD | Estimate | 1/Quarter | Estimate |
| ***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 Priority Pollutants | µg/L | Grab | 1 in Year One<br>1 in Year Five<br>~~1/Year~~ | [1] |
| ***Non-Conventional Pollutants*** | | | | |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Settleable Solids | mL/L | Grab | 1/Quarter | [1] |
| Turbidity | NTU | Grab | 1/Quarter | [1] |
| Acute Toxicity | Pass/Fail | Grab | 1/five year permit cycle | [1,4] |
| Chronic Toxicity | TUc | Grab | 1/five year permit cycle | [1,4] |

[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.
[4] As specified in section V of this MRP.

2. Annually, the Discharger shall submit a log of the pier boom, fender, and mooring cleaning activity including the duration, the personnel in charge of the cleaning, the quantity of the discharge, the date, a summary of any potential impacts to receiving water quality, and a summary regarding the description and location of any booms removed from the San Diego Bay to be cleaned because of oil or other pollutants.

### C. Monitoring Locations UV-001 through UV-015

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-015 as follows:

**Table E-4. Effluent Monitoring for Utility Vault and Manhole Dewatering**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Flow | GPD | Estimate | 1/Quarter | Estimate |
| ***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] |
| Cadmium, Total Recoverable | µg/L | Grab | 1/Quarter | [1] |
| Chrysene | µg/L | Grab | 1/Quarter | [1] |
| Copper, Total Recoverable | µg/L | Grab | 1/Quarter | [1,2] |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| 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] |
| 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 | [1,4] |
| Chronic Toxicity | TUc | Grab | 1/five year permit cycle | [1,4] |

[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.

[4] As specified in section V of this MRP.

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.

## D. Monitoring Locations WT-001 through WT-013

1. The Discharger shall monitor the discharge of weight test water at a minimum of three representative monitoring locations from Monitoring Location Nos. WT-001 through WT-013 as follows:

**Table E-5. Effluent Monitoring for Weight Test Water**

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

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| ***Priority Pollutants*** | | | | |
| Copper, Total Recoverable | µg/L | Grab | 1/Quarter | [1,2] |
| TCDD-Equivalents[3] | µg/L | Grab | 1/Quarter | [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 | [1,4] |
| Chronic Toxicity | TUc | Grab | 1/five year permit cycle | [1,4] |

[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.
[4] As specified in section V of this MRP.

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

## E. 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-6. Effluent Monitoring for Miscellaneous Discharges**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|
| Flow | GPD | Estimate | 1/Year | Estimate |
| ***Priority Pollutants*** | | | | |
| TCDD-Equivalents[2] | µg/L | Grab | 1 in Year One<br>1 in Year Five<br>~~1/Year~~ | [1] |
| Priority Pollutants | µg/L | Grab | 1 in Year One<br>1 in Year Five<br>~~1/Year~~ | [1,3] |
| Acute Toxicity | Pass/Fail | Grab | 1/five year permit cycle | [1,4] |
| Chronic Toxicity | TUc | Grab | 1/five year permit cycle | [1,4] |

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method |
|---|---|---|---|---|

[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.
[4] As specified in section V of this MRP.

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

## F. Monitoring Location Nos. NGD-001 and NGD-002

1. The Discharger shall monitor the discharge of graving dock deflooding and salt water rinse at Monitoring Location Nos. NGD-001 and NGD-002 as follows:

### Table E-7. Effluent Monitoring for Graving Dock Deflooding & Salt Water Rinse Discharges

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method and (Minimum Level, units), respectively |
|---|---|---|---|---|
| Flow | GPD | Grab | 1/day | Estimate |
| Oil and Grease | mg/L | Grab | 1/year | [1] |
| Settleable Solids | ml/L | Grab | 1/year | [1] |
| Turbidity | NTU | Grab | 1/year | [1] |
| pH | pH units | Grab | 1/year | [1] |
| Temperature | °F | Grab | 1/year | [1] |
| Copper, Total Recoverable | µg/L | Grab | 1/year | [1,2] |
| Tributyltin, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Acute Toxicity | Pass/Fail | Grab | 1/year | [1,3] |
| Remaining CTR Priority Pollutants | µg/L | Grab | 1/year | [1] |

[1] As specified in 40 CFR 136.
[2] 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 that is analyzed by methods 6010B or 200.7 are known.
[3] As specified in section V of this MRP.

## G. Monitoring Location No. NGD-003

1. The Discharger shall monitor the discharge of saltwater supply system water and caission gate ballast water effluent at Monitoring Location No. NGD-003 as follows:

**Table E-8. Effluent Monitoring for Caission Gate Ballast Water Effluent and Saltwater Supply System Water**

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method and (Minimum Level, units), respectively |
|---|---|---|---|---|
| Flow | GPD | Grab | 1/day | Estimate |
| Oil and Grease | mg/L | Grab | 1/year | [1] |
| Settleable Solids | ml/L | Grab | 1/year | [1] |
| Turbidity | NTU | Grab | 1/year | [1] |
| pH | pH units | Grab | 1/year | [1] |
| Temperature | °F | Grab | 1/year | [1] |
| TSS | mg/L | Grab | 1/year | [1] |
| Cadmium, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Copper, Total Recoverable | µg/L | Grab | 1/year | [1,2] |
| Nickel, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Silver, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Tributyltin, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Zinc, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Acute Toxicity | Pass/Fail | Grab | 1/year | [1,3] |
| Chronic Toxicity | $TU_c$ | Grab | 1/year | [1,3] |
| Remaining CTR Priority Pollutants | µg/L | Grab | 1/year | [1] |

[1] As specified in 40 CFR 136.

[2] 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 that is analyzed by methods 6010B or 200.7 are known.

[3] As specified in section V of this MRP.

## H. Monitoring Location No. NGD-004

1. The Discharger shall monitor the discharge of emergency fire suppression water and salt water supply water at Monitoring Location No. NGD-004 as follows:

## Table E-9. Effluent Monitoring for Emergency Fire Suppression and Salt Water Supply Discharges

| Parameter | Units | Sample Type | Minimum Sampling Frequency | Required Analytical Test Method and (Minimum Level, units), respectively |
|---|---|---|---|---|
| Flow | GPD | Grab | 1/day | Estimate |
| Oil and Grease | mg/L | Grab | 1/year | [1] |
| Settleable Solids | ml/L | Grab | 1/year | [1] |
| Turbidity | NTU | Grab | 1/year | [1] |
| pH | pH units | Grab | 1/year | [1] |
| Temperature | °F | Grab | 1/year | [1] |
| TSS | mg/L | Grab | 1/year | [1] |
| Copper, Total Recoverable | µg/L | Grab | 1/year | [1,2] |
| Nickel, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Silver, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Tributyltin, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Zinc, Total Recoverable | µg/L | Grab | 1/year | [1] |
| Acute Toxicity | Pass/Fail | Grab | 1/year | [1,3] |
| Chronic Toxicity | TUc | Grab | 1/year | [1] |
| Remaining CTR Priority Pollutants | µg/L | Grab | 1/year | [1] |

[1] As specified in 40 CFR 136.

[2] 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 that is analyzed by methods 6010B or 200.7 are known.

[3] As specified in section V of this MRP.

# V. WHOLE EFFLUENT TOXICITY TESTING REQUIREMENTS

## A. Acute Toxicity

### ~~A.~~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 one storm water discharge event 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 ~~calendar~~ year (July-June), at a different time of year from the previous years, the Discharger shall split ~~an~~ 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 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 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.

### ~~B.~~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)][~~(i.e., 96-hour LC50, etc.))~~ 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; Atlantic silverside, Menidia menidia; or Tidewater silverside, Menidia peninsulae (Acute Toxicity Test Method 2006.0);~~

~~•The sheepshead minnow, Cyprinodon variegates (Acute Toxicity Test Method 2004.0);~~

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).

**~~C.~~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 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".

**~~D.~~4.** Quality Assurance

**~~1.~~a.** Quality assurance measures, instructions, and other recommendations and requirements are found in the test methods manual previously referenced. Additional requirements are specified, below.

**~~2.~~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.

**~~3.~~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.

~~4.~~**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.).

~~5.~~**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 within 14 days, or within the shortest time period possible (e.g., the next storm event, or next discharge event).

~~6.~~**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).

~~7.~~**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 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 12.2.8.2.2 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.

**~~E.~~5.** Accelerated Toxicity Testing and TRE/TIE Process

~~1.~~**a.** If the results of acute toxicity monitoring are reported as “Fail” and the 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 within 14 days, or within the shortest time period possible (e.g., the next storm event, or next discharge event), of receipt of test results reported

as "Fail" for acute toxicity. 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 within 14 days, or within the shortest time period possible (e.g., the next storm event, or next discharge event), of receipt of test results reported as "Fail" for acute toxicity. 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.A.5. a. or b. of this MRP)~~V.E.1 or V.E.2~~) are reported as "Fail" for acute toxcity, then, 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 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 not from samples collected during subsequent storm events or discharge events. Therefore, the Discharger shall collect additional sample volume, sufficient for a TIE, when in an accelerated testing phase.

~~F.~~**6.** Reporting of Acute Toxicity Monitoring Results

~~1.~~**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—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.

~~2.~~**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 calendar year, 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.

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:

- 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.

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.

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

**1.** The Discharger shall monitor the San Diego Bay at RSW-001 as follows:

**Table E-~~7~~10. 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~~ |
| Cadmium, Total Recoverable | µg/L | Grab | 1/year | [2] |
| Copper, Total Recoverable | µg/L | Grab | 1/year | [2,3] |
| Mercury, Total Recoverable | µg/L | Grab | 1/year | [2] |
| Nickel, Total Recoverable | µg/L | Grab | 1/year | [2] |
| Zinc, Total Recoverable | µg/L | Grab | 1/year | [2] |
| Remaining CTR Priority Pollutants | µg/L | Grab | 1/year | [2] |
| ***Non-Conventional Pollutants*** | | | | |
| Temperature | °F | Grab | 1/Quarter ~~1/Month~~ | [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

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.

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.

[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.

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.

~~c.~~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. NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~ NGDSW-10, and NGDSW-11 shall be sampled and analyzed as follows:

**Table E-~~8~~11. Monitoring Requirements for Industrial Storm Water Discharges from Discharge Points Nos. NBSD-001 through NBSD-266.**

| 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] |
| ***Priority Pollutants*** | | | | |
| Copper, Total Recoverable | µg/L | Grab | 2 storms per year ~~1/Discharge Event~~ | [2,3] |

| Parameter | Unit | Sample Type | Minimum Frequency* | Required Analytical Test Method |
|---|---|---|---|---|
| Zinc, Total Recoverable | µg/L | Grab | 2 storms per year ~~1/Discharge Event~~ | [2] |
| ***Non-Conventional Pollutants*** | | | | |
| Acute Toxicity[4] | Pass or Fail ~~% survival~~ | Grab | 2 storms per year ~~1 storm per year~~ | [2] |
| Electrical Conductivity | µmho/cm | Measurement | 2 storms per year | [2] |
| Total Organic Carbon | mg/L | Grab | 2 storms per year | [2] |
| Other Pollutants[5] | µg/L | Grab | 2 storms per year ~~1/Discharge Event~~ | [2] |

* Sampling shall occur during storm events, or if collected, prior to release to receiving water. If there are no 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.

## Table E-12. Monitoring Requirements for Industrial Storm Water Discharges from Discharge Points Nos. NGDSW-10, and NGDSW-11.

| Parameter | Unit | Sample Type | Minimum Frequency* | Required Analytical Test Method |
|---|---|---|---|---|
| Discharge Volume | gallons | Estimate [1] | 2 storms per year | Estimate |
| Total Petroleum Hydrocarbons (TPH) | mg/L | Grab | 2 storms per year | [2] |
| Total Suspended Solids | mg/L | Grab | 2 storms per year | [2] |
| Settleable Solids | ml/L | Grab | 2 storms per year | [2] |
| pH | pH Units | Grab | 2 storms per year | [2] |
| Arsenic, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Cadmium, Total | µg/L | Grab | 2 storms per year | [2] |

| Parameter | Unit | Sample Type | Minimum Frequency* | Required Analytical Test Method |
|---|---|---|---|---|
| Recoverable | | | | |
| Chromium, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Copper, Total Recoverable | µg/L | Grab | 2 storms per year | [2,4] |
| Lead, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Mercury, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Nickel, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Silver, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Zinc, Total Recoverable | µg/L | Grab | 2 storms per year | [2] |
| Chemical Oxygen Demand (COD) | mg/L | Grab | 2 storms per year | [2] |
| Tributlytin (TBT) | µg/L | Grab | 2 storms per year | [2] |
| Acute Toxicity[3] | Pass or Fail | Grab | 2 storm per year | [2] |
| Oil and Grease | mg/L | Grab | 2 storms per year | [2] |
| Total Organic Carbon (TOC) | mg/L | Grab | 2 storms per year | [2] |
| Specific Conductance | µmho/cm | Measurement | 2 storms per year | [2] |
| Remaining CTR Priority Pollutants[5] | µg/L | grab | 2 storms in year one<br>2 storms in year five | [2] |

* Sampling shall occur during storm events. If there are no 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] The presence of acute toxicity in the storm water shall be determined as specified in section VII.I of the Order.

[4] Influent and 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 that is analyzed by methods 6010B or 200.7 are known.

[5] As specified in Paragraph (b)(1) of 40 CFR 131.38.

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

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.
iv. 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.

## B. Graving Dock Flood Water Discharge

The Discharger shall provide written notification to the Regional Water Board 48 hours prior to flooding of its graving dock. If a facility has to be flooded on a short notice and the 48 hour notification time can not be met, the Discharger shall notify the Regional Water Board as early as possible and include information on why the notification time could not be met.

The Discharger shall document the condition of its facilities prior to each flooding. The conditions will be digitally documented either by video or photographs. The video must be in DVD format or other computer file format compatible with MS Windows such as mpg (Moving Picture Experts Group), avi (Audio Video Interleave), or wmv (Windows Media Video), and the photographs must be digital photographs that show date and time on each picture. Video or photographs shall document conditions at the initial flooding of the facilities. If flooding is to occur at night, video or photographs shall be taken during daylight hours as close to the flooding event as possible.

The Discharger shall submit documentation on the facility conditions quarterly to the Regional Water Board in accordance with Table E-17.

If the floating drydock was not flooded during the quarter, the Discharger shall document in the quarterly effluent monitoring report that no flooding occurred during that period.

## C. Spill and Illicit Discharge Log

The Discharger shall log and report all spills of significant quantities and all illicit discharges of any quantity within and from the Facility each month, including spills and illicit discharges from vessels that are in the yard for service. The spill / illicit discharge reports shall identify:

1. the time and date of the spill or illicit discharge;

2. the cause of the spill or illicit discharge;

3. the materials or wastes involved in the spill or illicit discharge;

4. the estimated volume of the spill or illicit discharges;

5. the specific location where the spill or illicit discharge originated;

6. the fate of the spill or illicit discharge (e.g., San Diego Bay, floating drydock, etc.);

7. the physical extent or size of the area(s) affected by the spill;

8. whether the spill or illicit discharge contained pollutants;

9. the public agencies notified;

10. the corrective actions taken; and

11. the means to prevent or minimize future spills or illicit discharges.

The reports shall be submitted quarterly to the Regional Water Board in accordance with Table E-17 of this MRP.

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

## D. Chemical Utilization Audit

The Discharger shall submit a complete Chemical Utilization Audit form to summarize the use of hazardous materials and wastes generated. The form shall be submitted annually to the Regional Water Board in accordance with Table E-17 of this MRP.

## E. Waste Hauling Log

The Discharger shall submit a log showing the volume, type, disposition, and date of disposal for all wastes originating from the Facility during each month. The log shall be submitted semi-annually to the Regional Water Board in accordance with Table E-17 of this Monitoring and Reporting Program.

## F. Sediment Chemistry Monitoring

Sediment monitoring, as specified in this MRP is required.

1. Sample Collection

a. The sediment sampling program shall consist entirely of surficial sediment samples, and shall be conducted by the Discharger at the stations within its leasehold, as specified in Table E-14 of this MRP.

b. A minimum of one sample shall be collected and analyzed from each designated station on an annual basis. The samples shall not be discarded after analysis. All samples shall be frozen and retained for a period of not less than 45 days from the date on which the Regional Water Board receives the corresponding analytical results. The Regional Water Board shall notify the Discharger when the samples can be discarded.

c. If more than one sample is collected from a sampling station, each sample shall

be analyzed separately and shall not be composited.

d. Samples shall be collected in accordance with the current *Sample Collection Plan* that was submitted and approved under the General Shipyard Permit by the Regional Water Board. This Plan addresses all collection protocol including station positioning method, sampling equipment, containers, preservation, transportation, etc.

Any proposed future changes to the *Sample Collection Plan* shall be submitted to this Regional Water Board for review at least 60 days prior to when the changes are proposed to take effect.

If the Discharger proposes a new Sample Collection Plan, the following items have to be included in the plan:

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

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

iii. Station Coordinates: The Discharger shall convert the station coordinates from the Lambert coordinate grid system (i.e., Easting and Northing) into Latitude and Longitude coordinates. All station coordinates shall be confirmed in the field and corrected if necessary.

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

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

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

When substitutions are necessary, the corresponding Discharge Monitoring

Reports shall specify the station(s) involved and the substitute method/sampler employed.

2. Sampling Stations and Analysis

a. The guidelines listed in Table E-13 regarding station location/sample collection shall apply, unless otherwise specified in this Monitoring and Reporting Program.

**Table E-13. Station Location General Guidelines**

| Stations Adjacent To: | Sample Collection: |
|---|---|
| Piers, Floats, Docks, Drydocks, and Quay Walls | Samples shall be taken immediately below the edge of a pier float, dock, dry dock, or quay wall and shall be collected by 0.1 $m^2$ modified van Veen dredge deployed from a boat or the side of the pier float, dock, dry dock, or quay wall.<br>When a float and quay wall or pier are present side-by-side, samples should be taken below the outside (or bay-side) edge of the float (rather than between the float and quay wall or under the float). |
| Rip Rap | Samples should be collected 5 feet further from shore than where the rip rap first meets the soft bottom sediment. (In some cases, 10 feet may be specified.) |
| Storm Drains | Storm drain samples of bay sediment should be collected at a point approximately 10 feet from the mouth of the drain and in line with the centerline of the drain unless otherwise specified in this Monitoring and Reporting Program. |
| Beach | The narrative descriptions will indicate the distance that a station is located relative to a stationary landmark, such as a pier or other nearby structure. |
| Dock/Rip Rap Intersection | Follow guidelines for rip rap station. |
| Dock/Beach Intersection | Follow guidelines for beach station. |

b. The three remote reference stations identified in Table E-16 of this Monitoring and Reporting Program are common to reference stations for other shipyards discharging to San Diego Bay. The Discharger may fulfill its sampling requirements for the remote reference stations by submitting results from samples collected at these stations by other entities during the sampling/reporting period. Reference station locations are specified in Sediment Monitoring Station Locations section of this MRP.

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

## 3. Analysis Parameters and Detection Limits

Sample analyses shall be conducted using approved laboratory methods capable of meeting the detection limits shown in Table E-14. Surficial sediment samples shall be analyzed for the parameters and to the detection limits indicated in Table E-14.

**Table E-14. Sediment Chemistry Methods and Detection Limits**

| Parameter | Method Number | Detection Limit (dry weight) |
|---|---|---|
| Grain size | -- | NA |
| Cadmium, Chromium, Copper, Nickel, Silver[1] | 6010 | 0.5 mg/kg |
| Mercury[1] | 7471 | 0.1 mg/kg |
| Arsenic[1] | 7060 or 7061 | 0.5 mg/kg |
| Lead[1] | 7421 | 0.5 mg/kg |
| Zinc[1] | 6010 | 2.0 mg/kg |
| Tributyltin (TBT)[2] | See Footnote 2 | 1.0 µg/kg |
| Total Petroleum Hydrocarbons (TPH)[3] | Modified 8015 or DHS | 500. µg/kg |
| Polychlorinated biphenyls/ Polychlorinated terphenyls (PCBs/PCTs)[4] | 8080 | 20.0 µg/kg |
| PAH[5] | 8270 | 100. µg/kg |

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

[2] Concentrations of tributyltin shall be analyzed using protocol approved by the Regional Water Board or as described in:

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

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

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

[3] Using gas chromatography, analyze for the medium molecular weight hydrocarbons, boiling point range $nC_{12}$ - $nC_{32}$. Separate the two resulting fractions, specifying the concentrations of (1) saturated aliphatic hydrocarbons; (2) unsaturated aromatic hydrocarbons; and (3) their sum, the total petroleum hydrocarbons. The concentrations of the remaining monitored contaminants, PCBs, PCTs, and PAHs, can be determined by further analysis of these two fractions.

TOTAL PETROLEUM HYDROCARBONS

Aliphatic Aromatic
PCBs/PCTs PAHs

[4] Analyze the saturated aliphatic fraction for PCBs and PCTs, both of which can be measured in a single procedure. Run the PCB analysis as usual but include one additional standard for Aroclor 5460. At approximately 40 minutes, increase the temperature to 285 degrees celsius. PCTs elute later than PCBs and the entire procedure will take approximately 90 minutes.

Report the concentration of total PCBs, indicating the name and degradation status of the predominant aroclor (e.g., Aroclor 1260, undegraded). The name and status of a secondary PCB aroclor shall also be reported, if present. Similarly, specify the concentration of total PCTs assumed to be Aroclor 5460. Report the presence of any unidentified mixture of chlorinated hydrocarbons detected by electron capture gas chromatography. Additional PCB/PCT information, such as the concentrations of individual congeners, should also be provided if available without additional analytical costs.

[5] The concentrations of the individual PAHs can be determined by further analysis of the unsaturated aromatic fraction. The concentrations of the following eight PAHs shall be reported: phenanthrene, 1-methyl phenanthrene, 2-methyl phenanthrene, benzo(a)pyrene, chrysene, fluoranthene, pyrene, and anthracene. Additional information, such as the concentration of other PAHs, should also be provided if available without additional analytical costs.

[6] Although not initially required, composited sediment from each sample shall be retained for possible future total organic carbon (TOC) analysis. All samples shall be frozen and retained for a period of no less than 45 days from the date on which Regional Water Board staff received the corresponding analytical results. At that time, the Regional Water Board shall be notified and approval to discard the samples shall be obtained, before the samples are discarded.

## 5. Sediment Monitoring Results and Reports

### a. Discharge Monitoring Reports

The sediment monitoring results shall be submitted to the Regional Water Board in hard copy form and on a compact disc in Microsoft Word 2003 or older format.

The sediment monitoring results shall contain all required sampling results in the following three forms:

#### i. Tables:

Current, as well as historical, monitoring data shall be provided in tabular form. Historical monitoring data is defined as sample results from all previous reporting periods collected as a part of this MRP. All concentrations shall be reported in both dry and wet weights. Tabular data shall be submitted in hard copy and on a compact disk in IBM Microsoft Excel 2003 or older format.

#### ii. Graphs:

The specific type of graph(s) to be generated (e.g., histogram) is not specified, but left to the discretion of the Discharger's consultant who should determine the most effective way of presenting the data. Graphical data shall be submitted in hard copy and on a compact disk in Microsoft Excel 2003 or older format.

#### iii. Facility and Reference Station Maps:

The Facility and reference station maps developed for the final Sample Collection Plan and confirmed during the "pre-sampling field effort" shall be used to present the monitoring data. A separate Facility and reference station map shall be developed for each monitored contaminant or contaminant group indicating the measured concentrations at each station (rather than concentration contours).

iv. Paint Chip Analysis:

In addition to tables, graphs, and maps, shipyard Discharge Monitoring Reports must also include the results of the annual paint chip analyses required in Tables E-15 and E-16 of this MRP.

b. Trend Curves and Statistical Analysis

The Discharger shall submit annual "trend curves" for each monitored constituent, in which concentrations are plotted as a function of time. The Discharger shall also determine if a statistically significant change (increase or decrease) in sediment concentrations has occurred over time for each contaminant, relative to reference concentrations.

In making this determination, the Discharger shall employ a statistical method that is best suited for the data available (parametric vs. non-parametric test).

In all cases, the Discharger shall report as soon as possible the cause(s) or suspected cause(s) of any increase in contaminant concentrations, if they are known.

Monitoring results shall be compared against the following three sets of reference data:

i. The Discharger's own historical baseline data (historical data is defined as sample results from all previous sampling/reporting periods collected as a part of the Sediment Monitoring and Reporting Program);

ii. Concentrations measured at the three remote reference sites; and

iii. Concentrations measured at nearby city storm drain(s), if present.

6. Sediment Monitoring Station Locations

a. The Discharger shall collect surficial sediment samples in accordance with Table E-9.

**Table E-15. Sediment Sampling Site Coordinates (Lambert/California Coordinates)**

| Station Number | Easting | Northing | Indicators Only[1] | Full Analysis[2] | Paint Chips[3] |
|---|---|---|---|---|---|

| Station Number | Easting | Northing | Indicators Only[1] | Full Analysis[2] | Paint Chips[3] |
|---|---|---|---|---|---|
| GVD-S01 | 1730965 | 187785 | X | | |
| GVD-S02 | 1730000 | 186990 | X | | |
| GVD-S03 | 1730610 | 187365 | | X | X |
| GVD-S04[4] | 1731055 | 187650 | | X | X |
| GVD-S05[5] | 1731130 | 187710 | | X | X |
| GVD-S06[6] | 1730985 | 187290 | X | | |
| STD-GVD-S01[7] | 1731290 | 187380 | | X | X |

[1] Indicators Only Analysis
Grain Size
Trace Metals
Tributyltin (TBT)

[2] Full Analysis
Grain Size
Trace Metals
Tributyltin (TBT)
Total Petroleum Hydrocarbons (TPH)
Polychlorinated Biphenyls/Terphenyls (PCBs/PCTs)
Polynuclear Aromatic Hydrocarbons (PAHs)

[3] Paint Chip Analysis
For each analysis, paint chips shall be extracted from a total of approximately 9 liters of sediment; 3 liters from each of the three sampling sites.

In the laboratory, the sediment shall be sieved using a screen size just large enough to allow the sediment to pass but not the paint chips. Do not exceed a maximum screen size of 16 openings per inch (openings are approximately 1/16th of an inch). The remaining debris shall then be sorted by hand to remove paint chips. After removal, the paint chips shall be photographed, quantified, and analyzed for metals and TBT.

If paint chips are present, three separate analyses shall be conducted annually. Each analysis will be conducted on paint chips extracted from three stations or replicates; the first analysis will use paint chips extracted from the three discharger stations indicated and the second analysis shall use paint chips from the three reference stations. The third analysis shall be conducted on three replicates taken from storm drain station STD-GVD-01.

i. Sampling station GVD-S04 is outside the Graving Dock at the main pump outfall.

ii. Station GVD-S05 samples shall be taken from the sediment inside the Graving Dock at the bottom of the main sump. Three replicates of sump sediment shall be collected and composited in the laboratory.

iii. Station GVD-S06 is located approximately mid-channel between Piers 5 and 6, approximately ¼ of the distance from the quay wall to the end of piers, and between the south edge of the caisson and storm drain station STD-GVD-01.

iv. Station STD-GVD-01 fronts the city storm drain.

b. The Discharger shall collect surficial samples from the three reference stations in accordance with Table E-16. Reference Station Sampling Site Coordinates.

**Table E-16. Reference Station Sampling Site Coordinates (Lambert/California Coordinates).**

| Station Number | Easting | Northing | Indicators Only[1] | Full Analysis[2] | Paint Chips[3] |
|---|---|---|---|---|---|
| REF-01 | 1697300 | 196600 | | X | X |
| REF-02 | 1706085 | 204810 | | X | X |
| REF-03 | 1715225 | 201110 | | X | X |

[1] Indicators Only Analysis (see *Table E-9* above)
[2] Full Analysis (see *Table E-9* above)
[3] Paint Chip Analysis (see *Table E-9* above)

## 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-~~9~~17. Monitoring Periods and Reporting Schedule**

| Sampling Frequency | Monitoring Period Begins On… | Monitoring Period | SMR Due Date |
|---|---|---|---|
| Continuous | Permit Effective Date | All | Submit with monthly SMR |

| | | | |
|---|---|---|---|
| **Daily** | **Permit Effective Date** | **(Midnight through 11:59 PM) or any 24-hour period that reasonably represents a calendar day for purposes of sampling.** | **Submit with monthly SMR** |
| **Weekly** | **Sunday following permit effective date or on permit effective date if on a Sunday** | **Sunday through Saturday** | **Submit with monthly SMR** |
| 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 |
| 1/Quarter | Closest of January 1, April 1, July 1, or October 1 following (or on) permit effective date | January 1 through March 31<br>April 1 through June 30<br>July 1 through September 30<br>October 1 through December 31 | May 1<br>August 1<br>November 1<br>February 1 |
| 2/Year | Closest of January 1 or July 1 following (or on) permit effective date | January 1 through June 30<br>July 1 through December 31 | August 1<br>February 1 |
| 1/Year | ~~January 1 following p~~Permit effective date | July 1 through June 30~~January 1 through December 31~~ | September 1~~March 1~~ |
| 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<br>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).

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.

**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<br>Division of Water Quality<br>c/o DMR Processing Center<br>PO Box 100<br>Sacramento, CA 95812-1000 | State Water Resources Control Board<br>Division of Water Quality<br>c/o DMR Processing Center<br>1001 I Street, 15th Floor<br>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-~~10~~18. Reporting Requirements for Special Provisions Progress Reports**

| Special Provision | Reporting Requirements |
|---|---|
| ~~Compliance Schedules~~Progress Reports for meeting Final Effluent Limitations for Steam Condensate Discharges of Copper, Lead, Mercury, Zinc, and TCDD-Equivalents (section VI.C.7.a. of this Order) | September 12, 2009, and by the end of every other subsequent month~~January 30 and July 30~~, until final compliance |
| ~~Compliance Schedules for Final Effluent Limitations for Weight Test Water Discharges of Copper and TCDD-Equivalents (section VI.C.7.b)~~ | ~~January 30 and July 30, final compliance~~ |
| Progress Reports for meeting the final effluent limitations for cadmium, copper, nickel, silver, and zinc at the USN Graving Dock. (section VI.C.7.b. of this Order) | September 12, 2009, and by the end of every other subsequent month, until final compliance |
| Attachment G, Provision IX – Annual BMP Site Evaluation | February 28 |

2. **Toxicity Reduction Evaluation.** The Discharger shall report the results of any acute toxicity testing, TRE/TIE, or Pollution Prevention Plan required by Special Provisions – VI.C.2.a ~~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.

# ATTACHMENT F – FACT SHEET

## Table of Contents

## List of Tables

## 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.

## 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 San Diego |
| **Facility Address** | 3455 Senn Road, Building 72~~937 N. Harbor Drive, Box 81~~ |
| | San Diego, CA 91236-508~~492132-0058~~ |
| | San Diego County |
| **Facility Contact, Title and Phone** | Mark Edson, Installation Environmental Program Manager, (619) 556-1532<br>~~Robert Chichester, Water Program Manager, (619) 532-2261~~ |
| **Authorized Person to Sign and Submit Reports** | Installation Environmental Program Manager or Water Program Manager~~D.R. Smith, Captain, U.S. Navy, Commanding Officer~~ |
| **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** | San Diego Bay |
| **Receiving Water Type** | Enclosed Bay |

**A.** The United States Department of the Navy (hereinafter Discharger) is the owner and operator of Naval Base San Diego (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 San Diego Bay, a water of the United States. The Facility is currently regulated by Order No. R9-2002-0169 and R9-2003-0365.~~, which~~The former was adopted on November 13, 2002 and expired on November 13, 2007, and the latter was adopted on August 13, 2003 and expired on August 13, 2008. The terms and conditions of these current Orders 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.

In 1976, the Port of San Diego was issued a permit for the United States Navy (USN) Graving Dock and reissued in 1981. During this time the Facility did not have an NPDES permit.

In 1986, the USN Graving dock permit was amended to transfer responsibility of the permit from the Port of San Diego to the Discharger.

In 1987, the permit for the USN Graving Dock was reissued to the Discharger.

In 1992, the discharger enrolled in the State Board's General Permit to Discharge Strom Water Associated with Industrial Activity Order No. 91-13-DWQ for the Facility. The enrollment in the General Permit did not include the USN Graving Dock because the discharger had an individual NPDES permit for the USN Graving Dock.

In 1997, the State Board reissued the General Permit Order No. 97-03-DWQ, and the discharger continued enrollment in the General Permit.

In 1998, the individual permit for the USN Graving Dock was reissued.

In 2002, for the first time, the discharger was issued an individual permit for the Facility; this individual permit did not include the USN Graving Dock.

In 2003, the individual permit for the USN Graving Dock was reissued.

The individual permit for the Facility expired in 2007 and the individual permit for the USN Graving Dock expired in 2008. Both have been automatically continued and remain in effect.

While, historically the Discharger was initially issued a permit for the Graving Dock, and then a separate permit for the Facility, it is appropriate for the Graving Dock to be combined into the Facility's permit because the Graving Dock is located in the same geographical location.

The Regional Water Quality Control Board (hereinafter Regional Water Board) is currently undergoing proceedings for the issuance of a Cleanup and Abatement Order for discharges of metals and other pollutant wastes to San Diego Bay marine sediment

and waters located within and adjacent to US Navy San Diego Ship Repair (formerly called Southwest Marine Inc.) and National Steel and Shipbuilding Company (NASSCO) leaseholds. The Discharger (along with NASSCO; BAE; City of San Diego; Marine Construction and Design Company and Campbell Industries, Inc.; Chevron; BP Atlantic Richfield Company; and San Diego Gas and Electric) is currently being considered for coverage under the tentative Cleanup and Abatement Order No. R9-2005-0126 to address elevated levels of metals and organics in the sediment for unrelated discharges from the US Navy floating Dry Dock (located within the NASSCO lease hold) from 1950's through 1970's, and the US Navy municipal separate storm water conveyance system for Naval Station San Diego.

**C.** The Discharger filed a report of waste discharge and submitted an application for renewal of its WDRs and NPDES permit June 18, 2007. A site visit was conducted on December 11, 2007 to observe operations and collect additional data to develop permit limitations and conditions.

The Discharger also filed a report of waste discharge and submitted an application for renewal of its WDRs and NPDES permit for the USN Graving Dock on July 2, 2008. A site visit was conducted on February 17, 2003 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 Coronado (NBC), and Naval Base Point Loma (NBPL). The Facility is comprised of the following installations: Naval Base San Diego – main base (NBSD; formerly known as Naval Station San Diego or NAVSTA), Broadway Complex, Mission Gorge Recreational Facility (MGRF; also known as Admiral Baker Field), and the Naval Medical Center, San Diego (NMCSD).

Of the four installations aligned under the Facility, only NBSD ~~and the Broadway Complex have~~ has discharges subject to NPDES permitting.

**NBSD.** NBSD is the largest industrial installation within the three major naval base complexes operated by the Discharger. It has more ships, personnel, and support operations than the other bases. The station includes over 45 tenant activities, including the following major commands: Fleet Training Center (FTC), Naval Facilities Engineering Command Southwest (NAVFAC SW), Southwest Regional Maintenance Center (SWRMC), and Naval Supply Center (NSC). Personnel support activities at NBSD include Regional Commissary Store, Naval Dental and Medical Clinics, Naval Legal Service Office Trial Judiciary, Environmental Preventative Medicine Unit Five, Personnel Support Detachment, and Navy Resale and Service Support Office.

The mission of NBSD is to provide logistical support for the operating forces of the U.S. Navy and for dependent activities and other commands as assigned. NBSD forms the major West Coast logistics base for the surface operating forces of the U.S. Navy and for dependent activities and other commands. NBSD is homeport to approximately 55 Pacific

Fleet ships and provides in-port berthing services for 56 surface force ships and 51 service craft assigned to the NBSD.

NBSD occupies 1,049 acres of land and water at a site lying east and west of Harbor Drive. The wet side consists of the Bay front area west of Harbor Drive, while the dry side consists of the community facilities east of Harbor Drive.

The wet side is intensively developed and supports waterfront operations, ship berthing and maintenance, station maintenance, training, administration, and logistics functions. Operational facilities include piers, quay walls, small craft berthing facilities, fueling facilities, armories, and waterfront operations buildings. The straight-line map measurement of the shoreline at NBSD is 1.6 miles. NBSB contains 12 berthing piers, a mole pier, two channels, and various quay walls that have a total shoreline measurement of approximately 5 miles.

The 12 piers at NBSD are used to berth surface ships, support vessels, and barges. Supplies and equipment are loaded onto the vessels at these piers, and berth-side ship maintenance is also performed (i.e., maintenance while vessels are docked at the pier). Berth-side ship maintenance may 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. Berth-side ship repair activities are generally less complex than those 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. The most complex ship repair work at the Facility is performed at Pier 13. Typically, civilian contractors will store materials and supplies on the piers while working aboard the ships. NBSD also has several shore-side industrial maintenance repair shops onsite. Personnel at these shops repair various vessel parts, such as antenna or ship mechanics.

Two land parcels within the NBSD perimeter are not under the direct control of the CNRSW or Executive Officers at the NBSD. A 25.8-acre compound is owned by the Naval Supply Center, and 40 acres of railroad right-of-way is owned by the Burlington Northern and Santa Fe Railway (BNSF) and the Metropolitan Transit Development Board (MTDB). Finally, 54.51 acres of NBSD real estate are occupied under easement or permit and contain Interstate 5, Harbor Drive, and various public utilities.

Industrial activities at NBSD are classified as fuel storage and dispensing, hazardous substance storage, material handling/loading docks, materials storage, metal fabrication, painting, recycling collection center, repair and maintenance (general), sandblasting, scrap yard, ship support services, and fleet vehicle repair and maintenance.

Point source discharges at NBSD are classified as steam condensate; pier boom, mooring, and fender cleaning; utility vault and manhole dewatering; weight test water; and miscellaneous discharges associated with facility maintenance. The discharge of weight test water was not regulated by Order No. R9-2002-0169 and is a new discharge regulated by this Order. Order No. R9-2002-0169 regulated the salt water system as a point source discharge. This Order, however, no longer regulates this salt water system point source discharge. The Discharger has installed a separate salt water system pumping station at the Graving Dock, which enabled it to deactivate the pumps that produced discharges at Pier 13 and the Mole Pier. ~~Discharges from the salt water system at the Graving Dock Facility are regulated under Order No. 98-53, NPDES Permit No. CA0107867.~~

The dry docks are used to conduct repair and maintenance activity which cannot normally be conducted while the vessel is waterborne. These activities generally include exterior: hull repair; wielding; grinding; abrasive blasting; hydroblasting; painting; the repair or replacement of shafts, propellers, and rudders; and the repair or replacement of valves and fittings below the waterline. Utility services provided to a docked vessel may include electrical, steam, fresh (potable) water, salt water (from the Bay), and sewage disposal. Ship launching and recovery is accomplished by means of integral ballast tanks, which take in and discharge seawater used to raise and lower the dry docks. Wastes generated during ship repair include spent abrasives, paint, rust, petroleum products, marine growth and general refuse and debris.

~~**Broadway Complex.** The commands located at the Broadway Complex include the offices of Commander, Navy Region Southwest, Personnel Support Activity, Navy Computer and Telecommunications Station, Reserve Readiness Command, and Fleet and Industrial Supply Center. Historically, this facility served as a supply depot, but it has operated only minimally in that capacity since the middle 1990s. The site on which the Broadway Complex is located is slated for redevelopment. It is anticipated the Broadway Complex will be demolished and redeveloped within the proposed permit period. The Discharger will be required to obtain coverage under the General Construction Storm Water Permit for this work.~~

~~Industrial activities at the Broadway Complex are classified as materials handling/loading docks, materials storage, and hazardous substance storage.~~

Point source discharges at the Broadway Complex are classified as miscellaneous discharges (landscape runoff and fire system maintenance).

### A. Description of Wastewater

Discharges at the Facility consist of the following:

### 1. Industrial Storm Water Discharges

A total of 40 outfalls drain storm water runoff from industrial areas at NBSD into the San Diego Bay. A storm water treatment system using filter-absorption technology is installed at the Navy Regional Recycling Center. All storm water runoff at the Navy Regional Recycling Center drains through the treatment unit before discharge to Discharge Point No. NBSD-024. 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 total of two outfalls drain storm water runoff from industrial areas at the Broadway Complex into the San Diego Bay.~~

A map of the industrial storm water discharge locations at NBSD ~~and the Broadway Complex~~ is shown in Attachment B (Figure B-2).

Storm water discharges from the Broadway Complex, MGRF and NMCSD are considered non-industrial and are not subject to regulation by this Order.

### 2. Steam Condensate

The Discharger uses a pressurized steam system for its shore and afloat operations. The steam is produced at an on-site cogeneration plant operated by Sithe Energy, a contractor. Chemicals are injected into the boiler feed water (Trident 3506 and 2301) and directly into the boilers. (Trident 1003 and 1103). The chemicals that may be present in the steam condensate as a result of the additives include cyclohexylamine (20%), diethylaminoethanol, diethylhydroxylamine, hydroquinone, and morpholine.

The produced steam is distributed to buildings and surface ships through a system made up of high and low pressure steam lines, pressure reducing valve stations, and expansion joints. The system traps steam condensate to ensure that the steam supplied meets user quality assurance specifications. When water collects in the steam lines, it is essential for the system to remove the water as soon as possible.

Order No. R9-2002-0169 regulated steam condensate from 190 discharge points with an approximate discharge volume of 2,150 gallons per day (GPD). During the term of Order No. R9-2002-0169, the Discharger demolited Piers 10 and 11, which were replaced with Pier 10. Additionally, the Discharger is in the process of demolishing Pier 12 in order to construct a replacement pier. These activities have resulted in the elimination of outfalls P10ST1 through P10ST11 and P11ST1 through P11ST5 (as identified in Order No. R9-2002-0169) and the addition of Discharge Point Nos. SC-150 through SC-153. This Order regulates 175 steam condensate discharge points, as identified in the Discharger's application. All but two of these points are located along the piers or quay walls. The pier discharge points, in

addition to releasing steam, drip small amounts of water to the Bay between steam discharges. The estimated discharge rate for the steam lines is 1 ounce per minute. The estimated total discharge volume per day is 2,000 GPD.

The steam condensate discharges are typically from the traps. The discharges consist of steam clouds, with temperatures in excess of 100°C. A portion of the steam evaporates prior to condensing and discharging to the San Diego Bay or ground surface, depending on the location of the steam trap, through Discharge Point Nos. SC-001 through SC-175.

Pollutants that may be found in the discharge include contaminants in the potable water supplied to the steam boilers, chemical additives injected into the boiler feedwater, and any contaminants that the steam condensate comes into contact with as it circulates steam distribution. A map of the steam condensate discharge locations at NBSD is shown in Attachment B (Figure B-3). A line drawing for the steam condensate discharges is shown in Attachment C (Figure C-1).

### 3. Pier Boom, Fender, and Mooring Cleaning

Security booms, oil containment booms, moorings, and fender systems are placed around vessels and piers at NBSD. The security and oil containment boom placed around the vessels and piers, and the pier mooring and fender systems have marine growth and bird guano on them. The marine growth can cause the booms, moorings, and fender systems to sink, and the accumulated bird guano presents a potential human health hazard. The marine growth and bird guano is washed off with high-pressure potable water or seawater. The booms, moorings, and fender systems are usually removed from the water during the cleaning process.

Typically, the booms, moorings, and fenders are cleaned twice per year on a quarterly rotational basis. The high-pressure washer discharges 5 GPM and operates 6 hours per day for 2 to 3 weeks per quarter for a total annual discharge of approximately 108,000 gallons.

After a response to an oil spill, the oily booms are removed from the San Diego Bay by barge and transported to a designated cleaning area on Plaleta Creek, north of Pier 8, at NBSD for cleaning. The cleaning water from the designated cleaning area discharges to the bilge and oily water treatment system (BOWTS) and then to the sanitary sewer system.

Boom, mooring, and fender cleaning discharges at NBSD can occur at any pier where oil booms are installed. However, boom cleaning typically occurs along the quay wall in front of the Waterfront Operations facility.

Pollutants that may be found in the discharge include contaminants in the potable water or San Diego Bay water used in the pressure wash, any contaminants 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, fender, and mooring cleaning discharge locations at NBSD is shown in

Attachment B (Figure B-4). A line drawing for the pier boom, fender, and mooring cleaning discharges is shown in Attachment C (Figure C-2).

**4. Utility Vault and Manhole Dewatering**

NBSD has electrical and steam utility vaults and manholes, and discharges may occur from these point sources to surface waters. 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, as necessary, for day-to-day living and operations. This includes, but is not limited to, supplies of natural gas, electricity, and telephone service. Electrical and steam utilities are owned and maintained by the NAVFAC SW. Discharges from the utility vaults and manholes are short-term and intermittent.

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 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.

NBSD requires electrical power for both its shore and afloat operations. 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 grade cables. NBSD has 15 electrical vaults, each of which has the potential to discharge wastewater. Three of the 15 vaults are located under Pier 2 and are subject to Bay water intrusion and storm water. Automatic sump pumps are installed in each vault and discharge the accumulated water directly to San Diego Bay.

The remaining 12 vaults are located on land, inside buildings, and are associated with electrical switching or substations. Similar to the pier vaults, the vaults on land can accumulate ground water and storm water, and they are dewatered using automatic sump pumps. The sump pumps discharge the water onto the ground surface around the vault buildings. These discharges have the potential to reach a storm drain inlet and discharge to San Diego Bay, depending on the volume of the discharge.

In addition to the vaults, electrical and steam utility manholes are located at all Facility installations, except at MGRF. These manholes can accumulate groundwater and storm water. They can also accumulate steam condensate water. High-pressure steam lines are located in underground conduit systems and are accessed through utility manholes. Water in the manholes must be removed when maintenance or emergency work on the utility services to NBSD is required.

All manholes at NBSD are manually dewatered 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 contaminants in the San Diego Bay water that accumulates in pier vaults, contaminants in groundwater 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. A map of the utility vault and manhole dewatering discharge locations at NBSD is shown in Attachment B (Figure B-5). A line drawing for the utility vault and manhole dewatering discharges is shown in Attachment C (Figure C-3).

Prior to the adoption of Order No. R9-2002-0169, 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. R9-2002-0169, 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. R9-2002-0169. The State Water Board has since re-issued the General Order again, the most recent version being Order No. 2006-0008-DWQ.

### 5. Weight Test Water

Ships moored at the piers at NBSD are typically at decreased weight from their actual working weight due to the removal of ballast, equipment, and supplies. When assessing a ship's equipment or structures at the pier, it is often necessary to adjust the ship's weight to its full working weight. This is accomplished by placing large, reusable bladders filled with seawater onboard the ship. The bladders are filled with seawater pumped from San Diego Bay through the ship's seawater distribution system. Presently, the Discharger drains the bladders to the nearest sanitary sewer system when work is completed and the weight adjustment on the ship is no longer needed. Due to the time-consuming and cumbersome nature of this activity, the Discharger requests the ability to discharge the bladders directly into the San Diego Bay.

The weight test bladders are constructed of heavy mil visquene. A typical weight test using weight test bladders is about 20,000 pounds or approximately 2,648 gallons. Approximately four of these types of weight tests would be done per year for an estimated yearly discharge of 11,000 gallons of weight test water.

The largest bladder the Discharger uses at this site holds up to 9,166 gallons of water. The seawater remains in the bags for a couple of hours up to a maximum of 6 hours. A fully opened valve on a bladder would have a discharge flow rate of

approximately 305 GPM. Weight test water discharges at NBSD can occur at any pier where ships are moored.

Pollutants that may be found in the discharge include contaminants in the fresh seawater, pollutants that could be picked up as the water passes through the ship's seawater supply system, and pollutants picked up in the weight test bladder prior to discharge. A map of the weight test water discharge locations at NBSD is shown in Attachment B (Figure B-6). A line drawing for the weight test water discharges is shown in Attachment C (Figure C-4).

**6. 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.

**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.

**7. 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.

**8. Dock Deflooding Water.**

The discharge of dry dock deflooding water through Discharge Point Nos. 001 and 002 occurs during vessel docking and undocking. Bay water captured in the dry dock is pumped back into the Bay. Approximately 20.2 million gallons of graving dock deflooding water and salt water rinse is discharged per event.

**9. Caisson Ballast Dewatering.**

To dock and undock a vessel, the caisson is raised approximately 4 feet by pumping a portion of the caisson ballast water to the San Diego Bay through Discharge Point No. 003. Approximately 0.050 million gallons of caisson ballast water is discharged per event.

**10. Emergency Fire Suppression Water.**

Water from the San Diego Bay is supplied to an emergency fire suppression (EFS) system and saltwater supply system (SSS) at the dry dock. Relief water is discharged through Discharge Point No. 004.

**11. Graving Dock Storm Water.**

Storm water is discharged from approximately 5.2 acres of low risk non-permeable surface area utilized by the Discharger for parking and the staging of contractor's

ship repair supplies. Storm water is discharged through Discharge Point Nos. 10 and 11. The discharge of commingled storm water and industrial waste water is not authorized under this Order.

## B. Discharge Points and Receiving Waters

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

2. NBSD is located on the eastern edge of the San Diego Bay, bordered by the cities of San Diego to the north and east and National City to the south and east. NBSD is about three miles southeast of downtown San Diego and 10 miles north of the Mexican border. NBSD is a large facility located within three hydrologic subareas: the *Chollas Hydrologic Subarea* (908.22) *of the San Diego Mesa Hydrologic Area* (908.20), the *El Toyan Hydrologic Subarea* (908.31) and the *Paradise Hydrologic Subarea* (908.32) of the *National City Hydrologic Area* (908.30). The three hydrologic subareas are in the *Pueblo San Diego Hydrologic Unit* (908.00).

~~3.The Broadway Complex is located in downtown San Diego at 937 North Harbor Drive on the corner of North Harbor Drive and Broadway. The Broadway Complex is within the *Lindbergh Hydrologic Subarea* (908.21) of the *San Diego Mesa Hydrologic Area* (908.20) of the *Pueblo San Diego Hydrologic Unit* (908.00).~~

~~4.~~3. Wastewater is discharged into the San Diego Bay as summarized below:

**Table F-2. Discharge Locations**

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P1ST1 | SC-001 | Steam Condensate | 32° 41' 9" N | 117° 7' 57" W | San Diego Bay |
| P1ST2 | SC-002 | Steam Condensate | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| P1ST3 | SC-003 | Steam Condensate | 32° 41' 7" N | 117° 8', 1" W | San Diego Bay |
| P1ST4 | SC-004 | Steam Condensate | 32° 41' 7" N | 117° 8' 2" W | San Diego Bay |
| P1ST5 | SC-005 | Steam Condensate | 32° 41' 5" N | 117° 8' 3" W | San Diego Bay |
| P1ST6 | SC-006 | Steam Condensate | 32° 41' 5" N | 117° 8' 5" W | San Diego Bay |
| P1ST7 | SC-007 | Steam Condensate | 32° 41' 4" N | 117° 8' 5" W | San Diego Bay |
| P1ST8 | SC-008 | Steam Condensate | 32° 41' 3" N | 117° 8' 6" W | San Diego Bay |
| P1ST9 | SC-009 | Steam Condensate | 32° 41' 4" N | 117° 8' 5" W | San Diego Bay |
| P1ST10 | SC-010 | Steam Condensate | 32° 41' 5" N | 117° 8' 4" W | San Diego Bay |
| P1ST11 | SC-011 | Steam Condensate | 32° 41' 5" N | 117° 8' 3" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P1ST12 | SC-012 | Steam Condensate | 32° 41' 6" N | 117° 8' 1" W | San Diego Bay |
| P1ST13 | SC-013 | Steam Condensate | 32° 41' 7" N | 117° 8' 0" W | San Diego Bay |
| P1ST14 | SC-014 | Steam Condensate | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| P1ST15 | SC-015 | Steam Condensate | 32° 41' 9" N | 117° 7' 57" W | San Diego Bay |
| QW1 2ST1 | SC-016 | Steam Condensate | 32° 41' 7" N | 117° 7' 55" W | San Diego Bay |
| QW1 2ST2 | SC-017 | Steam Condensate | 32° 41' 4" N | 117° 7' 51" W | San Diego Bay |
| QW1 2ST3 | SC-018 | Steam Condensate | 32° 41' 2" N | 117° 7' 50" W | San Diego Bay |
| P2ST1 | SC-019 | Steam Condensate | 32° 41' 1" N | 117° 7' 51" W | San Diego Bay |
| P2ST2 | SC-020 | Steam Condensate | 32° 41' 1" N | 117° 7' 51" W | San Diego Bay |
| P2ST3 | SC-021 | Steam Condensate | 32° 41' 0" N | 117° 7' 53" W | San Diego Bay |
| P2ST4 | SC-022 | Steam Condensate | 32° 40' 58" N | 117° 7' 56" W | San Diego Bay |
| P2ST5 | SC-023 | Steam Condensate | 32° 40' 58" N | 117° 7' 56" W | San Diego Bay |
| P2ST6 | SC-024 | Steam Condensate | 32° 40' 56" N | 117° 7' 59" W | San Diego Bay |
| P2ST7 | SC-025 | Steam Condensate | 32° 40' 56" N | 117° 7' 59" W | San Diego Bay |
| P2ST8 | SC-026 | Steam Condensate | 32° 40' 57" N | 117° 7' 57" W | San Diego Bay |
| P2ST9 | SC-027 | Steam Condensate | 32° 40' 57" N | 117° 7' 57" W | San Diego Bay |
| P2ST10 | SC-028 | Steam Condensate | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| P2ST11 | SC-029 | Steam Condensate | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| P2ST12 | SC-030 | Steam Condensate | 32° 41' 0" N | 117° 7' 51" W | San Diego Bay |
| P2ST13 | SC-031 | Steam Condensate | 32° 41' 2" N | 117° 7' 48" W | San Diego Bay |
| P2ST14 | SC-032 | Steam Condensate | 32° 41' 2" N | 117° 7' 48" W | San Diego Bay |
| P2ST15 | SC-033 | Steam Condensate | 32° 41' 3" N | 117° 7' 47" W | San Diego Bay |
| QW2 3ST1 | SC-034 | Steam Condensate | 32° 41' 1" N | 117° 7' 41" W | San Diego Bay |
| P3ST1 | SC-035 | Steam Condensate | 32° 40' 58" N | 117° 7' 42" W | San Diego Bay |
| P3ST2 | SC-036 | Steam Condensate | 32° 40' 56" N | 117° 7' 44" W | San Diego Bay |
| P3ST3 | SC-037 | Steam Condensate | 32° 40' 56" N | 117° 7' 45" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P3ST4 | SC-038 | Steam Condensate | 32° 40' 55" N | 117° 7' 47" W | San Diego Bay |
| P3ST5 | SC-039 | Steam Condensate | 32° 40' 53" N | 117° 7' 49" W | San Diego Bay |
| P3ST6 | SC-040 | Steam Condensate | 32° 40' 52" N | 117° 7' 51" W | San Diego Bay |
| P3ST7 | SC-041 | Steam Condensate | 32° 40' 51" N | 117° 7' 53" W | San Diego Bay |
| P3ST8 | SC-042 | Steam Condensate | 32° 40' 52" N | 117° 7' 51" W | San Diego Bay |
| P3ST9 | SC-043 | Steam Condensate | 32° 40' 53" N | 117° 7' 49" W | San Diego Bay |
| P3ST10 | SC-044 | Steam Condensate | 32° 40' 54" N | 117° 7' 46" W | San Diego Bay |
| P3ST11 | SC-045 | Steam Condensate | 32° 40' 56" N | 117° 7' 44" W | San Diego Bay |
| P3ST12 | SC-046 | Steam Condensate | 32° 40' 57" N | 117° 7' 42" W | San Diego Bay |
| P3ST13 | SC-047 | Steam Condensate | 32° 40' 58" N | 117° 7' 40" W | San Diego Bay |
| QW3 4ST1 | SC-048 | Steam Condensate | 32° 40' 57" N | 117° 7' 38" W | San Diego Bay |
| QW3 4ST2 | SC-049 | Steam Condensate | 32° 40' 55" N | 117° 7' 36" W | San Diego Bay |
| P4ST1 | SC-050 | Steam Condensate | 32° 40' 53" N | 117° 7' 35" W | San Diego Bay |
| P4ST2 | SC-051 | Steam Condensate | 32° 40' 52" N | 117° 7' 36" W | San Diego Bay |
| P4ST3 | SC-052 | Steam Condensate | 32° 40' 51" N | 117° 7' 38" W | San Diego Bay |
| P4ST4 | SC-053 | Steam Condensate | 32° 40' 50" N | 117° 7' 39" W | San Diego Bay |
| P4ST5 | SC-054 | Steam Condensate | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| P4ST6 | SC-055 | Steam Condensate | 32° 40' 49" N | 117° 7' 41" W | San Diego Bay |
| P4ST7 | SC-056 | Steam Condensate | 32° 40' 48" N | 117° 7' 42" W | San Diego Bay |
| P4ST8 | SC-057 | Steam Condensate | 32° 40' 48" N | 117° 7' 43" W | San Diego Bay |
| P4ST9 | SC-058 | Steam Condensate | 32° 40' 47" N | 117° 7' 44" W | San Diego Bay |
| P4ST10 | SC-059 | Steam Condensate | 32° 40' 46" N | 117° 7' 45" W | San Diego Bay |
| P4ST11 | SC-060 | Steam Condensate | 32° 40' 46" N | 117° 7'46" W | San Diego Bay |
| P4ST12 | SC-061 | Steam Condensate | 32° 40' 45" N | 117° 7' 46" W | San Diego Bay |
| P4ST13 | SC-062 | Steam Condensate | 32° 40' 46" N | 117° 7' 45" W | San Diego Bay |
| P4ST14 | SC-063 | Steam Condensate | 32° 40' 47" N | 117° 7' 44" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P4ST15 | SC-064 | Steam Condensate | 32° 40' 48" N | 117° 7' 41" W | San Diego Bay |
| P4ST16 | SC-065 | Steam Condensate | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| P4ST17 | SC-066 | Steam Condensate | 32° 40' 50" N | 117° 7' 39" W | San Diego Bay |
| P4ST18 | SC-067 | Steam Condensate | 32° 40' 50" N | 117° 7' 38" W | San Diego Bay |
| P4ST19 | SC-068 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| P4ST20 | SC-069 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| P4ST21 | SC-070 | Steam Condensate | 32° 40' 52" N | 117° 7' 35" W | San Diego Bay |
| QW4 5ST1 | SC-071 | Steam Condensate | 32° 40' 51" N | 117° 7' 33" W | San Diego Bay |
| QW4 5ST2 | SC-072 | Steam Condensate | 32° 40' 51" N | 117° 7' 33" W | San Diego Bay |
| QW4 5ST3 | SC-073 | Steam Condensate | 32° 40' 49" N | 117° 7' 31" W | San Diego Bay |
| QW4 5ST4 | SC-074 | Steam Condensate | 32° 40' 47" N | 117° 7' 30" W | San Diego Bay |
| P5ST1 | SC-075 | Steam Condensate | 32° 40' 46" N | 117° 7' 31" W | San Diego Bay |
| P5ST2 | SC-076 | Steam Condensate | 32° 40' 45" N | 117° 7' 33" W | San Diego Bay |
| P5ST3 | SC-077 | Steam Condensate | 32° 40' 44" N | 117° 7' 34" W | San Diego Bay |
| P5ST4 | SC-078 | Steam Condensate | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| P5ST5 | SC-079 | Steam Condensate | 32° 40' 42" N | 117° 7' 37" W | San Diego Bay |
| P5ST6 | SC-080 | Steam Condensate | 32° 40' 41" N | 117° 7' 36" W | San Diego Bay |
| P5ST7 | SC-081 | Steam Condensate | 32° 40' 40" N | 117° 7' 40" W | San Diego Bay |
| P5ST8 | SC-082 | Steam Condensate | 32° 40' 40" N | 117° 7' 40" W | San Diego Bay |
| P5ST9 | SC-083 | Steam Condensate | 32° 40' 41" N | 117° 7' 38" W | San Diego Bay |
| P5ST10 | SC-084 | Steam Condensate | 32° 40' 42" N | 117° 7' 36" W | San Diego Bay |
| P5ST11 | SC-085 | Steam Condensate | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| P5ST12 | SC-086 | Steam Condensate | 32° 40' 44" N | 117° 7' 34" W | San Diego Bay |
| P5ST13 | SC-087 | Steam Condensate | 32° 40' 44" N | 117° 7' 32" W | San Diego Bay |
| P5ST14 | SC-088 | Steam Condensate | 32° 40' 45" N | 117° 7' 31" W | San Diego Bay |
| QW5 6ST1 | SC-089 | Steam Condensate | 32° 40' 41" N | 117° 7' 24" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P6ST1 | SC-090 | Steam Condensate | 32° 40' 40" N | 117° 7' 26" W | San Diego Bay |
| P6ST2 | SC-091 | Steam Condensate | 32° 40' 38" N | 117° 7' 28" W | San Diego Bay |
| P6ST3 | SC-092 | Steam Condensate | 32° 40' 36" N | 117° 7' 32" W | San Diego Bay |
| P6ST4 | SC-093 | Steam Condensate | 32° 40' 35" N | 117° 7' 34" W | San Diego Bay |
| P6ST5 | SC-094 | Steam Condensate | 32° 40' 34" N | 117° 7' 36" W | San Diego Bay |
| P6ST6 | SC-095 | Steam Condensate | 32° 40' 35" N | 117° 7' 33" W | San Diego Bay |
| P6ST7 | SC-096 | Steam Condensate | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| P6ST8 | SC-097 | Steam Condensate | 32° 40' 38" N | 117° 7' 28" W | San Diego Bay |
| P6ST9 | SC-098 | Steam Condensate | 32° 40' 39" N | 117° 7' 26" W | San Diego Bay |
| P6ST10 | SC-099 | Steam Condensate | 32° 40' 40" N | 117° 7' 24" W | San Diego Bay |
| QW6 7ST1 | SC-100 | Steam Condensate | 32° 40' 36" N | 117° 7' 21" W | San Diego Bay |
| QW6 7ST2 | SC-101 | Steam Condensate | 32° 40' 35" N | 117° 7' 19" W | San Diego Bay |
| P7ST1 | SC-102 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| P7ST2 | SC-103 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| P7ST3 | SC-104 | Steam Condensate | 32° 40' 33" N | 117° 7' 22" W | San Diego Bay |
| P7ST4 | SC-105 | Steam Condensate | 32° 40' 32" N | 117° 7' 24" W | San Diego Bay |
| P7ST5 | SC-106 | Steam Condensate | 32° 40' 31" N | 117° 7' 25" W | San Diego Bay |
| P7ST6 | SC-107 | Steam Condensate | 32° 40' 30" N | 117° 7' 27" W | San Diego Bay |
| P7ST7 | SC-108 | Steam Condensate | 32° 40' 29" N | 117° 7' 28" W | San Diego Bay |
| P7ST8 | SC-109 | Steam Condensate | 32° 40' 28" N | 117° 7' 29" W | San Diego Bay |
| P7ST9 | SC-110 | Steam Condensate | 32° 40' 27" N | 117° 7' 31" W | San Diego Bay |
| P7ST10 | SC-111 | Steam Condensate | 32° 40' 27" N | 117° 7' 32" W | San Diego Bay |
| P7ST11 | SC-112 | Steam Condensate | 32° 40' 26" N | 117° 7' 33" W | San Diego Bay |
| P7ST12 | SC-113 | Steam Condensate | 32° 40' 25" N | 117° 7' 33" W | San Diego Bay |
| P7ST13 | SC-114 | Steam Condensate | 32° 40' 26" N | 117° 7' 32" W | San Diego Bay |
| P7ST15 | SC-115 | Steam Condensate | 32° 40' 28" N | 117° 7' 29" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P7ST16 | SC-116 | Steam Condensate | 32° 40' 29" N | 117° 7' 28" W | San Diego Bay |
| P7ST18 | SC-117 | Steam Condensate | 32° 40' 30" N | 117° 7' 25" W | San Diego Bay |
| P7ST19 | SC-118 | Steam Condensate | 32° 40' 31" N | 117° 7' 23" W | San Diego Bay |
| P7ST20 | SC-119 | Steam Condensate | 32° 40' 32" N | 117° 7' 22" W | San Diego Bay |
| P7ST21 | SC-120 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| P7ST22 | SC-121 | Steam Condensate | 32° 40' 34" N | 117° 7' 19" W | San Diego Bay |
| QW7 8ST1 | SC-122 | Steam Condensate | 32° 40' 30" N | 117° 7' 15" W | San Diego Bay |
| P8ST1 | SC-123 | Steam Condensate | 32° 40' 28" N | 117° 7' 14" W | San Diego Bay |
| P8ST2 | SC-124 | Steam Condensate | 32° 40' 28" N | 117° 7' 15" W | San Diego Bay |
| P8ST3 | SC-125 | Steam Condensate | 32° 40' 26" N | 117° 7' 17" W | San Diego Bay |
| P8ST4 | SC-126 | Steam Condensate | 32° 40' 25" N | 117° 7' 19" W | San Diego Bay |
| P8ST5 | SC-127 | Steam Condensate | 32° 40' 24" N | 117° 7' 21" W | San Diego Bay |
| P8ST6 | SC-128 | Steam Condensate | 32° 40' 23" N | 117° 7' 22" W | San Diego Bay |
| P8ST7 | SC-129 | Steam Condensate | 32° 40' 22" N | 117° 7' 25" W | San Diego Bay |
| P8ST8 | SC-130 | Steam Condensate | 32° 40' 20" N | 117° 7' 27" W | San Diego Bay |
| P8ST9 | SC-131 | Steam Condensate | 32° 40' 20" N | 117° 7' 27" W | San Diego Bay |
| P8ST10 | SC-132 | Steam Condensate | 32° 40' 21" N | 117° 7' 25" W | San Diego Bay |
| P8ST11 | SC-133 | Steam Condensate | 32° 40' 23" N | 117° 7' 22" W | San Diego Bay |
| P8ST12 | SC-134 | Steam Condensate | 32° 40' 24" N | 117° 7' 21" W | San Diego Bay |
| P8ST13 | SC-135 | Steam Condensate | 32° 40' 25" N | 117° 7' 19" W | San Diego Bay |
| P8ST14 | SC-136 | Steam Condensate | 32° 40' 26" N | 117° 7' 17" W | San Diego Bay |
| QW8 9ST1 | SC-137 | Steam Condensate | 32° 40' 27" N | 117° 7' 14" W | San Diego Bay |
| QW8 9ST2 | SC-138 | Steam Condensate | 32° 40' 26" N | 117° 7' 13" W | San Diego Bay |
| QW8 9ST3 | SC-139 | Steam Condensate | 32° 40' 24" N | 117° 7' 11" W | San Diego Bay |
| P9ST1 | SC-140 | Steam Condensate | 32° 40' 11" N | 117° 7' 19" W | San Diego Bay |
| P9ST2 | SC-141 | Steam Condensate | 32° 40' 11" N | 117° 7' 22" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P9ST3 | SC-142 | Steam Condensate | 32° 40' 9" N | 117° 7' 23" W | San Diego Bay |
| QW9 10ST1 | SC-143 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| P10ST1 | SC-144 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| P10ST11 | SC-145 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| QW10 11ST1 | SC-146 | Steam Condensate | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| QW10 11ST2 | SC-147 | Steam Condensate | 32° 40' 2" N | 117° 7' 10" W | San Diego Bay |
| QW10 11ST3 | SC-148 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| P11ST5 | SC-149 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| Q11 12ST2 | SC-150 | Steam Condensate | 32° 39' 58" N | 117° 7' 9" W | San Diego Bay |
| P12ST1 | SC-151 | Steam Condensate | 32° 39' 52" N | 117° 7' 11" W | San Diego Bay |
| P12ST2 | SC-152 | Steam Condensate | 32° 39' 50" N | 117° 7' 23" W | San Diego Bay |
| P12ST3 | SC-153 | Steam Condensate | 32° 39' 52" N | 117° 7' 11" W | San Diego Bay |
| QW12 13ST1 | SC-154 | Steam Condensate | 32° 39' 48" N | 117° 7' 8" W | San Diego Bay |
| QW12 13ST2 | SC-155 | Steam Condensate | 32° 39' 46" N | 117° 7' 7" W | San Diego Bay |
| P13ST1 | SC-156 | Steam Condensate | 32° 39' 45" N | 117° 7' 9" W | San Diego Bay |
| P13ST2 | SC-157 | Steam Condensate | 32° 39' 45" N | 117° 7' 10" W | San Diego Bay |
| P13ST3 | SC-158 | Steam Condensate | 32° 39' 45" N | 117° 7' 13" W | San Diego Bay |
| P13ST4 | SC-159 | Steam Condensate | 32° 39' 45" N | 117° 7' 15" W | San Diego Bay |
| P13ST5 | SC-160 | Steam Condensate | 32° 39' 45" N | 117° 7' 17" W | San Diego Bay |
| P13ST6 | SC-161 | Steam Condensate | 32° 39' 45" N | 117° 7' 19" W | San Diego Bay |
| P13ST7 | SC-162 | Steam Condensate | 32° 39' 44" N | 117° 7' 20" W | San Diego Bay |
| P13ST8 | SC-163 | Steam Condensate | 32° 39' 44" N | 117° 7' 22" W | San Diego Bay |
| P13ST9 | SC-164 | Steam Condensate | 32° 39' 43" N | 117° 7' 24" W | San Diego Bay |
| P13ST10 | SC-165 | Steam Condensate | 32° 39' 43" N | 117° 7' 22" W | San Diego Bay |
| P13ST11 | SC-167 | Steam Condensate | 32° 39' 43" N | 117° 7' 20" W | San Diego Bay |
| P13ST12 | SC-168 | Steam Condensate | 32° 39' 43" N | 117° 7' 19" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| P13ST13 | SC-169 | Steam Condensate | 32° 39' 44" N | 117° 7' 17" W | San Diego Bay |
| P13ST14 | SC-170 | Steam Condensate | 32° 39' 44" N | 117° 7' 15" W | San Diego Bay |
| P13ST15 | SC-171 | Steam Condensate | 32° 39' 44" N | 117° 7' 13" W | San Diego Bay |
| P13ST16 | SC-172 | Steam Condensate | 32° 39' 44" N | 117° 7' 10" W | San Diego Bay |
| P13ST17 | SC-173 | Steam Condensate | 32° 39' 44" N | 117° 7' 9" W | San Diego Bay |
| P13ST18 | SC-174 | Steam Condensate | 32° 39' 44" N | 117° 7' 7" W | San Diego Bay |
| IL01 | SC-175 | Steam Condensate | 32° 40 49" N | 117° 7' 31" W | San Diego Bay |
| Boom Cleaning | BW-001 | Boom Cleaning[1] | 32° 40' 24" N | 117° 7' 1" W | San Diego Bay |
| Switch Station F | UV-001 | Utility Vault & Manhole Dewatering[2] | 32° 41' 1" N | 117° 1' 39" W | San Diego Bay |
| Mole Substation | UV-002 | Utility Vault & Manhole Dewatering[2] | 32° 40' 9" N | 117° 7' 15" W | San Diego Bay |
| S. Cummings Rd. Substation | UV-003 | Utility Vault & Manhole Dewatering[2] | 32° 42' 16" N | 117° 6' 54" W | San Diego Bay |
| Switch Station J | UV-004 | Utility Vault & Manhole Dewatering[2] | 32° 40' 29" N | 117° 7' 14" W | San Diego Bay |
| P-7 Switch Station B-3420 | UV-005 | Utility Vault & Manhole Dewatering[2] | 32° 40' 36" N | 117° 7' 19" W | San Diego Bay |
| Switch Station G | UV-006 | Utility Vault & Manhole Dewatering[2] | 32° 40' 41" | 117° 7' 22" W | San Diego Bay |
| Vesta Switch Station | UV-007 | Utility Vault & Manhole Dewatering[2] | 32° 40' 52" N | 117° 7' 13" W | San Diego Bay |
| Substation D, B-85 | UV-008 | Utility Vault & Manhole Dewatering[2] | 32° 40' 49" N | 117° 7' 23" W | San Diego Bay |
| Harbor Dr. Switch Station | UV-009 | Utility Vault & Manhole Dewatering[2] | 32° 41' 0" N | 117° 7' 29" W | San Diego Bay |
| Switch Station R | UV-010 | Utility Vault & Manhole Dewatering[2] | 32° 40' 49" N | 117° 6' 54" W | San Diego Bay |
| McCandles Switch Station | UV-011 | Utility Vault & Manhole Dewatering[2] | 32° 40' 5" N | 117° 7' 6" W | San Diego Bay |
| Substation T | UV-012 | Utility Vault & Manhole Dewatering[2] | 32° 41' 29" N | 117° 7' 42" W | San Diego Bay |
| Substation B, Pier 2 | UV-013 | Utility Vault & Manhole Dewatering[2] | 32° 41' 3" N | 117° 7' 48" W | San Diego Bay |
| Pier 2, Vault 1 | UV-014 | Utility Vault & Manhole Dewatering[2] | 32° 41' 0" N | 117° 7' 52" W | San Diego Bay |
| Pier 2, Vault 2 | UV-015 | Utility Vault & Manhole Dewatering[2] | 32° 40' 58" N | 117° 7' 57" W | San Diego Bay |
| Pier 1 | WT-001 | Weight Test Water[3] | 32° 41' 8" N | 117° 7' 59" W | San Diego Bay |
| Pier 2 | WT-002 | Weight Test Water[3] | 32° 40' 59" N | 117° 7' 54" W | San Diego Bay |
| Pier 3 | WT-003 | Weight Test Water[3] | 32° 40' 55" N | 117° 7' 46" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| Pier 4 | WT-004 | Weight Test Water[3] | 32° 40' 48" N | 117° 7' 41" W | San Diego Bay |
| Pier 5 | WT-005 | Weight Test Water[3] | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| Pier 6 | WT-006 | Weight Test Water[3] | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| Pier 7 | WT-007 | Weight Test Water[3] | 32° 40' 30" N | 117° 7' 26" W | San Diego Bay |
| Pier 8 | WT-008 | Weight Test Water[3] | 32° 40' 24:" N | 117° 7' 20" W | San Diego Bay |
| Pier 9 | WT-009 | Weight Test Water[3] | 32° 40' 9" N | 117° 7' 19" W | San Diego Bay |
| Pier 10 | WT-010 | Weight Test Water[3] | 32° 39' 60" N | 117° 6' 18" W | San Diego Bay |
| Pier 12 | WT-012 | Weight Test Water[3] | 32° 39' 51" N | 117° 7' 17" W | San Diego Bay |
| Pier 13 | WT-013 | Weight Test Water[3] | 32° 39' 44" N | 117° 7' 15" W | San Diego Bay |
| 2 (NBSD) | NBSD-001 | Industrial Storm Water | 32° 41' 1" N | 117° 7' 42" W | San Diego Bay |
| 5 (NBSD) | NBSD-002 | Industrial Storm Water | 32° 40' 56" N | 117° 7' 38" W | San Diego Bay |
| 8 (NBSD) | NBSD-003 | Industrial Storm Water | 32° 40' 50" N | 117° 7' 33" W | San Diego Bay |
| 9 (NBSD) | NBSD-004 | Industrial Storm Water | 32° 40' 47" N | 117° 7' 30" W | San Diego Bay |
| 11 (NBSD) | NBSD-005 | Industrial Storm Water | 32° 40' 44" N | 117° 7' 27' W | San Diego Bay |
| 12 (NBSD) | NBSD-006 | Industrial Storm Water | 32° 40' 41" N | 117° 7' 25" W | San Diego Bay |
| 14 (NBSD) | NBSD-007 | Industrial Storm Water | 32° 40' 36" N | 117° 7' 21" W | San Diego Bay |
| 22 (NBSD) | NBSD-008 | Industrial Storm Water | 32° 40' 22" N | 117° 7' 6" W | San Diego Bay |
| 24 (NBSD) | NBSD-009 | Industrial Storm Water | 32° 40' 25" N | 117° 7' 1" W | San Diego Bay |
| 25 (NBSD) | NBSD-010 | Industrial Storm Water | 32° 40' 26" N | 117° 6' 59" W | San Diego Bay |
| 27 (NBSD) | NBSD-011 | Industrial Storm Water | 32° 40' 29" N | 117° 6' 55" W | San Diego Bay |
| 30 (NBSD) | NBSD-012 | Industrial Storm Water | 32° 40' 23" N | 117° 6' 57" W | San Diego Bay |
| 34 (NBSD) | NBSD-013 | Industrial Storm Water | 32° 40' 18" N | 117° 7' 6" W | San Diego Bay |
| 35 (NBSD) | NBSD-014 | Industrial Storm Water | 32° 40' 15" N | 117° 7' 9" W | San Diego Bay |
| 38 (NBSD) | NBSD-015 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 17" W | San Diego Bay |
| 39 (NBSD) | NBSD-016 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 20" W | San Diego Bay |
| 40 (NBSD) | NBSD-017 | Industrial Storm Water | 32° 40' 11" N | 117° 7' 23" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| 41 (NBSD) | NBSD-018 | Industrial Storm Water | 32° 40' 9" N | 117° 7' 23" W | San Diego Bay |
| 42 (NBSD) | NBSD-019 | Industrial Storm Water | 32° 40' 8" N | 117° 7' 21" W | San Diego Bay |
| 45 (NBSD) | NBSD-020 | Industrial Storm Water | 32° 40' 8" N | 117° 7' 11" W | San Diego Bay |
| 46 (NBSD) | NBSD-021 | Industrial Storm Water | 32° 40' 4" N | 117° 7' 10" W | San Diego Bay |
| 48 (NBSD) | NBSD-022 | Industrial Storm Water | 32° 39' 55" N | 117° 7' 9" W | San Diego Bay |
| 80 (NBSD) | NBSD-023 | Industrial Storm Water | 32° 40' 30" N | 117° 6' 52" W | San Diego Bay |
| 80A (NBSD) | NBSD-024 | Industrial Storm Water | 32° 40' 15" N | 117° 6' 55" W | San Diego Bay |
| 83 (NBSD) | NBSD-025 through NBSD-043 | Industrial Storm Water | 32° 40' 30" N | 117° 6' 54" W | San Diego Bay |
| 153-171, Pier No. 1 (NBSD) | NBSD-044 | Industrial Storm Water | 32° 41' 7" N | 117° 8' 0" W | San Diego Bay |
| 122 (NBSD) | NBSD-045 through NBSD-068 | Industrial Storm Water | 32° 40' 47" N | 117° 7' 1" W | San Diego Bay |
| 172-195, Pier No. 2 (NBSD) | NBSD-069 through NBSD-090 | Industrial Storm Water | 32° 40' 60" N | 117° 7' 53" W | San Diego Bay |
| 196-217, Pier No. 3 (NBSD) | NBSD-091 through NBSD-120 | Industrial Storm Water | 32° 40' 54" N | 117° 7' 46" W | San Diego Bay |
| 218-247, Pier No. 4 (NBSD) | NBSD-121 through NBSD-142 | Industrial Storm Water | 32° 40' 49" N | 117° 7' 40" W | San Diego Bay |
| 248-269, Pier No. 5 (NBSD) | NBSD-143 through NBSD 161 | Industrial Storm Water | 32° 40' 43" N | 117° 7' 35" W | San Diego Bay |
| 270-288, Pier No. 6 (NBSD) | NBSD-162 through NBSD-187 | Industrial Storm Water | 32° 40' 36" N | 117° 7' 31" W | San Diego Bay |
| 289-314, Pier No. 7 (NBSD) | NBSD-188 through NBSD-212 | Industrial Storm Water | 32° 40' 30" N | 117° 7' 26" W | San Diego Bay |
| 315-339, Pier No. 8 (NBSD) | NBSD-213 through NBSD-214 | Industrial Storm Water | 32° 40' 23" N | 117° 7' 21" W | San Diego Bay |
| 340-341, Pier No. 9 (NBSD) | NBSD-215 | Industrial Storm Water | 32° 40' 9" N | 117° 7' 22" W | San Diego Bay |
| 343, Pier No. 10 (NBSD) | NBSD-216 through NBSD-239 | Industrial Storm Water | 32° 40' 1" N | 117° 7' 9" W | San Diego Bay |
| 391-414, Pier No. 12 (NBSD) | NBSD-240 through NBSD-263 | Industrial Storm Water | 32° 39' 51" N | 117° 7' 16" W | San Diego Bay |

| Application Name | Discharge Point | Effluent Description | Discharge Point Latitude | Discharge Point Longitude | Receiving Water |
|---|---|---|---|---|---|
| 415-438, Pier No. 13 (NBSD) | NBSD-264 | Industrial Storm Water | 32° 39' 44" N | 117° 7' 16" W | San Diego Bay |
| 442 (NBSD) | NBSD-265 | Industrial Storm Water | 32° 39' 39" N | 117° 7' 6" W | San Diego Bay |
| 443 (NBSD) | NBSD-266 | Industrial Storm Water | 32° 39' 41" N | 117° 7' 7' W | San Diego Bay |
| 001 | NGD-001 | Deflooding water/Salt water rinse | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| 002 | NGD-002 | Deflooding water/Salt Water Rinse | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| 003 | NGD-003 | Caisson ballast dewatering | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| 004 | NGD-004 | Emergency fire suppression/Saltwater supply | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| 010 | NGDSW-010 | Stormwater | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| 011 | NGDSW-011 | Stormwater | 32° 40' 45" N | 117° 7' 30" W | San Diego Bay |
| ~~3 (Broadway Complex)~~ | ~~BC-002~~ | ~~Industrial Storm Water~~ | ~~32° 42' 53"~~ | ~~117° 10' 24"~~ | ~~San Diego Bay~~ |
| ~~2 (Broadway Complex)~~ | ~~BC-001~~ | ~~Industrial Storm Water~~ | ~~32° 42' 49"~~ | ~~117° 10' 24"~~ | ~~San Diego Bay~~ |

[1] Boom, mooring, and fender cleaning discharges can occur at any pier where oil booms are installed. However, boom cleaning typically occurs along the quay wall in front of the Waterfront Operations facility. The discharge point identified in the table is located at the Waterfront Operations facility.

[2] The discharge points identified in the table represent electrical utility vaults that could potentially discharge to the San Diego Bay. Potential discharge points for discharges associated with manhole dewatering could occur at numerous locations within the Facility.

[3] Weight test water discharges can occur at any pier where ships are moored. The discharge points identified in the table represent the location of the operational piers at the Facility.

**4.** In February 1998, the Regional Water Board designated 30 acres of the San Diego Bay's eastern shoreline near the Coronado Bridge as an impaired water body and included this area in the CWA section 303(d) list (currently the 303(d) listed shipyard sediment area consists of approximately 55 acres). The elevated levels of metals in the sediment led the Regional Water Board to issue Resolution No. 2001-03 on February 21, 2001 which directed the Executive Officer to issue a Water Code section 13267 letter to Southwest Marina (currently US Navy) and NASSCO requiring each shipyard to submit the results of a site-specific study to develop sediment cleanup levels and identify sediment cleanup alternatives by June 21, 2001.

NASSCO and US Navy conducted a detailed sediment investigation within the Shipyard Sediment Site adjacent to the NASSCO and US Navy lease holds. The results of the investigation are provided in the *Exponent Report NASSCO and Southwest Marine Detailed Sediment Investigation, September 2003*. The

Shipyard Report aided in the development of acceptable cleanup levels for the Shipyard Sediment Site.

Currently the Regional Water Board is working on Cleanup and Abatement Order No. R9-2005-0126, which the Discharger is expected to be regulated under. Cleanup and Abatement Order No. R9-2005-0126 is expected to require all the applicable dischargers to take all corrective actions necessary to cleanup contaminated marine bay sediment at the Shipyard Sediment Site.

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

**1.** Discharge prohibitions contained in Order No. R9-2002-0169 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.** Compliance with the waste discharge prohibitions contained in the Basin Plan and as listed in Attachment C to Order No. R9-2002-0169 was required as a condition of the Order.

**c.** Discharges of wastes that have not been described in the Report of Waste Discharge (RWD) and Fact Sheet for Order No. R9-2002-0169, 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. R9-2002-0169 are prohibited unless regulated by applicable waste discharge requirements.

**d.** Except as allowed in the Storm Water Pollution Prevention Plan (SWPPP) requirements of Order No. R9-2002-0169, 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.

**e.** 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.

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

**2.** Discharge specifications contained in Order No. R9-2002-0169 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 NBSD, 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. R9-2002-0169. [Addendum No. 1 to Order No. R9-2002-0169 was adopted on November 10, 2004 which amended Finding 11 to specify that the Discharger may develop and implement storm water treatment technology that provides equivalent or greater water quality protection as an alternative to diversion. The addendum also amended Discharge Specification B.3 to specify that the Discharger may develop and implement storm water treatment technology that

[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.

provides equivalent or greater water quality protection as an alternative to diversion. The addendum required the Discharger to notify the Regional Water Board in writing at least 60 days prior to the installation of a storm water treatment system and required the discharges from storm water treatment systems to be monitored pursuant to Monitoring and Reporting Program No. R9-2002-0169.]

**d.** For NBSD, effective 4 years after the adoption of Order No. R9-2002-0169, in a 96-hour static or continuous flow bioassay (toxicity) test, undiluted storm water runoff associated with industrial activity shall not produce less than 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 NBSD 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 NBSD. 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 D.1 and D.2 contained in Order No. R9-2002-0169 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. R9-2002-0169 and that includes *Best Mangagement Practices* (BMPs) that achieve BAT and BCT.

**4.** Section E of Order No. R9-2002-0169 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.

**5.** Discharge prohibitions for all authorized discharges contained in Order No. R9-2003-0265 include:

a. The 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;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;
viii. steam cleaning water;
ix. pipe and tank hydrostatic test water, unless regulated by an NPDES permit;
x. saltbox water;
xi. hydraulic oil leaks and spills;
xii. fuel leaks and spills;
xiii. trash;
xiv. miscellaneous refuse and rubbish;
xv. fiberglass dust;
xvi. swept materials;
xvii. ship repair and maintenance activity debris;

xviii. demineralizer and reverse osmosis brine; and
xix. oily bilge water.

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

c. The discharge of sewage, except as noted in the Basin Plan Waste Discharge Prohibitions, to San Diego Bay is prohibited.

d. The discharge of the first flush of storm water runoff from high risk areas is prohibited, except if the pollutants in the discharge were reduced to the extent that compliance with the requirements of Discharge Specification [B.3 of Order No. R9-2003-0265 (acute toxicity limit summarized in section II.C.7.a. of this Fact Sheet)] is achieved.

e. The discharge of municipal and industrial waste sludge and untreated sludge digester supernatant, centrate, or filtrate to San Diego Bay is prohibited.

f. The discharge of rubbish, refuse, debris, materials of petroleum origin, waste zinc plates, abrasives, primer, paint, paint chips, solvents, and marine fouling organisms, and the deposition of such wastes at any place where they could eventually be discharged is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from unpainted, uncoated surfaces by underwater operations and discharges that result from floating booms that were installed for "Force Protection" purposes.

g. The discharge of materials of petroleum origin in sufficient quantities to be visible is prohibited.

h. The discharge or bypassing of untreated waste to San Diego Bay is prohibited. (This prohibition does not apply to non-contact cooling water, miscellaneous low volume water, and fire protection water streams which comply with the requirements of this Order for elevated temperature waste discharges and which do not contain pollutants or waste other than heat.)

i. The discharge of polychlorinated biphenyl compounds, such as those used for transformer fluid, is prohibited.

j. The discharge of wastes and pollutants from underwater operations, (such as underwater paint and/or coating removal and underwater hull cleaning (e.g. "scamping")), is prohibited. This prohibition does not apply to the discharge of marine fouling organisms removed from unpainted and uncoated surfaces by underwater operations, or to discharges that result from the cleaning of floating booms that were installed for "Force Protection" purposes.

**6.** Discharge effluent limitations and specifications for saltwater supply system water, graving dock flood dewatering, and industrial storm water were contained Order No.

R9-2003-0265. Effluent limitations contained in Order No. R9-2003-0265 are summarized below.

a. Effluent limitations for saltwater supply system water, graving dock flood dewatering, and graving dock caisson gate ballast water included:

**Table F-3. Numeric Effluent Limitations**

| Parameter | Units | Monthly Average | 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 | pH units | Within limits of 6.0 – 9.0 at all times. | | |
| Temperature | °F | Not more than 20°F greater than natural temperature of receiving waters. | | |

**7.** The following acute and chronic toxicity effluent limitations apply to the discharges of SSS and caisson gate ballast water in Order No. R9-2003-0265:

a. Acute toxicity: Undiluted discharges to the San Diego Bay shall not produce less than 90% survival, 50% of the time, and not less than 70% survival, 10% of the time, except where the percent survival in San Diego Bay Water at the intake location is less than these levels. Where the percent survival in San Diego Bay water at the intake location is less than these levels, the percent survival in undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not be less than the percent survival in San Diego Bay water at the intake location. In the absence of test results demonstrating otherwise, it will be assumed that the percent survival in San Diego Bay water at the intake location is not less than these levels.

b. Chronic toxicity: Undiluted discharges to San Diego Bay which consist of water taken from San Diego Bay shall not exceed 1 TUc, except where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc. Where the chronic toxicity of San Diego Bay water at the intake location exceeds 1 TUc, the chronic toxicity of undiluted discharges to San Diego Bay which consists of water taken from San Diego Bay shall not exceed the chronic toxicity of San Diego Bay water at the intake location. In the absence of test results demonstrating otherwise, it will be assumed that the chronic toxicity in San Diego Bay water at the intake location does not exceed 1 TUc.

**8.** The following acute toxicity effluent limitations apply to the discharge of undiluted industrial storm water to San Diego Bay in Order No. R9-2003-0265:

a. Acute toxicity: Undiluted discharges to the San Diego Bay shall not produce less than 90% survival, 50% of the time, and not less than 70% survival, 10% of the time.

**9.** All discharges regulated under Order No. R9-2003-0265 were prohibited from containing a hazardous substance equal to or in excess of a reportable quantity listed in Title 40 of the Code of Federal Regulations (40 CFR), Part 117 and/or 40 CFR Part 302.

**10.** In addition to numeric effluent limitations in Order No. R9-2003-0265, the Discharger was required to reduce or prevent the discharge of pollutants through the implementation of best available technology (BAT) economically achievable for toxic, non-conventional, pollutants and Best Conventional Pollution Control Technology (BCT) for conventional pollutants through the development and implementation of a BMP Plan.

**11.** Waste discharges under Order No. R9-2003-0265 shall be discharged in a manner so as to achieve the most rapid initial dilution practicable to minimize concentrations of substances not removed by source control or treatment.

**12.** Waste management systems (e.g., wastewater treatment systems and waste storage facilities) under Order No. R9-2003-0265 shall be designed, constructed, operated, and maintained so as to prevent the discharge of pollutants and maintain indigenous marine life and a healthy and diverse marine community.

**13.** Waste discharges under Order No. R9-2003-0265 shall be essentially free of:

a. Material that is floatable or will become floatable upon discharge.

b. Settleable material or substances that may form sediments which will degrade benthic communities or other aquatic life.

c. Substances which will accumulate to toxic levels in marine waters, sediment, or biota.

d. Materials that result in aesthetically undesirable discoloration of receiving waters.

e. Substances that significantly decrease the natural light to benthic communities and other marine life.

**14.** A summary of the available monthly monitoring data for regulated parameters under Order No. R9-2003-0265 for saltwater supply system water and caisson gate ballast water are summarized below:

**Table F-4. Discharge Data Summary**

| Parameters | Units | Highest Reported Value | |
|---|---|---|---|
| | | Saltwater Supply System | Caisson Gate Ballast Water |
| Oil and Grease | mg/L | <5 | <5 |
| Settleable Solids | ml/L | <0.2 | <0.2 |
| Turbidity | NTU | 3.8 | 0.6 |
| pH | su | 6.3 – 7.93 | 6.7 – 7.83 |
| Temperature | °F | 68.2 | 70.5 |
| Acute Toxicity[1] | % survival | 98 | 100 |
| Chronic Toxicity | $TU_c$ | 1 | 1 |

NA – Not Available
[1] Lowest survival percentage.

**15.** Monitoring the drydock deflooding water for parameters was not a requirement of Monitoring and Reporting Program No. R9-2003-0265, thus data for oil and grease, settleable solids, turbidity, pH, temperature, and toxicity is not available.

## D. Compliance Summary

**1.** On April 12, 2004, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169. Major findings reported from that inspection include:

**a.** The 2003 Log of Boom, Mooring and Fender Cleaning Activity was not submitted because it was not maintained as required in section B.3 of MRP R9-2002-0169.

**b.** The contract laboratory analytical results for the 2002/2003 Annual Report did not contain the name or initials of the analysis as required by MRP R9-2002-0169 section A.6.d.

**c.** Hazardous Materials stored on piers 2 and 10 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 as required by sections A.4 and A.5 of Order No. R9-2002-0169. On-site practices appeared inconsistent with BMPs 115 and 061 of the site-specific SWPPP at the PWS Sandblasting and Painting/Welding Lot and the SIMA Antenna Repair Shop.

**d.** Scrap metal storage containers did not have covers to prevent materials, such as copper and zinc, from washing into the storm water sewer system as required by sections A.4 and A.5 of Order No. R9-2002-0169. On-site practices appeared inconsistent with BMP 061 of the site-specific BMP.

**e.** Reported sample pH readings are 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 as required by section A.2 of MRP R9-2002-0169.

**f.** Coliform samples are scooped and then transferred into the sample container. This does not meet the requirements of 40 CFR Part 136 as required by section A.2 of MRP R9-2002-0169.

**2.** On December 11, 2007, the Facility was inspected by a USEPA contractor to determine compliance with Order No. R9-2002-0169. Major findings reported from that inspection include:

**a.** Monitoring and Reporting Program No. R9-2002-0169, Sections C.6.d and C.6.f (Storm water Discharges and Other Visual Observations) state that "Monthly the discharger shall visually observe storm water storage and containment areas…", and "The discharger shall maintain records of all visual observations, personnel, observation dates/locations, and corrective actions…", respectively. Monthly storm water observations were conducted; however, no records of observations, personnel, corrective actions, etc. were provided for the storage and containment areas. Naval Base San Diego does not have areas designed for storm water storage with the exception of the Mole Pier storm water storage tanks that are discharged to the sanitary sewer system after a rain event is over.

**b.** Regional Water Board Order No. R9-2002-0169, 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.

**c.** Regional Water Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A of this Order that includes BMPs that achieve BCT. Significant materials, as identified in Section 4.3.4 of the Storm water Discharge Management Plan (SDMP), on Pier 8 were not stored in accordance with the site-specific SWPPP. Section 4.6.35.2.2 of the SWPPP requires "Drums and containers of hazardous wastes generated on the pier or manually unloaded from ships are transferred onto containment pallets at temporary bermed staging areas on the pier." Specifically, nine 55-gallon drums and eight pallets were observed stored adjacent to pier storm drain inlets A32 to A36 as identified on the site-specific site map. BMP 055 of the site-specific SWPPP requires the use of overpack containers or containment pallets to store 55-gallon drums outside of storage areas and BMP 061B requires liquids and significant materials to be stored within a building or covered area. In addition, the secondary containment did not comply with the Storm water BMPs Guidance for Contractors Working on

Navy Piers, dated August 2005. This guidance document is provided to each contractor working on the piers. Specifically, Section 3 of the contractor guidance manual, Materials Waste/Labeling, Storage, and Handling Procedures, requires that "secondary containment must be large enough to contain materials/waste from the largest container plus rainwater." Unused secondary containment pallets were observed adjacent to the boom cleaning area and Oil Recovery Maintenance Building.

**d.** Regional Water Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A, of this Order that includes BMPs that achieve BCT. Painting/grit resurfacing operations conducted by a contractor were observed on Pier 8. Two large Rain for Rent tanks (approximately 4,000 gallons each) were utilized for the mixing and pumping of the paint and grit material for the berthed ship's interior floor resurfacing. Secondary containment was provided; however, it did not appear to have the volume consistent with BMP 115 (Store Containers Inside Secondary Containment). In addition, the secondary containment did not comply with Section 3 of the contractor guidance manual, Materials Waste/Labeling, Storage, and Handling Procedures requires that "secondary containment must be large enough to contain materials/waste from the largest container plus rainwater".

**e.** Regional Water Board Order No. R9-2002-0169, Provision D.2, requires the discharger to implement a SWPPP that complies with the requirements in Attachment D, Section A of this Order that includes BMPs that achieve BCT. A JLG equipment (i.e., mobile aerial work platform) with basket and drop cloth was observed with an open 5-gallon container of paint in the basket. This was inconsistent with BMP 054 (Properly Store Containers) and with Section 2 of the Stormwater BMPs Guidance for Contractors Working on Navy Piers that states "Keep all containers closed with tight fitting lids". Furthermore, an open pier storm drain inlet was located directly adjacent to the JLG equipment basket. BMP 023, which requires portable rubber mats to be placed over storm drain inlets, was not implemented per the site-specific SWPPP. In addition, the storm drain inlet was not covered in accordance with Section 5 (Cover/Plug Pier Drains) in the contractor guidance manual.

**f.** The Facility exceeded effluent limitations specified in Regional Water Board Order No. R9-2002-0169, Section B.2 at Outfall No. 22 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 total zinc at Outfall No. 22. The Facility reported the following exceedances of these effluent limitations on their SMRs submitted to the Regional Water Board.

**i.** August 20, 2007 – 190 µg/L, total copper, and
**ii.** August 20, 2007 – 1,400 µg/L, total zinc.

**g.** Monitoring and Reporting Program Order No. R9-2002-0169, Section A.10, requires "flow measurement devisces shall be calibrated at least once per year". The permittee was utilizing a flow meter at the discharge point from the filtration treatment system at the Recycling Center that had not been calibrated in over 1 year.

### 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 San Diego Bay are as follows:

**Table F-~~35~~.Basin Plan Beneficial Uses**

| Discharge Point | Receiving Water Name | Beneficial Use(s) |
|---|---|---|
| SC-001 through SC-175, BW-001, UV-001 through UV-015, WT-001 through WT-013, NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~NGD-001, NGD-002, NGD-003, NGD-004, NGDSW-010, and NGDSW-011 | San Diego Bay | Existing:<br>Industrial service supply (IND); navigation (NAV); contact water recreation (REC1); non-contact water recreation (REC2); commercial and sport fishing (COMM); preservation of biological habitats of special significance (BIOL); estuarine habitat (EST); wildlife habitat (WILD); preservation of rare, threatened or endangered species (RARE); marine habitat (MAR); migration of aquatic organisms (MIGR); spawning, reproduction, and/or early development (SPAWN); shellfish harvesting (SHELL) |

Requirements of this Order implement the Basin Plan.

2. **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 *elevated temperature waste* as "*liquid, solid, or gaseous material including thermal waste discharged at a temperature higher than the natural temperature of receiving water.*" 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 discharges of steam condensate with temperatures in excess of 100°C meet the criteria of an elevated temperature waste, and because these discharges commenced subsequent to adoption of the Thermal Plan, discharges of steam condensate 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.

3. **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.

4. **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 chronic toxicity control. Requirements of this Order implement the SIP.

5. **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.

6. **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.

7. **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.

8. **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 Sheets for Order No. R9-2002-0002 for NBPL and Order No. R9-2003-0008 for NBC included an attached memorandum dated July 22, 2002 which was written for the Fact Sheet for Order No. R9-2002-0002. The memorandum specifies

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

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. 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). Portions of the San Diego Bay including the 32$^{nd}$ Street San Diego Naval Station; San Diego Bay Shoreline, near Chollas Creek; San Diego Bay Shoreline, North of 24$^{th}$ Street Marine Terminal; and San Diego Bay Shoreline, 7$^{th}$ Street Channel are adjacent to NBSD. These portions of the San Diego Bay are listed in the 303(d) list as impaired for benthic community effects and sediment toxicity. In addition, portions of the San Diego Bay including the San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers and the San Diego Bay, G Street Pier are adjacent to the Broadway Complex. The San Diego Bay Shoreline, Vicinity of B Street and Broadway Piers is listed in the 303(d) list as impaired for benthic community effects, indicator bacteria, and sediment toxicity. The San Diego Bay Shoreline, G Street Pier is listed in the 303(d) list as impaired for indicator bacteria.

Applicable Total Maximum Daily Loads (TMDLs) have 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.

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; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; and weight test water. For the purpose of the Bays and Estuaries Policy and the Order, the discharges of steam condensate; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; and weight test water 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.

## 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. R9-2002-0169 and Order No. R9-2003-0265.

**2.** The Basin Plan prohibitions are incorporated by reference in the Order. Prohibitions III.B, III.C, III.D, and III.E are retained from Order No. R9-2002-0169 and require the Discharger to comply with the Basin Plan prohibitions.

**3.** Discharge Prohibition III.F is based on the requirements of the Bays and Estuaries Policy and is retained from Order No. R9-2002-0169.

**4.** 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.~~G~~H 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 unless the discharge can be demonstrated to meet the limits of this permit.

**5.** California Water Code section 13243 provides that the Regional Water Board, in a water quality control plan, may specify certain conditions where the discharge of wastes or certain types of wastes that could affect the quality of waters of the state is

prohibited. The Basin Plan prohibitions are incorporated by reference in the Order. Prohibition III.B and III.G are carried over from Order No. R9-2003-0265 and require the Discharger to comply with the Basin Plan prohibitions.

6. III.I, III.J, III.K, and III.L are based on the requirements of the Enclosed Bays and Estuaries Policy and are carried over from Order No. R9-2003-0265.

7. Discharge Prohibition III.M, which prohibits the discharge of PCBs, is carried over from Order No. R9-2003-0265 based on the 303(d) listing for these compounds for San Diego Bay.

8. Discharge Prohibition III.N prohibits the discharge of waste and pollutants from underwater operations, and has been carried over from Order No. R9-2003-0265.

9. Discharge Prohibition III.O prohibits the discharge of effluent from contributing to a violation of water quality objectives and is based on the Ocean Plan, the SIP, the Basin Plan, and the Enclosed Bays and Estuaries Policy.

## 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.

**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. 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-175 and WT-001 through WT-013.

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.

Numeric effluent limitations based on Table A of the Ocean Plan are being established in this Order for discharges of steam condensate, ~~and~~ weight test water, and USN Graving Dock discharges from Discharge Point Nos. SC-001 through SC-175, ~~and~~ WT-001 through WT-013, and NGD-001 through NGD-004. The applicable technology-based effluent limitations are summarized below:

**Table F-~~4~~6. Numeric Technology-based Effluent Limitations for Discharge Point Nos. SC-001 through SC-175, ~~and~~ WT-001 through WT-013, and NGD-001 through NGD-004**

| 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. R9-2002-0169, 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. R9-2002-0169 to reflect the PLAN requirements included in Order No. 2006-0008-DWQ.

c. Due to the nature of activities associated with discharges from pier boom, fender, and mooring 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, fender, and mooring 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, fender, and mooring cleaning.

d. In accordance with 40 CFR 122.44(k), Order No. R9-2002-0169 determined that the implementation of BMPs for the discharge of industrial storm water were

appropriate. To carry out the purpose and intent of the CWA, Order No. R9-2002-0169 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. R9-2002-0169.

e. In addition to numeric technology-based limitations, Order No. R9-2003-0265 requires the Discharger to reduce or prevent the discharge of pollutants through the implementation of BAT [CWA §301(b)(2)(A)] for toxic and non-conventional pollutants and BCT [CWA §301(b)(2)(E)] for conventional pollutants. In accordance with 40 CFR 122.44(k), the previous Order determined that the implementation of BMPs for the discharge of conventional, non-conventional, and toxic pollutants via industrial discharges and storm water were appropriate. To carry out the purpose and intent of the CWA, the previous Order required the Discharger to develop and implement a BMP plan, as authorized by CWA section 304(e) and section 402(p), for toxic pollutants and hazardous substances.

f. The requirement to implement an appropriate BMP plan is carried over from Order No. R9-2003-0265. Further, the effluent limitations contained in Table A of the Ocean Plan and established in Order No. R9-2003-0265 are carried over for discharge of saltwater supply system water, graving dock flood dewatering, and graving dock caisson gate ballast water.

## 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 San Diego Bay 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 CTR and NTR are only applicable to non-storm water 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 Facility to the San Diego Bay. The applicable toxicity limitations are discussed in this section of the 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; pier boom, fender, and mooring cleaning; utility vault and manhole dewatering; weight test water; ~~and~~ miscellaneous discharges associated with facility maintenance; graving dock deflooding; caisson ballast dewatering; and saltwater supply system water.

Representative monitoring of the steam condensate discharges was conducted at five locations and submitted in the annual reports for years 2003, 2004, 2005, and 2006 and in the application for a total of six sampling events. Monitoring of

the San Diego Bay in the vicinity of the discharges was submitted in the application.

Representative monitoring of utility vault and manhole dewatering discharges was conducted at nine 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 14 sampling events. Receiving water in the vicinity of the discharges was not conducted.

Representative monitoring of the pier boom cleaning, fender, and mooring cleaning discharge and the weight test water discharge was conducted and submitted in the application for a total of one sampling event. Monitoring of the San Diego Bay in the vicinity of the discharges was also submitted in the application.

Data for the caisson ballast dewatering, the saltwater supply system water, and the receiving water was available from April 8, 2004 through November 1, 2006. Data for the graving dock deflooding water was only available for August 8, 2003.

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-~~5~~7. 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 | | -- |
| Cyanide, Total Recoverable | 1.00 | | | 1.00 | 1.00 | | -- |
| Lead, Total Recoverable | 8.52 | | | 220.82 | 8.52 | | -- |

| 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 |
| Mercury, Total Recoverable | 0.051 | | | -- | -- | | 0.051 |
| Nickel, Total Recoverable | 8.28 | | | 74.75 | 8.28 | | -- 4,600 |
| 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 | $1.40 \times 10^{-8}$ | | | -- | -- | | $1.40 \times 10^{-8}$ |
| Bromoform | 360 | | | -- | -- | | 360 |
| Chlorodibromomethane | 34 | | | -- | -- | | 34 |
| Chloroform | No Criteria | | | -- | -- | | -- |
| Dichlorobromomethane | 46 | | | -- | -- | | 46 |
| Methyl Chloride | No Criteria | | | -- | -- | | -- |
| Methylene Chloride | 1,600 | | | -- | -- | | 1,600 |
| 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 | | | -- | -- | | -- |
| 1,2-Diphenylhydrazine | 0.54 | | | -- | -- | | 0.54 |
| Fluoranthene | 370 | | | -- | -- | | 370 |
| Fluorene | 14,000 | | | -- | -- | | 14,000 |

| 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 |
| Indeno (1,2,3-cd) Pyrene | 0.049 | | | -- | -- | | 0.049 |
| Naphthalene | No Criteria | | | -- | -- | | -- |
| Nitrobenzene | 1,900 | | | -- | -- | | 1,900 |
| Phenanthrene | No Criteria | | | -- | -- | | -- |
| Pyrene | 11,000 | | | -- | -- | | 11,000 |
| 1,2,4-Trichlorobenzene | No Criteria | | | -- | -- | | -- |

**b. 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.

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.

### 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 copper, lead, mercury, zinc, benzo (b) fluoranthene, benzo (k) fluoranthene, chrysene, arsenic, cadmium, nickel, silver, benzo (a) anthracene, benzo (a) pyrene, indeno (1,2,3-cd) pyrene, and TCDD-equivalents.

The Regional Water Board conducted the RPA in accordance with section 1.3 of the SIP. A summary of the results for the parameters which demonstrated reasonable potential, for each applicable discharge, is provided in the tables below.

**Table F-~~6~~8. Summary of RPA Results[1]**

| Discharge Location No. | Parameter | MEC | B | C | Reason |
|---|---|---|---|---|---|

| | | µg/L | µg/L | µg/L | |
|---|---|---|---|---|---|
| Steam Condensate (SC-001 through SC-175) | Copper, Total Recoverable | 130 | 4.42 | 3.73 | MEC & B > C |
| | Lead, Total Recoverable | 18.78 | 0.361 | 8.52 | MEC > C |
| | Mercury, Total Recoverable | 0.15 | <0.01 | 0.051 | MEC > C |
| | Zinc, Total Recoverable | 249.82 | 10.31 | 85.62 | MEC > C |
| | TCDD-Equivalents | $4.37 \times 10^{-7}$ | $2.62 \times 10^{-8}$ | $1.4 \times 10^{-8}$ | MEC & B > C |
| Pier Boom, Fender, and Mooring Cleaning (BW-001) | Copper, Total Recoverable | 10.16 | 5.22 | 3.73 | MEC & B > C |
| | Benzo (b) Fluoranthene | 0.071 | 0.0031 | 0.049 | MEC > C |
| | Benzo (k) Fluoranthene | 0.057 | 0.0023 | 0.049 | MEC > C |
| | Chrysene | 0.1264 | 0.0032 | 0.049 | MEC > C |
| | TCDD-Equivalents | $2.88 \times 10^{-7}$ | $3.18 \times 10^{-8}$ | $1.4 \times 10^{-8}$ | MEC & B > C |
| Utility Vault and Manhole Dewatering (UV-001 through UV-015 | Arsenic, Total Recoverable | 36 | NA | 36 | MEC = C |
| | Cadmium, Total Recoverable | 22 | NA | 9.36 | MEC > C |
| | Copper, Total Recoverable | 5,300 | NA | 3.73 | MEC > C |
| | Lead, Total Recoverable | 400 | NA | 8.52 | MEC > C |
| | Mercury, Total Recoverable | 8.3 | NA | 0.051 | MEC > C |
| | Nickel, Total Recoverable | 82 | NA | 8.28 | MEC > C |
| | Silver, Total Recoverable | 25 | NA | 2.24 | MEC > C |
| | Zinc, Total Recoverable | 1,500 | NA | 85.62 | MEC > C |
| | Benzo (a) Anthracene | 0.11 | NA | 0.049 | MEC > C |
| | Benzo (a) Pyrene | 0.066 | NA | 0.049 | MEC > C |
| | Benzo (b) Fluoranthene | 0.072 | NA | 0.049 | MEC > C |
| | Chrysene | 0.094 | NA | 0.049 | MEC > C |
| | Indeno (1,2,3-cd) Pyrene | 0.13 | NA | 0.049 | MEC > C |
| Weight Test Water (WT-001 through WT-013) | Copper, Total Recoverable | 26.28 | 4.64 | 3.73 | MEC & B > C |
| | TCDD-Equivalents | $6.32 \times 10^{-8}$ | $1.42 \times 10^{-7}$ | $1.4 \times 10^{-8}$ | MEC & B > C |

NA – Not Available

[1] MEC = Maximum Effluent Concentration
B = Background Concentration
C = Criterion

## Table F-9. Summary of RPA Results for discharges at USN Graving Dock

| Discharge Location No. | Pollutant | Basis for Applying Criteria/ Objective | Source of applied Criteria/ Objective | Units | Most Stringent Applicable Criteria | MEC | Background | Effluent Limit? |
|---|---|---|---|---|---|---|---|---|
| NGD-001 and NGD-002 Deflooding Water | Copper | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 3.73 | 11.1 | 16.7 | Y |
| NGD-003 Caisson Ballast | Cadmium | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 9.36 | 30 | 0.0752 | Y |

| | | | | | | | | |
|---|---|---|---|---|---|---|---|---|
| Dewatering | Copper | CTR Water Quality Criteria | Saltwater acute criteria | µg/L | 3.73 | 40 | 16.7 | Y |
| | Nickel | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 8.28 | 50 | 0.844 | Y |
| | Silver | CTR Water Quality Criteria | Saltwater acute criteria | µg/L | 2.24 | 10.1 | 45.1 | Y |
| | Zinc | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 85.62 | 120 | 21.3 | Y |
| NGD-004 Saltwater System Supply Water | Copper | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 3.73 | 213 | 16.7 | Y |
| | Nickel | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 8.28 | 79.7 | 0.844 | Y |
| | Silver | CTR Water Quality Criteria | Saltwater acute criteria | µg/L | 2.24 | 5.65 | 45.1 | Y |
| | Zinc | CTR Water Quality Criteria | Saltwater chronic criteria | µg/L | 85.62 | 771 | 21.3 | Y |

### 4. WQBEL Calculations

a. As shown in Table F-6, 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. R9-2002-0169, 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-6, the Regional Water Board finds that discharges from pier boom, fender, and mooring 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, fender, and mooring cleaning. In lieu of numeric effluent limitations, the Regional Water Board finds that the implementation of BMPs is 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.2, 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-175 and is based on the requirements of the Thermal Plan.

e. Effluent limitations for cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents were calculated in accordance with section 1.4 of the SIP. The paragraphs below describe the methodology used for calculating effluent limitations for these parameters.

~~e.~~f. **Effluent Limitation Calculations.** ~~Effluent limitations for copper, lead, mercury, zinc, and TCDD-equivalents at Discharge Point Nos. SC-001 through SC-175 and for copper and TCDD-equivalents at Discharge Point Nos. WT-001 through WT-013 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:

$$ECA_{HH} = HH + D(HH - B)$$

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.

$LTA_{acute}$

$$AMEL = mult_{AMEL}\left[\min\left(M_A ECA_{acute}, M_C ECA_{chronic}\right)\right]$$

$$MDEL = mult_{MDEL}\left[\min\left(M_A ECA_{acute}, M_C ECA_{chronic}\right)\right]$$

$LTA_{chronic}$

$$MDEL_{HH} = \left(\frac{mult_{MDEL}}{mult_{AMEL}}\right) AMEL_{HH}$$

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

WQBELs were calculated for cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents as follows in Tables F-7 through F-11, below.

**Table F-10. WQBEL Calculations for Cadmium**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 42.25 | 9.36 |
| Dilution Credit | No Dilution | No Dilution |
| ECA | 42.25 | 9.36 |
| ECA Multiplier | 0.32 | 0.53 |

| | | |
|---|---|---|
| LTA | 13.57 | 4.94 |
| AMEL Multiplier (95th%) | [2] | 1.55 |
| **AMEL** (µg/L) | [2] | **7.66** |
| MDEL Multiplier (99th%) | [2] | 3.11 |
| **MDEL** (µg/L) | [2] | **15.38** |

**Table F-~~7~~11. WQBEL Calculations for Copper ~~for Discharges of Steam Condensate and Weight Test Water (Discharge Point Nos. SC-001 through SC-175 and WT-001 through WT-013)~~**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 5.78 | 3.73 |
| Dilution Credit | No Dilution | No Dilution |
| ECA | 5.78 | 3.73 |
| ECA Multiplier | 0.32 | 0.53 |
| LTA | 1.86 | 1.97 |
| AMEL Multiplier (95th%) | 1.55 | [2] |
| **AMEL** (µg/L) | **2.9** | [2] |
| MDEL Multiplier (99th%) | 3.11 | [2] |
| **MDEL** (µg/L) | **5.8** | [2] |

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (Acute LTA < Chronic LTA)

**Table F-~~8~~12. WQBEL Calculations for Lead ~~in Discharges of Steam Condensate (Discharge Point Nos. SC-001 through SC-175)~~**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 220.82 | 8.52 |
| Dilution Credit | No Dilution | No Dilution |
| ECA | 220.82 | 8.52 |
| ECA Multiplier | 0.32 | 0.53 |
| LTA | 70.90 | 4.49 |
| AMEL Multiplier (95th%) | [2] | 1.55 |
| **AMEL** (µg/L) | [2] | **7.0** |
| MDEL Multiplier (99th%) | [2] | 3.11 |
| **MDEL** (µg/L) | [2] | **14.0** |

[1] CTR Aquatic Life Criteria

[2] Limitations based on chronic LTA (Chronic LTA < Acute LTA)

**Table F-~~9~~13. WQBEL Calculations for Mercury ~~in Discharges of Steam Condensate (Discharge Point Nos. SC-001 and SC-175)~~**

| | 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.

**Table F-14. WQBEL Calculations for Nickel**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 74.75 | 8.28 |
| Dilution Credit | No Dilution | No Dilution |
| ECA | 74.75 | 8.28 |
| ECA Multiplier | 0.32 | 0.53 |
| LTA | 24.00 | 4.37 |
| AMEL Multiplier (95$^{th}$%) | [2] | 1.55 |
| **AMEL (µg/L)** | [2] | **6.78** |
| MDEL Multiplier (99$^{th}$%) | [2] | 3.11 |
| **MDEL (µg/L)** | [2] | **13.60** |

1 CTR Aquatic Life Criteria

2 Limitations based on chronic LTA (Chronic LTA < Acute LTA)

**Table F-15. WQBEL Calculations for Silver**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 2.24 | No Criteria |
| Dilution Credit | No Dilution | -- |
| ECA | 2.24 | -- |
| ECA Multiplier | 0.32 | -- |
| LTA | 0.72 | -- |
| AMEL Multiplier (95$^{th}$%) | 1.55 | -- |
| **AMEL (µg/L)** | **1.12** | **--** |
| MDEL Multiplier (99$^{th}$%) | 3.11 | -- |
| **MDEL (µg/L)** | **2.24** | **--** |

1 CTR Aquatic Life Criteria

**Table F-~~10~~16. WQBEL Calculations for Zinc in Discharges of Steam Condensate (Discharge Point Nos. SC-001 and SC-175)**

| | Acute | Chronic |
|---|---|---|
| Criteria (µg/L) [1] | 95.14 | 85.62 |
| Dilution Credit | No Dilution | No Dilution |
| ECA | 95.14 | 85.62 |

| | Acute | Chronic |
|---|---|---|
| ECA Multiplier | 0.32 | 0.53 |
| LTA | 30.55 | 45.16 |
| AMEL Multiplier (95$^{th}$%) | 1.55 | [2] |
| **AMEL** (µg/L) | **47.4** | [2] |
| MDEL Multiplier (99$^{th}$%) | 3.11 | [2] |
| **MDEL** (µg/L) | **95.1** | [2] |

[1] CTR Aquatic Life Criteria

[2] Limitations based on acute LTA (AcuteLTA < Chronic LTA)

**Table F-~~11~~17. WQBEL Calculations for TCDD-Equivalents in Discharges of Steam Condensate and Weight Test Water (Discharge Point Nos. SC-001 through SC-175 and WT-001 through WT-013)**

| | Human Health |
|---|---|
| Criteria (µg/L)[1] | $1.40 \times 10^{-8}$ |
| Dilution Credit | No Dilution |
| ECA | $1.40 \times 10^{-8}$ |
| **AMEL (µg/L)[2]** | **$1.4 \times 10^{-8}$** |
| MDEL/AMEL Multiplier[3] | 2.01 |
| **MDEL (µg/L)** | **$2.8 \times 10^{-8}$** |

[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.

~~f.~~g. A summary of the applicable WQBELs are summarized below:

**Table F-~~12~~18. Summary of Water Quality-based Effluent Limitations for Discharges of Steam Condensate from Discharge Point Nos. SC-001 through SC-175**

| Parameter | Units | Effluent Limitations | | | |
|---|---|---|---|---|---|
| | | Average Monthly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Copper, Total Recoverable | µg/L | 2.9 | 5.8 | -- | -- |
| Lead, Total Recoverable | µg/L | 7.0 | 14.0 | -- | -- |
| Mercury, Total Recoverable | µg/L | 0.051 | 0.102 | -- | -- |
| Zinc, Total Recoverable | µg/L | 47.4 | 95.1 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | $2.8 \times 10^{-8}$ | -- | -- |
| 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.

**Table F-~~13~~19. Summary of Water Quality-based Effluent Limitations for Discharges of Weight Test Water from Discharge Point Nos. WT-001 through WT-013**

| Parameter | Units | Effluent Limitations | | | |
|---|---|---|---|---|---|
| | | Average Monthly | Maximum Daily | Instantaneous Minimum | Instantaneous Maximum |
| Copper, Total Recoverable | µg/L | 2.9 | 5.8 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | $2.8 \times 10^{-8}$ | -- | -- |
| pH | standard units | -- | -- | 7.0 | 9.0 |

**Table F-20. Summary of CTR Water Quality-based Effluent Limitations**

| Discharge Location | Parameter | Units | Effluent Limitations | |
|---|---|---|---|---|
| | | | Average Monthly | Maximum Daily |
| NGD-001 and NGD-002 Deflooding Water | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| NGD-003 Caisson Ballast Dewatering | Cadmium, Total Recoverable | µg/L | 7.66 | 15.38 |
| | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| | Nickel, Total Recoverable | µg/L | 6.78 | 13.60 |
| | Silver, Total Recoverable | µg/L | 1.12 | 2.24 |
| | Zinc, Total Recoverable | µg/L | 47.42 | 95.14 |
| NGD-004 Saltwater System Supply Water | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| | Nickel, Total Recoverable | µg/L | 6.78 | 13.60 |
| | Silver, Total Recoverable | µg/L | 1.12 | 2.24 |
| | Zinc, Total Recoverable | µg/L | 46.92 | 94.14 |

1) All discharges shall maintain a pH of between 7.0 standard units and 9.0 standard units at all times.

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

## 5. Whole Effluent Toxicity (WET)

### a. Acute Toxicity.

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. R9-2002-0169 and Order No. R9-2003-0265 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, NBC, 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 storm water 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.

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 $10^{th}$ and $75^{th}$ 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 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.

**b. Chronic Toxicity**. Numeric chronic WET effluent limitations have been included in this order. The numeric chronic WET effluent limitations are the same as in the Order No. R9-2003-0265. In addition, this Order requires that the Discharger meet best management practices for compliance with the Basin Plan's narrative toxicity objective, as allowed under 40 CFR 122.44(k) and maintain compliance with any applicable acute toxicity limitations. Monitoring for chronic toxicity is continued for applicable discharges because chronic toxicity continues to be a pollutant of concern.

## 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-175 shall not exceed the effluent limitations summarized below:

**Table F-~~14~~21. Effluent Limitations for Discharges of Steam Condensate from Discharge Point Nos. SC-001 through SC-175**

| 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 | 2.9 | -- | 5.8 | -- | -- |
| Lead, Total Recoverable | µg/L | 7.0 | -- | 14.0 | -- | -- |
| Mercury, Total Recoverable | µg/L | 0.051 | -- | 0.102 | -- | -- |
| Zinc, Total Recoverable | µg/L | 47.4 | -- | 95.1 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | -- | $2.8 \times 10^{-8}$ | -- | -- |
| ***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 weight test water to San Diego Bay from Discharge Point Nos. WT-001 through WT-013 shall not exceed the effluent limitations summarized below:

**Table F-~~15~~22. Effluent Limitations for Discharges of Weight Test Water from Discharge Point Nos. WT-001 through WT-013**

| 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 | 2.9 | -- | 5.8 | -- | -- |
| TCDD-Equivalents | µg/L | $1.4 \times 10^{-8}$ | -- | $2.8 \times 10^{-8}$ | -- | -- |
| ***Non-Conventional Pollutants*** | | | | | | |
| Settleable Solids | ml/L | 1.0 | 1.5 | -- | -- | 3.0 |
| Turbidity | NTU | 75 | 100 | -- | -- | 225 |

Discharges of storm water at Discharge Point Nos. NBSD-001 through NBSD-266, ~~BC-001, and BC-002~~ NGDSW-010, and NGDSW-011 shall achieve a rating of

"Pass" for acute toxicity with compliance determined as specified in section VII.H of this Order.

Discharges of SSS, caisson gate ballast water, and graving dock deflooding water from the Facility shall not exceed the effluent limitations summarized below:

**Table F-15. Effluent Limitations For All Non-Strom Water Discharges at USN Graving Dock at Discharge Point Nos. NGD-001 through NGD-004**

| 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 | pH units | -- | -- | [1] |
| Temperature | °F | -- | -- | [2] |
| Acute Toxicity | Pass/Fail[3] | -- | -- | [3] |
| Chronic Toxicity[4] | TUc | -- | -- | 1[5] |

[1] Within limits of 7.0 – 9.0 at all times.
[2] At no time shall any discharge be greater than 20°F over the natural temperature of the receiving water.
[3] Discharges of storm water shall achieve a rating of "Pass" for acute toxicity based on a t-test with compliance determined as specified in section VII.H. of the Order.
[4] Chronic Toxicity only applies to Discharge Points NGD-003 and NGD-004
[5] Discharges shall achieve a rating of 1 TUc for chronic toxicity with compliance determined as specified in section VII.I. of this Order.

Discharges from the Facility shall meet the location-specific effluent limitations specified below:

**Table F-23. Summary of Final Effluent Limitations By Discharge Location**

| Discharge Location | Parameter | Units | Effluent Limitations | |
|---|---|---|---|---|
| | | | Average Monthly | Maximum Daily |
| NGD-001 and NGD-002 Deflooding Water | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| NGD-003 Caisson Ballast Dewatering | Cadmium, Total Recoverable | µg/L | 7.66 | 15.38 |
| | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| | Nickel, Total Recoverable | µg/L | 6.78 | 13.60 |
| | Silver, Total Recoverable | µg/L | 1.12 | 2.24 |
| | Zinc, Total Recoverable | µg/L | 47.42 | 95.14 |

| Discharge Location | Parameter | Units | Effluent Limitations | |
|---|---|---|---|---|
| | | | Average Monthly | Maximum Daily |
| NGD-004 Saltwater System Supply Water | Copper, Total Recoverable | µg/L | 2.88 | 5.78 |
| | Nickel, Total Recoverable | µg/L | 6.78 | 13.60 |
| | Silver, Total Recoverable | µg/L | 1.12 | 2.24 |
| | Zinc, Total Recoverable | µg/L | 46.92 | 94.14 |

In addition to numeric technology-based limitations, the previous Order required the Discharger to develop and implement a BMP plan, as authorized by CWA section 304(e) and section 402(p). The requirement to update and implement a BMP plan is carried over from Order No. R9-2003-0265.

**2. Satisfaction of Anti-Backsliding Requirements**

All effluent limitations in this Order are at least as stringent as the effluent limitations in Order No. R9-2002-0169 and Order No. R9-2003-0265 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 has requested that four additional steam condensate discharges be authorized to discharge to the San Diego Bay (Discharge Point Nos. SC-150 through

SC-153). Order No. R9-2002-0169 regulated 190 steam condensate discharge locations. Previous discharges of steam condensate were estimated up to 2,150 gallons per day (GPD). However, due to the demolition of Piers 10 and 11 and replacement of Pier 10, and the demolition and replacement of Pier 12, there are now only 175 steam condensate discharge locations. The estimated discharge of steam condensate is now 2,000 GPD. Considering ht reduction in volume of steam condensate discharged to the receiving water, and the fact that the additional effluent streams are similar to the current steam condensate discharges, the addition of Discharge Point Nos. SC-150 through SC-153 for steam condensate discharges is not expected to negatively affect/impact the receiving water.

The Discharger applied in their application to discharge weight test water which was not regulated under Order No. R9-2002-0169. The Discharger stated in the application that water is drawn from the San Diego Bay and that nothing is added to the weight test water prior to discharge. The Regional Water Board conducted an RPA which indicates that these discharges have the reasonable potential to exceed water quality objectives. Effluent limitations for these discharges have been established in this Order. Due to the low volume and frequency of these discharges, the addition of Discharge Point Nos. WT-001 through WT-013 is not expected to negatively affect/impact the receiving water if the Discharger maintains compliance with the requirements of this Order.

The limitations and requirements of this Order are more stringent than established in Order No. R9-2002-0169 and Order No. R9-2003-0265. 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, fender, and mooring 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 for calculating the individual WQBELs for priority pollutants are based on the CTR-SIP, which was approved by USEPA on May 18, 2000. All beneficial uses and water quality objectives contained in the Basin 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.

## E. Interim Effluent Limitations

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL values shows that the Discharger may be unable to consistently comply with effluent limitations established in this Order for copper, lead, mercury, zinc, and TCDD-equivalents at Discharge Point Nos. SC-001 through SC-175 and copper and TCDD-equivalents at Discharge Point Nos. WT-001 through WT-013 As a result, this Order contains interim limitations for the parameters at Discharge Point Nos. SC-001 through SC-175 and WT-001 through WT-013 and a compliance schedule that allows the Discharger until May 18, 2010 to comply with the final effluent limitations. ~~Within 1 year after the effective date of this Order, the Discharger must prepare and submit a compliance plan that describes the steps that will be taken to ensure compliance with applicable 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 cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents ~~at Discharge Point Nos. SC-001 through SC-175 and copper and TCDD-equivalents at Discharge Point Nos. WT-001 through WT-013~~. 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.

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. R9-2002-0169.

Thus, the individual MECs for each discharge location shall serve as the interim effluent limitation concentration for the constituents.

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 cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents ~~at Discharge Point Nos. SC-001 through SC-175 and copper and TCDD-equivalents at Discharge Point Nos. WT-001 through WT-013.~~ in accordance with CWC section 13263.3(d)(2).

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-~~16~~24. Interim Effluent Limitations for Discharges of Steam Condensate at Discharge Point Nos. SC-001 through SC-175**

| Parameter | Units | Maximum Daily |
|---|---|---|
| Copper, Total Recoverable | µg/L | 130 |
| Lead, Total Recoverable | µg/L | 18.8 |
| Mercury, Total Recoverable | µg/L | 0.15 |
| Zinc, Total Recoverable | µg/L | 250 |
| TCDD-equivalents | µg/L | $4.4 \times 10^{-7}$ |

~~**Table F-17. Interim Effluent Limitations for Discharges of Weight Test Water at Discharge Point Nos. WT-001 through WT-013**~~

| ~~Parameter~~ | ~~Units~~ | ~~Maximum Daily~~ |
|---|---|---|
| ~~Copper, Total Recoverable~~ | ~~µg/L~~ | ~~26.3~~ |
| ~~TCDD-equivalents~~ | ~~µg/L~~ | ~~$6.3 \times 10^{-8}$~~ |

**Table F-25. Interim Effluent Limitations for USN Graving Dock**

| Discharge Location No. | Pollutant | Units | Maximum Daily |
|---|---|---|---|
| NGD-001 and NGD-002 Deflooding Water | Copper | µg/L | 11.1 |
| NGD-003 Caisson Ballast Dewatering | Cadmium | µg/L | 30 |
| | Copper | µg/L | 40 |
| | Nickel | µg/L | 50 |
| | Silver | µg/L | 10.1 |
| | Zinc | µg/L | 120 |
| NGD-004 Saltwater System Supply Water | Copper | µg/L | 213 |
| | Nickel | µg/L | 79.7 |
| | Silver | µg/L | 5.65 |
| | Zinc | µg/L | 771 |

### F. Land Discharge Specifications

**[Not Applicable]**

### G. Reclamation Specifications

**[Not Applicable]**

## 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-175)

**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 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 steam condensate discharges are elevated temperature wastes. In order to determine the effects of the discharge to 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. R9-2002-0169 indicates that the discharge has the reasonable potential to exceed water quality criteria for copper, lead, mercury, zinc, and TCDD-equivalents. Monthly monitoring using grab samples is required to determine compliance with the applicable effluent limitations.

**f.** ~~Annual m~~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. ~~Annual m~~Monitoring for arsenic, cadmium, chromium, nickel, and silver are included in this annual CTR monitoring and are no longer specified individually in the MRP.

**g.** Monitoring once in the five year permit cycle of steam condensate discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

**~~g.~~h.** Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of chemicals added to the steam boiler annually.

**2. Pier Boom, Fender, and Mooring 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, fender, and mooring 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 pier boom, fender, and mooring cleaning 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 determine the effectiveness of the Discharger's BMPs.

**d.** ~~Annual m~~Monitoring once in Year One and once in Year Five of pier boom, fender, and mooring cleaning 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.

**e.** Monitoring once in the five year permit cycle of pier boom, fender, and mooring cleaning discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

**~~e.~~f.** Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of pier boom, fender, and mooring activity annually.

**3. Utility Vault and Manhole Dewatering Monitoring (Monitoring Locations UV-001 through UV-015)**

**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, cadmium, 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, chrysene, 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 chromium and polycyclic aromatic hydrocarbons (PAHs) are included in this annual CTR monitoring and are no longer specified individually in the MRP.

**f.** Monitoring once in the five year permit cycle of utility vault and manhole dewatering discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

~~**f.**~~**g.** Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log of the utility vault and manhole dewatering discharges annually.

**4. Weight Test Water Monitoring (Monitoring Locations WT-001 through WT-013)**

**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 been established in order to determine compliance with effluent limitations.

**c.** Monitoring data submitted by the Discharger during the term of Order No. R9-2002-0169 indicates that the discharge has the reasonable potential to exceed water quality criteria for copper and TCDD-equivalents. Quarterly monitoring using grab samples is required to determine compliance with the applicable effluent limitations.

**d.** Annual monitoring of weight test water 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.

**e.** Monitoring once in the five year permit cycle of weight test water discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

~~e.~~**f.** This Order establishes a requirement to submit a log of weight test water discharges annually.

**5. 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.** ~~Annual m~~Monitoring once in Year One and once in Year Five of the miscellaneous discharges for the 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.

**c.** Monitoring once in the five year permit cycle of the miscellaneous discharges for acute and chronic toxicity has been included to determine if reasonable potential exists for the discharges to exceed the water quality criteria, as specified in this Order.

~~c.~~**d.** Consistent with Order No. R9-2002-0169, this Order requires the Discharger to submit a log identifying significant changes in the operation of miscellaneous discharges annually.

**Discharges at USN Graving Dock.** Based on the industrial types of activities that occur on-site, and the types of discharges from the USN Graving Dock, annual effluent monitoring at all effluent monitoring locations for settleable solids, turbidity, total suspended solids, oil and grease, total petroleum hydrocarbons, polynuclear aromatic hydrocarbons, tributyltin, lead, and total residual chlorine have been carried over from MRP No. R9-2003-0265.

**6. Graving Dock Deflooding And Salt Water Rinse (Monitoring Location Nos. NGD-001 and NGD-002)**

a. Daily Flow monitoring has been established for graving dock deflooding and salt water rinse so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Annual monitoring for oil and grease, settleable solids, turbidity, pH, temperature, copper, and acute toxicity has been established to determine compliance with applicable effluent limitations.

c. Annual monitoring for tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed water quality objectives/criteria in future permitting efforts.

d. Monitoring for chronic toxicity was not established due to the intermittent frequency of discharge expected for these types of effluents and chronic toxicity effluent limitations were not established in the previous Order. As noted above, monitoring for acute toxicity is established in this Order and is more appropriate for short term intermittent discharges.

**7. Caission Gate Ballast Water and Saltwater Supply System (Monitoring Location No. EFF-003)**

a. Daily effluent flow monitoring has been established so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Monitoring requirements from MRP No. R9-2003-0265 have been carried over. Monitoring for lead, mercury, and PAHs are included under the requirement to monitor for the remaining CTR Priority Pollutants. Annual monitoring for tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed water quality objectives/criteria in future permitting efforts.

c. Individual monitoring requirements for cadmium, copper, nickel, silver, and zinc have been carried over to ensure compliance with applicable effluent limitations.

**8. Emergency Fire Suppression Water and Salt Water Supply Water (Monitoring Location No. EFF-004)**

a. Daily effluent flow monitoring has been established so that the volume of effluent being discharged from the Facility into the San Diego Bay can be determined and the approximate amount of pollutants discharged can be accurately calculated.

b. Monitoring requirements from MRP No. R9-2003-0265 have been carried over. Monitoring for cadmium, lead, mercury, and PAHs are included under the requirement to monitor for the remaining CTR Priority Pollutants. Annual monitoring for tributyltin and the remaining CTR priority pollutants has been established to evaluate reasonable potential for the discharge to exceed water quality objectives/criteria in future permitting efforts.

c. Individual monitoring requirements for copper, nickel, silver, and zinc have been carried over to ensure compliance with applicable effluent limitations.

## C. Whole Effluent Toxicity Testing Requirements

For the first 4 years of the permit term, Order No. R9-2002-0169 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. R9-2002-0169 required the Discharger to analyze a representative sample from each area at NBSD 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. R9-2002-0169 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~~ two storm events 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.

This order carries over the monitoring requirements for the USN Graving Dock for acute toxicity and chronic toxicity from Order No. R9-2003-0265. The testing requirements have been revised to be applicable with the new acute toxicity limitation, based on a t-test, as specified in the MRP.

## 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 San Diego Bay, applicable beneficial uses, and aquatic life.

**b.** Annual monitoring of the remaining CTR priority pollutants at a single location in 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~~ Quarterly temperature monitoring has been established in order to determine compliance with the effluent limitations for temperature for discharges of steam condensate.

**d.** Annual monitoring of the CTR priority pollutants has been added to help determine reasonable potential, as specified in section 1.3 of the SIP, for future permitting efforts and provide data to help determine long-term trends in receiving water quality.

### 2. Groundwater

**[Not Applicable]**

## E. Other Monitoring Requirements

1. The discharge of contact storm water to the San Diego Bay 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. R9-2002-0169 to determine the effects of storm water discharges on the receiving water and monitor the effectiveness of the SWPPP.

2. Monitoring requirements for spill and illicit discharges, chemical utilization, and waste hauling have been carried over from MRP No. R9-2003-0265 to help determine the effectiveness of the BMP Plan and ensure that appropriate BMPs are properly implemented.

3. The discharge of contact storm water to the San Diego Bay through Discharge Point Nos. SW-010 through SW-011 may contain pollutants from the surrounding area which could contribute to the exceedance of the water quality criteria/objectives of the receiving water. Storm water monitoring requirements have been carried over from Order No. R9-2003-0265 to determine the effects of storm water discharges on the receiving water and monitor the effectiveness of the BMP Plan.

4. The General Shipyard Permit (Order No. 97-37; NPDES No. CAG039001) established a sediment monitoring program for the shipyards and required the facilities to collect annual surficial sediment samples. The sediment monitoring program also required sampling at three background reference stations in San Diego Bay. The monitoring included sediment sampling for grain size, trace metals including cadmium, chromium, copper, nickel, silver, mercury, arsenic, lead, zinc, TBT, TPH, PCBs/PCTs, and PAHs, and an analysis of paint chips entrained in the sediment. The purpose of the sampling is to monitor the levels of sediment contamination and to use the information for any future cleanups and implementation of waste load allocations for the TMDL program.

   Sediment monitoring requirements have been carried over from Order No. R9-2003-0265.

5. 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.

## 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.

**2. Special Studies and Additional Monitoring Requirements**

**a. Toxicity Reduction Requirements**

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.a 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. R9-2002-0169 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 Utility Vault Dewatering Discharges* as required by Order No. R9-2002-0169, 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, Fender, and Mooring Cleaning Discharges.** Due to the nature of activities associated with discharges from pier boom, fender, and mooring 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, fender, and mooring 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. 2002-0169, 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. R9-2002-0169 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. R9-2002-0169, this Order requires the Discharger to continue to implement and regularly update an adequate SWPPP as specified in Attachment G.

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 San Diego Bay.

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 NBSD 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. R9-2002-0169 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 R9-2002-0169 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 1,800 µg/L of copper and 10,000 µg/L of zinc. Due to the elevated levels of copper and zinc, and consistent with Order No. 2002-0169, this Order retains the requirements to monitor storm water discharges and modify the SWPPP as necessary.

e. **Evaluation and Minimization Plan for Copper and Zinc in Storm Water.** Order No. R9-2002-0169 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 cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents, and that pollution prevention is necessary to achieve water quality objectives for these constituents. The Discharger ~~shall~~ is required to develop and implement a Pollution Prevention Plan for cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents, which at a minimum, meets the requirements outlined in CWC section 13263.3(d)(2) in this Order.

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.

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.

g. Order No. R9-2003-0265 required the Discharger to develop and implement a BMP plan, to prevent, or minimize the potential for the release of pollutants to waters of the state and waters of the United States. This Order requires the Discharger to continue to implement and regularly update an adequate BMP Plan as specified in Attachment I.

**4. Construction, Operation, and Maintenance Specifications**

The construction, operation, and maintenance specifications have been retained from Order No. R9-2002-0169.

**5. Special Provisions for Municipal Facilities (POTWs Only)**

**[Not Applicable]**

**6. Other Special Provisions**

The disposal specifications have been retained from Order No. R9-2002-0169.

**7. Compliance Schedules**

a. **Compliance Schedules for Final Effluent Limitations for Cadmium, Copper, Lead, Mercury, Nickel, Silver, Zinc, and TCDD-Equivalents**

~~Section 2.2 of the SIP requires interim requirements to be included in an NPDES permit if a compliance schedule is granted in accordance with section 2.1 of the SIP. Data submitted by the Discharger over the term of Order No. R9-2002-0169 indicates that the Discharger cannot immediately meet applicable water quality criteria at Discharge Point Nos. SC-001 through SC-175 and WT-001 through WT-013. A compliance schedule for the Discharger to achieve compliance with final effluent limitations has been granted to the Discharger in accordance with section 2.1 of the SIP. By May 18, 2010, the Discharger shall comply with the final effluent limitations for copper, lead, mercury, zinc, and TCDD-equivalents at Discharge Point Nos. SC-001 through SC-175. By May 18, 2010, the Discharger shall comply with the final effluent limitations for copper and TCDD-equivalents at Discharge Point Nos. WT-001 through WT-013.~~

On December 3, 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, mercury, zinc, and TCDD Equivalents for the steam condensate discharges to San Diego Bay.

On January 17, 2009, 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 deflooding water discharges to San Diego Bay; cadmium, copper, nickel, silver, and zinc caisson ballast dewater discharges to San Diego Bay; and copper, nickel, silver, and zinc saltwater system supply water discharges to San Diego Bay.

These pollutants have been quantified in the steam condensate discharges, deflooding water discharges, caisson ballast dewater discharges, and saltwater system supply water discharges through point source discharge analyses performed in accordance with Order No. R9-2002-0169 and Order No. R9-2003-0265 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 these Discharge Points.

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.

**Steam Condensate Copper Pollutant** -
The Discharger's December 3, 2008 letter states that the discharge has been evaluated and the source for the steam condensate copper pollutants is primarily from the steam condensate piping. The piers at Naval Base San Diego and associated miles of steam lines do not currently posses steam condensate return systems. Navy ships require steam service while berthed at Naval Base San Diego piers. 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 the cost 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.

**Steam Condensate TCDD Pollutant** -
The Discharger's December 3, 2008 letter states that the discharge has been evaluated and the source for the steam condensate TCDD pollutant has not been determined at this time. The only practical option to meeting the final effluent limit as proposed would be to eliminate the discharges by installing a condensate return system. Although the cost 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.

**Deflooding Water Copper Pollutant** -
The Discharger's January 17, 2009 letter states that the discharge has been evaluated and the source for the deflooding water copper pollutant is primarily from the pumping and/or piping system and San Diego Bay water. The only practical option to meeting the final effluent limits as proposed would be treatment or elimination of the discharge by routing the discharge to the sanitary sewer. Although an estimate to treat this discharge has not been generated, the costs are expected to be exorbitant based on the performance standard that would be required to meet proposed effluent limitation. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

**Caisson Ballast Dewater Copper Pollutant** -
The Discharger's January 17, 2009 letter states that the discharge has been evaluated and the source for the caisson ballast dewater copper pollutants is primarily from the pumping and/or piping system and San Diego Bay water. The only practical option to meeting the final effluent limits as proposed would be treatment or elimination of the discharge by routing the discharge to the sanitary sewer. Although an estimate to treat this discharge has not been generated, the costs are expected to be exorbitant based on the performance standard that would be required to meet proposed effluent limitation. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

**Caisson Ballast Dewater Zinc Pollutant** –
The Discharger's January 17, 2009 letter states that the discharge has been evaluated and the source for the caisson ballast dewater zinc pollutant is primarily from the cathodic corrosion prevention system. The caisson zinc anodes have been replaced with aluminum anodes to reduce the zinc levels in the discharge. The Navy will be evaluating the effect of the aluminum anode installation. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

**Caisson Ballast Dewater Cadmium, Nickel, and Silver Pollutant** -
The Discharger's January 17, 2009 letter states that although the maximum effluent concentrations for cadmium, nickel, and silver do not exceed the proposed final effluent limitations, the Navy requests interim effluent limitations for these constituents. The extended time period would allow for further study of the presences of these constituents in the discharge. The Navy requests the Regional Board provide the maximum allowed compliance schedule in the NPDES permit.

Based on effluent monitoring data submitted by the Discharger, a comparison between the MEC and calculated AMEL values shows that the Discharger may be unable to consistently comply with effluent limitations established in this Order, therefore, the Regional Water Board establishes interim limits in this Order.

The Regional Board grants the Navy request for the maximum allowed compliance schedule for the Discharger to come into compliance with the final effluent limitations because the maximum compliance schedule allowed is less than the one year. 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 cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents.

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. ~~Because these compliance schedules are greater than 1 year, in accordance with the section 2.2.1 of the SIP, the Discharger shall submit semi-annual progress reports in accordance with the Monitoring and Reporting Program.~~

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 cadmium, copper, lead, mercury, nickel, silver, zinc, and TCDD-equivalents, 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.

## 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 San Diego. 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 June 28, 2009; posted on the Regional Board FTP site and sent by mail and e-mail on July 9, 2009; and posted on the Regional Board website on July 13, 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 August 10, 2009~~June 18, 2008~~.

### 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: **August 12, 2009 ~~June 25, 2008~~**
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.

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.

# 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.

[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.

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 NBSD, 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,

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..

## 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-

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.

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:

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.

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.

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.

## 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.

## 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 | | | |

| 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 | | | |

## 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

**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<br>- Minimize run-on of storm water into the fueling area<br>- Cover fueling area<br>- Use dry cleanup methods rather than hosing down area<br>- Implement proper spill prevention control program<br>- Implement adequate preventative maintenance program to prevent tank and line leaks<br>- Inspect fueling areas regularly to detect problems before they occur<br>- 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 | |

## ATTACHMENT H – POLLUTION PREVENTION PLAN (PLAN) REQUIREMENTS FOR UTILITY VAULT AND MANHOLE DEWATERING DISCHARGES

**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.

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.

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.

# ATTACHMENT I – BEST MANAGEMENT PRACTICES PLAN FOR PIER BOOM, FENDER, ~~AND~~ MOORING CLEANING DISCHARGES, AND USN GRAVING DOCK

## 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.

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. Ensure that the discharge of pollutants including, but not limited to, copper, benzo (b) fluoranthene, benzo (k) fluoranthene, chrysene, and TCDD-equivalents from pier boom, fender, and mooring cleaning 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.

## 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.