California Environmental Protection Agency
Department of Toxic Substances Control

HAZARDOUS WASTE FACILITY PERMIT

Permit Number: 97-SC-002

Facility Name:
North Island Hazardous Waste Facility Complex
Naval Air Station North Island
San Diego, California 92135-5000

Owner Name:
United States Navy
Commander Navy Region Southwest
33000 Nixie Way, Building 50,, Suite 326
San Diego, California 92147-5110

Operator Name:
Shaw Infrastructure, Inc.
2790 Mosside Boulevard
Monroeville, Pennsylvania 15146

Facility EPA ID Number: CA7170090016

Effective Date of Permit:
January 5, 1998

Expiration Date of Permit:
January 4, 2008

Date Modified:
June 7, 2007

Modification Number:
MOD2 NC3-2007-008

Pursuant to section 66270.42, title 22, division 4.5, California Code of Regulations, the Hazardous Waste Facility Permit modified on June 28, 2006, effective January 5, 1998, is hereby modified to: 1) allow the use of roll-off bins under two filter presses at the Industrial Waste Treatment Plant and the Oil Recovery Plant; 2) add a description and maximum storage volume of the maintenance waste, 3) reduce the maximum storage capacity at CST1, 4) modify the secondary containment of two filter press areas and two loading/offloading areas; 5) update the Emergency Coordinators list, notification procedures, equipment locations and figures in the contingency plan. Pages 6, 9, 11, 15, 16, 38, 40-43, 69, 71, 107, 117 and 118 of the June 28, 2006 permit are affected by these modifications. Due to reformatting, the entire permit is repaginated. The revised permit consists of 124 pages including appendices.

José Kou, P.E., Chief,
Southern California Permitting and
Corrective Action Branch
Department of Toxic Substances Control

Date: signed by José Kou on June 7, 2007

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ATTACHMENT A

Hazardous Waste Facility Permit
North Island Hazardous Waste Facility Complex
Naval Air Station North Island
San Diego, California 92135-5000

EPA ID No. CA7170090016

I DESCRIPTION OF FACILITY

I.A Ownership, Operation, and Location

Pursuant to Division 20, Sections 25200 and 25159.5 of the California Health and Safety Code (H&SC), and the Solid Waste Disposal Act, as amended by the Resource Conservation and Recovery Act of 1976 (42 USC 6901 et seq., commonly known as RCRA), as amended by the Hazardous and Solid Waste Amendments of 1984 and regulations promulgated thereunder, this Hazardous Waste Facility Permit is hereby issued to the Commander Navy Region Southwest (CNRSW), facility's owner, and Shaw Infrastructure, Inc., the facility's operator, a treatment, transfer and storage facility in San Diego, identified by U. S. Environmental Protection Agency Identification Number CA 717 009 0016 (hereinafter referred to as "PWC"). In 2005, CNRSW has applied to the California Environmental Protection Agency, Department of Toxic Substances Control (DTSC) for a change in owner/operator for the Hazardous Waste Facility Permit (hereinafter referred to as "Permit"). Prior to April 1, 2005, the owner/operator of the hazardous waste facility was the United States Navy Public Works Center.

The Facility is located at the North Island Hazardous Waste Facility Complex at Naval Air Station North Island (NASNI), San Diego, California. The permitted hazardous waste units are located at the North Island Hazardous Waste Facility Complex, located at latitude 32 deg 42.06' N and longitude 117 deg 12.10'W.

This permit authorizes the continued operation of the following hazardous waste management units for the full term of the permit as set forth in subsection II.I.:

- New Industrial Waste Treatment Plant (IWTP-2),
- Consolidation, Storage and Transfer Unit 1 (CST-1)

This permit authorizes the operation of the following new hazardous waste management units:

- Oil Recovery Plant (ORP), an oily waste treatment plant, to replace the Oily Waste Treatment Plant (OWTP);
- Consolidation, Storage and transfer Unit 2 (CST-2)

This permit establishes the closure requirements and/or schedules for the following hazardous waste management units:

- Oily Waste Treatment Plant (OWTP)
- PCB Storage Unit

At the time of this permit modification, the PCB Storage Unit is certified closed. DTSC acknowledged the closure certification report for the PCB Storage unit on March 10, 2000. In addition, NASNI started the operation of the ORP and submitted partial closure certification reports for the OWTP to DTSC on February 4, 1999 and June 18, 1999. The Navy is currently working with DTSC to complete the RCRA closure for the OWTP.

A brief description of operation at the permitted treatment units (IWTP-2 and ORP), the storage units (CST and CST-2) and the inactive unit (OWTP) is provided below.

I.B. Brief Description of Permitted Units

I.B.1. Hazardous Waste Treatment and Storage Units:

I.B.1.a. <u>Industrial Waste Treatment Plant (IWTP-2)</u>

The IWTP-2 unit consists mainly of several treatment tanks (T-1A/B, T-5A/B, T-6A/B , TN-1/2), a load equalization tank (IWLET or T-4B), a clarifier system, a clarifier unit (T-7), a surge tank (T-8), three dual media filters (T-10A,B &C), a Biotrickling Filter (BTF), four Granular Activated Carbon Adsorbers (V-1,2,3 & 4), and a filter press system.

The IWTP-2 treats a variety of wastes including, but not limited to, phenol/organic wastewater, cyanide, mixed metals, petroleum contaminated wastes, chromium wastes, non-hazardous general industrial wastes, groundwater and if required, treated ORP effluent. A complete list of

hazardous wastes that may be treated in this unit is listed in table IWTP-2-1 and the treatment processes are described as follows:

Phenol /Organic Wastewater

Phenol/organic waste is typically accumulated in one of two treatment tanks (T-1A or T-1B). If phenol/organic waste is discharged to any other tank within the IWTP-2, the wastes stored within a common secondary containment will be compatible and the tanks will be labeled with the contents. Either treatment tank can be removed from service. However, the treatment tank system cannot be bypassed entirely. Each treatment tank is equipped with a high level alarm.

When a phenol/organic waste treatment tank has been filled, the contents are mixed and field analyzed. The pH of the waste is adjusted to 3.5 or less by the addition of acid or caustic, as required. Oxidizers are added to the treatment tank to initiate the reaction. The reaction is typically taken to completion in the tank. Depending on the wastes' profile, the wastewater might also be treated in the tank for pH adjustment, metals, or cyanide prior to field analysis and discharge to a clarifier (T-7).

The reaction can also be carried out in the closed Fenton's Reactor. If this tank is utilized, the partially treated wastewater is pumped from tank T-1A or T-1B to the closed Fenton's Reactor. Additional quantities of oxidizers are added to the waste as it enters the reactor. The detention time of the reactor is four minutes. The oxidation process is completed during the one hour waste detention period. The treated waste is pumped to the LET system for additional treatment. Although the entire batch treatment process can be completed in a period of eleven hours, the system normally treats only one batch per day. However, the fenton's reactor has never been operated and PWC requested a permit modification to decontaminate and remove the Fenton's reactor tank on June 14, 2002.

Cyanide Waste

Cyanide waste is typically accumulated in one of two treatment tanks (T-6A or T-6B). If cyanide waste is discharged to any other tank within the IWTP-2, the wastes stored within a common secondary containment will be compatible and tanks will be labeled with the contents. Either treatment tank can be removed from service. However, the treatment tank system

cannot be bypassed entirely. Each treatment tank is equipped with a high level alarm.

When a cyanide waste treatment tank is filled, the contents are mixed, sampled, and field analyzed prior to treatment. The treatment process is a two- step alkaline chlorination. The first treatment consists of raising the pH to at least 10.0 with the addition of caustic and mixing oxidizers at concentrations proportional to cyanide concentrations. The second step is oxidation at a pH between 7.0 to 8.5.

When the cyanide destruction reaction is complete, the treated waste is sampled and field analyzed. If warranted, based on the initial profile, additional treatment for pH adjustment or metals might occur in this tank. The waste is then discharged and further treated in the clarifier (T-7), mixed media beds, wet GAC beds and the filter press. Two batches of cyanide plating waste can be processed each day.

Chrome Waste

Chromic acid is typically accumulated in tank T-5A and/or T-5B. If chrome waste is discharged to any other tank within the IWTP-2, the wastes stored within a common secondary containment will be compatible and the tanks will be labeled with contents. Either treatment tank can be removed from service. However, the treatment tank system cannot be bypassed entirely. Each treatment tank is equipped with a high level alarm.

When treatment tanks T-5A and/or T-5B are filled, the contents are mixed, sampled, and field analyzed prior to treatment.

The treatment process is designed to chemically reduce the hexavalent chromium to trivalent chromium, which can then be precipitated as a hydroxide compound. Treatment consists of mixing sulfuric acid for pH control and reaction acceleration and adding ferrous sulfate or sodium metabisulfite for chromium reduction. When the reduction reaction is complete, the treated waste is sampled and pumped to the LET or clarifier (T-7) system for additional treatment and neutralization. Two batches of acid plating waste can be processed each day.

In addition to phenol/general organic wastes, cyanide, mixed metals, contaminated oily wastes, and chrome wastes, other waste streams listed in

Table IWTP-2-1 may be periodically batch treated using the batch treatment tanks. The usage of the batch treatment tanks may be changed by the owner/operator. However, when tanks are used for a specific waste stream, logs specifying contents and procedures used to treat the batch are to be kept for each batch. Additionally, an appropriate label must be used for the tank indicating the contents of that tank. Waste stored within a common secondary containment area must be compatible.

Mixed Metal Waste

Mixed metal waste is typically accumulated in either tanks T-5A and T-5B or T-1A and T-1B. If mixed metal waste is accumulated in any other tank within the IWTP-2, the wastes stored within a common secondary containment will be compatible and the tanks will be labeled with the contents. Once the tank is full, the mixed metal waste is mixed, sampled, and field analyzed.

The treatment process involves the addition of precipitation agents to remove chelated and non-chelated regulated metals. Sodium bisulfite and a coagulant are added proportionally to the total metals concentration and the pH is adjusted to pretreat the metals. Once completed, the waste is pumped to the LET or clarifier (T-7) for further conditioning prior to metals removal in the clarifier.

Oily wastewater contaminated with metals is accepted into either a tank in the cyanide or chrome tank systems, or the aqueous batch treatment tanks (TN-1 or TN-2). The waste is allowed time to physically separate. The water portion is then treated. The oily residue will be pumped to the ORP LET.

In addition to phenol/general organic wastes, cyanide, mixed metals, contaminated oily wastes, and chrome wastes, other waste streams listed in Table IWTP-2-1 may be periodically batch treated using the batch treatment tanks. The usage of the batch treatment tanks may be changed by the owner/operator. However, when tanks are used for a specific waste stream, logs specifying contents and procedures used to treat the batch are to be kept for each batch. Additionally, an appropriate label must be used for the tank indicating the contents of that tank. Waste stored within a common secondary containment area must be compatible.

General Industrial Waste Train

General industrial waste (non-hazardous) is received into the IW/ORP LET via the general industrial underground lined pipeline or pumped from tanker trucks using above ground piping into the LET.

The IW LET system consists of a 465,000-gallon storage tank equipped with mixers, chemical addition capabilities, and an active skimmer. The function of the LET system is to equalize the flow and constituents, adjust pH for metals removal perform any of the treatment processes previously described, and provide adequate waste storage capacity during periods of plant shutdown for maintenance or emergency. The tank is equipped with a high level alarm.

The LET is periodically sampled and field analyzed for constituents of concern and pH.

As the conditioned effluent from the LET is pumped to the clarifier system, a coagulant and a flocculent may be added via specific in-line static mixers, to facilitate the precipitation of regulated metals. The clarifier is a 108,000 gallon circular tank with a mechanical scraper on the bottom for sludge removal. The sludge generated is periodically pumped to the filter press system for dewatering prior to disposal. The clarified water flows over a tap weir into a surge tank.

Non-hazardous waste from the surge tank is pumped through an ultraviolet (UV) light disinfection module to the dual-media filter units. The UV module is designed to destroy any bacteria that might be present in the waste. Without a disinfection process in the treatment train, uncontrolled microbial growth on the carbon filter beds could cause clogging and filter damage. The UV module is now removed.

The three dual-media filter units at the IWTP -2 are pressure vessels containing layers of coal and sand filter media. The dual-media filters are used to remove any residual suspended solids from the clarifier unit effluent. The filters are backwashed periodically with effluent from the clarifier. The wash water is pumped back to the LET system, a batch treatment tank or clarifier for treatment. The effluent from the dual-media filter units is routed to the granular activated carbon (GAC) modules. The dual-media filter system can be either partially or completely bypassed.

The effluent from the dual-media filter units is routed through two downflow, fixed bed type GAC modules. Each module consists of two vertical pressure vessels. The GAC modules are used to adsorb organic contaminants from the waste stream, thereby reducing the Total Toxic Organics (TTO) concentration of the waste to an acceptable level. The GAC modules units are sized to provide a minimum carbon contact time of 60 minutes at design flow. The effluent from the GAC modules is sampled in accordance with the Industrial User Discharge Permit and discharged to the NASNI sanitary sewer system.

Within each module the two vertical pressure vessels operate in series; the two GAC modules operate in parallel. Each module is piped for downflow waste feed. Spent carbon is periodically removed, replaced, and either regenerated off-site or properly disposed of. The affected module is only removed from service during the actual carbon transfer operation. The modules can both be bypassed simultaneously.

Sludges produced by the various treatment processes at the IWTP-2 are routed to the filter press system for dewatering prior to disposal. Sludge is either accumulated in the clarifier and pumped to the filter press system, or it is pumped manually from the batch treatment tanks to the filter press system. The filter press system is comprised of a storage tank (T-34), two day tanks, a filter press, a secondary containments system, and accumulation containers. The dewatered sludge from the filter press is stored in a 14.2cubic yard roll-off bin under the filter press. The roll-off bin, once filled, is moved to a container storage unit known as the Industrial Waste/Oily Waste (IW/OW) Container Storage Area located behind Building 788 for storage prior to its transport to an offsite treatment, storage and disposal facility. The filtrate is either accumulated in a day tank and transported to a batch treatment tank or it flows to the LET system.

The chemicals and materials needed to treat the various waste streams are stored at the IWTP-2. Bulk storage of chemicals and materials ensures that adequate treatment levels can be maintained, despite temporary disruptions in the availability or delivery of those chemicals and materials. The chemicals and materials stored at the IWTP-2 include: sulfuric acid, sodium hydroxide, hydrogen peroxide, calcium hypochlorite, ferrous sulfate, sodium metabisulfite, polyelectrolytes or polymers; and GAC.

Treated wastewater from the IWTP-2 is discharged to the NASNI sanitary sewer system for eventual discharge to the San Diego Metro sewerage

system. The arrangement of the treatment units at the IWTP-2 provides the operator with the flexibility to isolate treatment units for maintenance or repair, while preventing the discharge of untreated wastewater.

The IWTP-2's treatment produces three wastestreams: wastewater, activated carbon and sludge. The wastewater is discharged to the City of San Diego sanitary sewer system in accordance with the Industrial Wastewater Discharge Permit granted to the Navy. The activated carbon and dewatered sludge are disposed of as hazardous waste.

I.B.1.b. Oil Recovery Plant (ORP)

Oily Petroleum contaminated wastes at NASNI are generated by pierside activities on vessels located at Pier J and K and Quay Wall (Pier L-P) and the Depot Maintenance Facility. Vessels are connected to the pier-side risers and discharge into secondarily-contained pipes that lead to lift stations. The lift stations pump petroleum waste to the ORP via secondarily- contained oily waste pipeline. Petroleum and petroleum contaminated wastes can also be received at the ORP via trucks and containers.

The pipeline waste is discharged to the ORP LET (T-4A) or IW LET (T-4B) and containerized or trucked waste is discharged to the ORP LET, IWLET, or recovered oil tanks.

The ORP and IW LET provide residence time for physical separation of the petroleum into two phases, petroleum on top and water on the bottom. Floating mechanical skimmers located inside the ORP and IW LET remove free petroleum product via gravity or pump and discharge it to the oil skimmer recovered oil day tank (T-36). From T-36, the recovered oil is then pumped to the recovered oil storage tanks.

The water phase of the IW/ORP LET typically consists of sea water and water containing small concentrations of oil droplets and chemically emulsified oil. From the LET, the water phase is pumped to a parallel plate coalescer (T-23A) for additional oil removal, then through a dissolved air floatation (DAF) unit (T-24A) to a wastewater surge tank. From the surge tank (T-25A), the waste is pumped into either a sewer connection or the IWTP-2 LET or tanks 1A and 1B for further treatment, if necessary.

When the main ORP (T-23A, T-24A and T-25A) are down for maintenance and repair activities, the ORP “Backup Tanks” (T-23B, T-24B and T-25B) are used to process the waste at a maximum rate of 200 gallons per minute which is half the processing capacity of the main ORP tanks.

Any oil removed is collected in the recovered oil surge tank (T-27) and is then pumped to the recovered oil tanks.

In the DAF unit, the oil/water emulsion is broken via the addition of coagulants, flocculants, reducing agents, caustics, and acids. Table 1 provides a listing of the chemicals typically used for this process. The DAF unit is equipped with a flash mixing chamber and a flocculation chamber to enhance the chemical reactions and flocculent growth. To further aid in the removal of the oil droplets, a pressurized flow of treated waste that has been saturated with air is mixed with the waste flow from the flocculation chamber. The resulting release of dissolved air in the form of minute bubbles causes the oil droplets and small suspended solids to rise to the surface of the tank. The floating material forms a scum layer that is removed by a mechanical skimmer and discharged to the scum surge tank (T-26).

From the scum surge tank (T-26), the scum is pumped to the scum storage tank (also known as sludge pretreatment tank). When a sufficient amount of scum has accumulated, the scum is discharged to the rotary drum vacuum filter system for dewatering or a filter press. The rotary drum/ filter press system consists of a 2,300 gallon day tank with mixer, a rotary drum,a filter press, and a diatomaceous earth application system. The dewatered sludge cake from the filter is accumulated in a 14.2 cubic yard roll-off bin under the filter press. The roll-off bin, once filled, is moved to the IW/OW Container Storage Area located behind Building 788, and the filtrate is pumped back to the ORP/IW LET for treatment.

Suspended solids formed in the DAF unit that are too heavy to float, settle to the bottom of the unit as sludge. The bottom screw conveyor in the DAF unit pushes the sludge to a discharge port for release to T-26. The scum surge tank. Sludges are then discharged to and dewatered by the rotary vacuum filter press system described above.

The ORP treatment results in three waste streams: contaminated wastewater, sludge and carbon. The wastewater effluent from the ORP is discharged into the City of San Diego sanitary sewer, unless further

treatment is required by the Industrial User Discharge Permit. If difficulties are encountered in the treatment process, it is possible to route the ORP effluent to the IWTP-2. The contaminated carbon and sludge are characterized and disposed of accordingly.

I.B.2 Container Storage Units

I.B.2.a Collection, Storage, and Transfer (CST-1) Unit

The CST-1 unit is a multi-functional unit. The unit provides for the collection (*including* consolidation), storage, and transfer of hazardous and non-hazardous wastes; houses pollution prevention and source reduction equipment; and serves as a storage and collection center for recyclable and exempt materials.

The CST-1 unit contains equipment to process and puncture Universal Waste Aerosol Cans in accordance with California Health and Safety Code, section 25201.16. Aerosol can puncturing is authorized but is not currently being conducted at the facility.

CST personnel pick-up, properly characterized and containerized wastes from various generator sites. Once the wastes arrive at the unit, on-duty CST technicians inspect the containers and wastes to ensure acceptability in accordance with the facility permit. Wastes deemed acceptable are segregated and processed in accordance with their final disposition. Unacceptable wastes are returned to the generator.

The CST-1 Unit consists of an inside and an outside storage area. Additionally, a separate outside area is dedicated to consolidation efforts.

The inside storage area is the primary storage area. The perimeter of the storage pad is fitted with a 6-inch concrete curb. The primary entrance is protected by a concrete ramp. The floor of the storage area slopes inward from the berms toward a floor drain and a perforated manhole cover. Any spills or leaks flow by gravity to the floor drain that routes the liquid to a collection sump located under the floor slab. Precipitation collecting on the storage pad is minimal because the CST Unit is completely enclosed.

The concrete collection sump located under the slab of the inside containment area has a capacity of 1,450 gallons and measures 7 feet deep, 3.5 feet wide, and 8 feet long. The collection sump, combined with

the bermed areas, have in excess of 20,000 gallons of capacity. This is sufficient volume to contain the volume of the largest container stored in a single cell or 10% of the aggregate volume.

The inside containment consists of a 6-inch thick concrete slab on grade. The slab is reinforced with 6" x 6"-10/10 welded wire fabric to prevent crack opening or movement. The slab is underlain by a 2-inch layer of sand and a 4-mil polyethylene vapor barrier sheet. The concrete berms at the edge of the slab are 6 inches high. The perimeter berm is discontinuous at the entrances, which are protected by the concrete ramp and asphalt berm described previously. The area surrounding the unit is graded to drain away from the unit.

An outside storage area is located adjacent to the south side of the CST-1 building and is covered. The outside storage area is approximately 40 feet wide and 25 feet long. The entire area is enclosed by an 8' steel fence. The storage area consists of a 6-inch thick concrete slab on grade. The slab is reinforced with 6" x 6"-10/10 welded wire fabric and is underlain by a 2-inch layer of sand and a 4-mil polyethylene vapor barrier sheet. The edge of the slab is fitted with concrete berms that are 6 inches high and 12 inches wide. Access to the storage area is provided by a concrete ramp over the berm. The floor of the storage area slopes inward from the berms. The storage area has sufficient volume to contain the rainfall from the 24-hour, 25-year storm (3.5 inches of precipitation) plus the 10% of the volume of the total container storage capacity of 12,210 gallons. As the area begins to fill with liquid, the accumulated liquid will be characterized as either hazardous or non-hazardous waste and managed accordingly.

Two separately bermed outside consolidation areas are located directly to the west and south of the outside storage area respectively. The first area consists of a 13' x 27' concrete slab poured on grade. The slab is reinforced with wire mesh to guard against crack opening and provide added strength. The slab is further protected by a 6 inch concrete curb with access over the curb provided by a concrete ramp. The second area measures 33' X 67' and is protected by 6" concrete berms with access over the berms by concrete ramps.

I.B.2.b Collection, Storage and Transfer (CST-2) Unit

The CST2 unit is a new hazardous waste container storage area and a multi-functional unit. The unit provides for the collection (*including*

consolidation), storage, and transfer of hazardous and non-hazardous wastes; houses pollution prevention and source reduction equipment; and serves as a storage and collection center for recyclable and exempt materials. CST2 personnel pick-up properly characterized and containerized wastes from various generator sites. Once the wastes arrive at the unit, on-duty unit technicians inspect the containers and wastes to ensure acceptability in accordance with the facility permit. Wastes deemed acceptable are segregated and processed in accordance with their final disposition. Unacceptable wastes are returned to the generator.

The CST2 Unit consists of an inside storage area and an outside area dedicated to consolidation and staging efforts.

The inside containment area consists of 10 containment bays: one module (Module #1) enclosed on three sides by 8-inch concrete block walls extending 12 feet high, supported by ramps sloping into the bay from the main entrance and emergency exit door; seven `Storage Bays' approximately 1300 square feet each, enclosed on three sides by 8 to 12 inch concrete block walls extending a minimum of 8 feet high, sloped from the walls toward a flat floor surface possessing two containment basins placed at opposite ends of each bay; one Alternative Storage Bay providing approximately 1300 square feet in area, supported by concrete ramps sloping into the bay from the entrance, and enclosed by 12 feet high concrete walls on three sides; and one Repackaging Area enclosed on three sides by 12 feet high 8-inch concrete block walls and supported by sloped concrete curbs dropping vertically 1.5 inches. Precipitation does not collect inside the containment bays because the unit is completely enclosed.

The concrete collection basins inside the Storage Bays have a capacity of 890 gallons each and measure 1 foot deep, 3.5 feet wide, and 34 feet long. Each Storage Bay has two collection basins. The Alternative Storage Bay offers 1237 square feet of area protected on its sides by 6-inch concrete curbs. It has a containment capacity of 633.5 cubic feet or 4739 gallons. Additionally, the curbed area comprising the corridor has a capacity of 1627 gallons measuring 0.083 feet deep, 16.66 feet wide, and 156.66 feet in length. The combined containment capacity of the collection basins, the Alternative Storage Bay, and the corridor is 18,826 gallons, sufficient volume to contain the volume of the largest container stored in a single cell (119 gallons for containers containing liquids) or 10% of the aggregate volume.

The Repackaging Area is surrounded by 4-inch concrete ramps descending diagonally into the bay. A total vertical drop of 1.5 inches separates the lowest elevation at the base of the floor from the highest elevation point at the top of the ramps. This storage bay is approximately 22 feet wide and 38.33 feet long offering 843 gallons of containment capacity.

Module One is protected at its main entrance and emergency exit door by concrete ramps vertically dropping 6 inches, sloped toward the middle of the 760 square foot storage area. The area offers 2843 gallons of containment capacity.

The foundation of the unit and its perimeter is supported by, at a minimum, a 6-inch thick concrete slab on grade with #4 reinforcing bars to prevent crack opening or movement. The slab is underlain by a 4-inch sand layer and a 10 mil polyethylene moisture barrier sheet. The foundation is set above grade to prevent unit run on and divert liquid material away from the unit into a containment basin fitted with a post indicator valve which allows the collected material to be analyzed prior to discharge to the City of San Diego sanitary sewer or, if required, subsequent treatment.

The covered consolidation/staging area located on the southeast corner of the unit opposite the repackaging area is approximately 22.66 feet wide and 31 feet long. Concrete curbs enclose the area sloping towards its center, creating a vertical drop of 1-inch. Additionally, the staging area is protected by a 3.5’ x 3.5’ x 3.3’ containment basin. The 740 gallons of approximate containment capacity offered by the consolidation/staging area is sufficient to contain accumulated liquids since the area is not used to store hazardous waste. Additionally, the ceiling above the area is designed to direct precipitation away from the unit. Liquid accumulated in the bay will be characterized as either hazardous or non-hazardous waste and discharged, if suitable, into the sanitary sewer system.

I.B.2.c. IW/OW Waste Container Storage Area

The IW/OW Container Storage Area is located behind Building 788. It is used to store filter cake from the dewatering system units at the IWTP and the ORP. Liquid or solid sludges generated during tank cleanings/maintenance at the IWTP and ORP can also be stored at this unit after a notification to DTSC. The IW and OW maintenance-related wastes include granulated activated carbon, mixed media, media packs (coalescing filters), sandblasting/coating waste, filter cloths and non-

pumpable tank bottoms.

The IW/OW Container Storage Area is an outside reinforced concrete storage pad with an epoxy coating system. The perimeter of the storage pad is fitted with a 5” to 6” high epoxy-coated concrete curb. The entrance is protected by a 5”concrete ramp. The floor of the storage area slopes to the northwest corner of the pad where liquids can be removed.

It measures 63’-8.5” wide by 85’-6.5” long. The perimeter of the storage pad is fitted with a 5” to 6” concrete curb. Inside the storage area is a 7’-9.5” wide by 7’-9.5” long curb that protects Monitoring Well S11-MW-4, which is located in the center of the storage area. The 26” curb encloses the monitoring well to prevent runoff or spills from the storage pad into the area surrounding the monitoring well. The total available containment capacity is approximately 16,000 gallons.

I.B.3 Treatment units under the closure

I.B.3.a Oily Waste Treatment Plant (OWTP) *(Closure certifications submitted to DTSC on February 4, 1999 and June 18, 1999. Status is inactive.)*

This unit was located behind Building 795 and was scheduled to be closed once the ORP became operational. The existing OWTP will be clean closed, thereby minimizing the requirement for post-closure maintenance. Specifically, at closure, all hazardous materials and wastes (except waste oil in storage) will be removed from all storage location within the OWTP. Tanks, appurtenances, and ancillary equipment not incorporated as part of the ORP was decontaminated and managed accordingly. Actions taken to prevent future infiltration and migration of contaminants in the soil (including remedial efforts regarding the OWTP conveyance system) are not included in the scope of the closure described above. These issues will be addressed by the Navy's Installation Restoration Program with oversight from DTSC's Office of Military Facilities (OMF) in accordance with guidelines established by the RCRA Corrective Action Plan being prepared by the Navy.

The primary use of tankage and ancillary equipment at the OWTP is to process oily liquid wastes received from federal facilities and to store recovered oil prior to reuse. Treatment systems at the OWTP include: load equalization and oil/water separator tanks, a flotation/clarifier system; a

scum/sludge dewatering tank system and a sludge rotary drum vacuum filter system.

I.C Compliance with the California Environmental Quality Act

DTSC has prepared an Initial Study to evaluate the potential impact of the proposed project to human health and the environment. Based on the findings in the Initial Study, DTSC has determined that a permit condition for transporting hazardous wastes is required. During the peak hours, which are from 7:00 to 8:00 a.m. and from 4:00 to 5:00 p.m., some street segments and intersections in the truck routes adopted by City Council of the City of Coronado, Resolution No. 6944, on May 1, 1990, were identified to have a level of service (LOS) E or F. See Table T-1 and T-2 (Appendix -A) for the street segments and intersections with LOS E or F. The LOS D is considered the minimum acceptable during peak hours. The permit condition restricts any hazardous waste shipments to and from hazardous waste management units pursuant to this Permit from using the truck routes adopted by the City Council of the City of Coronado, Resolution No. 6944 during peak hours (see detail in Section III.H. of this Permit). A Negative Declaration was completed in accordance with the California Environmental Quality Act (Public Resources Code, Section 21000, et seq.) and the State Guidelines.

I.D Definitions

The following definitions and others that may apply to this Part of the Permit shall be consistent with the California Code of Regulations (CCR), Title 22, Section 66260.10 and H&SC Section 25110.

"Day" means a calendar day. Periods of time are calculated by excluding the first day and including the last. Except, if the last day is a Saturday, Sunday or other holidays specified in Government Code section 6700, it is also excluded.

"Facility" means all contiguous land and structures, other appurtenances, and improvements on the land used for the treatment, transfer, storage, resource recovery, disposal, or recycling of hazardous waste. A hazardous waste facility may consist of one or more treatment, transfer, storage, resource recovery, disposal, or recycling hazardous waste management units or combinations of these units.

"Hazardous Constituent" means a constituent identified in Appendix VIII to Chapter 11, Division 4.5, Title 22, CCR; or any other element, chemical compound, or mixture of compounds which is a component of a hazardous waste or leachate and

which has a physical or chemical property that causes the waste or leachate to be identified as a hazardous waste.

"Hazardous Waste" means a hazardous waste as defined in 22 CCR 66261.3. Hazardous waste includes extremely hazardous waste, acutely hazardous waste, RCRA hazardous waste, non-RCRA hazardous waste, and special waste.

"Release" means any spilling, leaking, pumping, pouring, emitting, emptying, discharging, injecting, escaping, leaching, dumping, or disposing into the environment. Release does not include items described in 22 CCR 66260.10, Definition for "Release", Subsections (b)(1-3).

"Solid Waste Management Unit" or "SWMU" means any unit at a hazardous waste facility from which hazardous constituents might migrate, irrespective of whether the units were intended for the management of wastes, including but not limited to: containers, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators and underground injection wells.

"Waste" means waste as defined in 22 CCR 66261.2.

I.E Permit Modification History

Modifications to this Permit or the Operation Plan identified in Part II.M of this permit are allowed as per 22 CCR Section 66271.41 or 66271.42. All modifications made to this permit and/or Operation Plan are listed and described in Appendix A to this permit.

II GENERAL CONDITIONS

II.A Effect of Permit

II.A.1 The issuance of this Permit by DTSC does not release the owner and operator from any liability or duty imposed by federal or state statutes and regulations or local ordinances, except the obligation to obtain this Permit. In particular, unless otherwise specifically provided in this Permit, the owner and operator shall comply with the provisions of the H&SC, Division 20, Chapter 6.5 and the CCR, Title 22, Division 4.5.

II.A.2 Issuance of this Permit by DTSC does not prevent DTSC from adopting or amending regulations, issuing administrative orders, or obtaining judicial orders which impose requirements which are in addition to or more stringent than those in existence at the time this Permit was issued, and does not prevent the enforcement of these requirements against the owner and operator of the facility. The owner and operator shall comply with any such additional or more stringent requirements in addition to the requirements and conditions specified in the Permit. Where appropriate, this Permit is also subject to H&SC Sections 25159.5 and 25159.6 relating to the incorporation of Federal Regulations in the absence of equivalent State regulations.

II.A.3 This Permit does not convey any property rights of any sort, or any exclusive privilege.

II.B Requirement to Submit Information

All information, reports, submittals, or notices required by this Permit shall be submitted, if applicable, to:

Department of Toxic Substances Control
Chief, Southern California Permitting and Corrective Action Branch
1011 North Grandview Avenue
Glendale, California 91201

II.C Consent to Entry by DTSC Representatives

The owner and operator, by accepting this Permit, consent to entry by any authorized representative of DTSC or of the Local Health Officer at any reasonable hour of the day in order to carry out the purposes of the Hazardous Waste Control

Law, Health and Safety Code section 25100 et seq., including but not limited to the activities listed in 22 CCR, 66270.30(I).

II.D Specific Conditions

II.D.1 The owner and operator shall comply with the general facility standards contained in CCR, Title 22, Division 4.5, Chapter 14, Article 2.

II.D.2 The owner and operator shall comply with preparedness and prevention requirements contained in CCR, Title 22, Division 4.5, Chapter 14, Article 3.

II.D.3 The owner and operator shall comply with the contingency plan and emergency procedure requirements contained in CCR, Title 22, Division 4.5, Chapter 14, Article 4.

II.D.4 The owner and operator shall comply with the manifest system, record keeping and reporting requirements contained in CCR, Title 22, Division 4.5, Article 5 of Chapter 14 and Section 66270.30(l)(7)(8)(9).

II.D.5 The owner and operator shall comply with the closure and, if applicable, post-closure requirements contained in CCR, Title 22, Division 4.5, Chapter 14, Article 7.

II.E Land Disposal Restrictions

The owner and operator shall comply with applicable provisions of the land disposal restrictions as found in CCR, Title 22, Division 4.5, Chapter 18.

The owner and operator shall retain on-site, until closure of the facility, a copy of all notices, certifications, demonstrations, waste analyses data, and other documentation related to the management of all wastes (for on-site or off-site treatment, storage or disposal) subject to land disposal restrictions.

The owner and/or operator shall retain on-site, a current waste analysis plan describing how and when wastes or treatment residues will be tested to comply with the land disposal restriction regulations.

II.F Permit Actions

This Permit may be modified, revoked and reissued, or terminated for cause. The filing of a request by the owner and/or operator for a permit modification,

revocation and reissuance, or termination or a notification of anticipated noncompliance or planned changes (except as provided in 22 CCR, 66270.42(a)), does not stay any permit condition. Except as provided in 22 CCR, Section 66270.42(a), a new facility permit condition or a modification of an existing facility permit condition shall become effective on the date specified in DTSC's written notice of approval of the permit modification, pursuant to 22 CCR, 66270.42 and/or 66271.14.

II.G Need to Halt or Reduce Activity

It shall not be a defense for the owner and/or operator in an enforcement action that it would have been necessary to halt or reduce the permitted activity in order to maintain compliance with the conditions of this Permit.

II.H Severability

The provisions of this Permit are severable, and if any provision of this Permit or the application of any provision of this Permit to any circumstance is held invalid, the application of such provision to other circumstances and the remainder of this Permit shall not be affected thereby.

II.I Permit Expiration

The life of this Permit shall be 10 years. However, in accordance with 22 CCR, 66270.51, this Permit and all conditions therein will remain in effect beyond the permit expiration or termination date, until the effective date of a new permit, if the owner or operator has submitted a timely and complete Permit Application (both Part A and Part B) for a new permit and, through no fault of the owner or operator, DTSC has not issued a new permit. In accordance with 22 CCR, 66270.10(h), a timely and complete application for a new permit shall be submitted at least 180 days before this Permit expires, unless DTSC grants permission in writing for a later date. DTSC will not grant permission for application to be submitted later than the expiration date of the existing permit.

II.J 24-Hour Reporting

The owner and/or operator shall report to DTSC any incidents of noncompliance, with the conditions of this Permit and any of the provisions of CCR, Title 22, Division 4.5 or H&SC, Division 20, Chapter 6.5, which may endanger health or the environment, pursuant to the reporting requirements in 22 CCR, 66270.30(l)(6).

II.K Notice of Planned Physical Changes and Certification of Construction

The owner and/or operator shall give notice to DTSC as soon as possible, and at least 30 days in advance of, any planned physical alterations or additions to the permitted facility. In addition, prior to commencement of the treatment, storage, or transfer of hazardous wastes at a modified portion of an existing facility, the owner and operator shall comply with the requirements contained in 22 CCR, 66270.30(l)(2).

II.L Operation at Night

When the facility is operated during hours of darkness, the owner and operator shall provide sufficient lighting to ensure safe, effective management of hazardous wastes.

II.M Permit Application (Both Part A and B) of the Hazardous Waste Facility Units

II.M.1 By the issuance of this Permit, the Part A Permit Application dated June 14, 1994 and the Part B Permit Application dated May 21, 1994 which was revised on September 8, 1995 (hereafter called the Permit Application), are hereby approved. The Permit Application and any subsequent revisions thereto, (Part B Permit Modification Application dated August 10, 1998), subject to the permit modification requirements contained in 22 CCR, 66270.41 and 66270.42, are by this reference made part of this Permit. Specific sections of this Permit Application/Modification are referenced elsewhere in this Permit.

II.M.2 The owner and operator shall operate and maintain the facility in accordance with the approved Permit Application.

II.M.3 In the event of any conflict between this Permit and the approved Permit Application referenced herein, the most stringent provisions shall be controlling.

II.M.4 The approved Permit Application and this Permit shall be maintained at the facility and place of business at all times until final closure is completed.

II.N General Responsibilities of Owner and Operator

II.N.1 Compliance

The owner and operator shall comply with all conditions of this Permit in accordance with 22 CCR, 66270.30(a). The owner and operator shall comply with

all laws, regulations, permits, zoning conditions, and all other requirements established by federal, state, and local agencies.

II.N.2 Transfer of the Permit

This Permit may be transferred to a new owner or operator only if it is modified or revoked and reissued pursuant to 22 CCR, Section 66270.40. The owner and/or operator shall notify the Branch Chief of the Southern California Permitting Branch, in writing, of a proposed change in ownership of this facility no later than 90 days prior to the proposed date of transfer. A copy of the notification, required under 22 CCR, 66264.12(c), informing the new owner and operator of the requirements of this Permit and CCR, Title 22, Division 4.5, Chapters 14 and 20, shall be submitted to the Branch Chief, Southern California Permitting Branch.

II.N.3 Operation and Maintenance

II.N.3.a The facility shall be maintained at all times and operated to minimize the possibility of a fire, explosion, or any unplanned sudden or non-sudden release of hazardous waste or hazardous waste constituents to air, soil, or surface water which could threaten human health or the environment.

II.N.3.b All equipment, and ancillary pipelines used at the facility to handle, transfer, pump, or store hazardous wastes shall be maintained in a manner that prevents the leaking and spilling of hazardous wastes.

II.N.3.c The owner and operator shall at all times properly operate and maintain all facilities and systems of treatment and control in accordance with 22 CCR, 66270.30(e).

II.N.4 Submittal of Requested Information

The owner and/or operator shall furnish to DTSC, within the time specified by DTSC in its request, any relevant information which DTSC may request to determine whether cause exists for modifying, revoking and reissuing, or terminating this Permit, or to determine compliance with this Permit. The owner and/or operator shall also furnish to DTSC, upon request, copies of records required to be kept by this Permit.

II.N.5 Hazardous Waste List

The owner and/or operator shall maintain a current list of hazardous wastes that are handled by the facility. The owner and/or operator shall, as necessary, update the hazardous waste list presented in the approved Permit Application in accordance with the permit modification requirements contained in 22 CCR, 66270.42 (a), (b) or (c). Any additions to the list must be approved by DTSC, in accordance with the requirements of 22 CCR, 66270.41 and/or 66270.42, prior to their inclusion.

II.N.6 Anticipated Noncompliance

The owner and/or operator shall give advance notice to DTSC of any planned changes in the permitted facility or activity which may result in noncompliance with permit requirements, in accordance with 22 CCR, 66270.30(l)(2).

II.N.7 Noncompliance

In the event of noncompliance with the Permit, the owner and operator shall take all reasonable steps to minimize or correct releases to the environment, and shall carry out all measures as are reasonable to prevent and correct adverse impacts on human health or the environment. The owner and/or operator shall report to the California Office of Emergency Services (800) 852-7550 any circumstances that may endanger public health or the environment immediately upon becoming aware of the incident.

II.N.8 Incomplete and/or Incorrect Information

Where the owner and/or operator becomes aware that any relevant facts were not submitted in a Permit Application, or incorrect information was submitted in a Permit Application or in any report to DTSC, the owner and/or operator shall promptly submit such facts or information.

II.O Signatory Requirement

II.O.1 The owner and operator shall comply with the signatory requirements in 22 CCR, 66270.11, for all applications, reports or information submitted to DTSC.

II.O.2 The owner and operator shall provide documentation of an agreement for operation of the facility between the property owner and the facility owner, if different from the property owner.

II.P Waste Minimization Certification

The owner and/or operator shall certify annually, by March 1 for the previous year ending December 31, that:

II.P.1 To the degree determined by the owner and/or operator to be economically practicable, the facility has a program in place to reduce the volume and toxicity of all hazardous wastes identified in Section III of the approved Part B Permit Application which are generated by the facility operations to the degree, determined by the owner and/or operator, to be economically practicable.

II.P.2 The method of storage, treatment, or disposal is the only practicable method or combination of methods currently available to the facility which minimizes the present and future threat to human health and the environment.

The owner and/or operator shall make this certification, in accordance with 22 CCR, 66270.11. The owner and operator shall submit the certification to the Branch Chief of the Southern California Permitting Branch and shall record and maintain on-site such certification in the facility Operating Record.

II.Q Waste Minimization Conditions

II.Q.1 The owner and operator shall comply with the Hazardous Waste Source Reduction and Management Review Act requirements that are specified in Article 11.9 of the H&SC, and any subsequent applicable promulgations.

II.Q.2 The owner and/or operator shall submit a copy of all reviews, plans, plan summaries, reports and report summaries required by Section II.Q.1 above, to the Branch Chief of the Southern California Permitting and Corrective Action Branch, 1011 North Grandview Avenue, Glendale, California 91201 on or before January 2, 1997, and by January 2 every four years thereafter.

The Branch Chief of the Southern California Permitting and Corrective Action Branch may require the facility to submit a more detailed status report explaining any deviation from, or changes to, the approved waste minimization plan.

III SPECIAL CONDITIONS

III.A Prohibition of Disposal

Pursuant to H&SC Section 25203, hazardous wastes shall not be disposed of at the facility unless such disposal is properly authorized by DTSC under a permit.

III.B Permitted Waste Identification

Tables CST-1-1, CST-2-1, IWTP-2-1 and ORP-1 contain a specific listing of the wastes authorized for storage and treatment under this permit.

III.B.1 Storage in Containers

This permit authorizes the owner and/or operator to store for more than 90-days the following wastes in containers at the designated storage areas, subject to the conditions of this Permit, the requirements of CCR, Title 22, Division 4.5, Chapter 14, Article 9, and as follows:

III.B.1.a Table CST-1-1 lists all hazardous wastes that are stored in containers at the CST-1 Storage Unit.

III.B.1.b Table CST-2-1 lists all hazardous wastes that are stored in containers at the CST-2 Storage Unit.

III.B.1.c Table IW/OW -1 lists all hazardous wastes that are stored in containers at the IW/OW Waste Container Storage Area.

TABLE CST-1-1
LIST OF HAZARDOUS WASTES ALLOWED FOR STORAGE IN CONTAINERS AT THE CST-1 STORAGE UNIT

WASTE CATEGORY	USEPA Waste Codes	CA Waste Codes
Absorbent (dry sweep & rags w/oil, paint, solvents; debris)	D001 F001-005	151, 181, 223, 352
Adhesives	D001, D018 D035, F002 F003, F005	281, 725, 741, 751
Aqueous Solution (unspecified)	N/A	132, 133, 134 135, 223, 722
Asbestos	N/A	151
Batteries	D002, 3, 6 D007-10	722, 724, 725 726, 792
Corrosives: General	D002, F006, U133	181, 791, 792
Corrosives: Acids	D002, D005-11 F006, U032, U103, U131, U134	135, 141, 181 791, 792
Corrosives: Bases	D002-9, D011 F006	121, 122, 123 141, 181 722, 724, 725
Detergent/soap	D001-2	121, 122, 561, 791, 792
Empty containers (oil, paint, pesticides, solvent)	D001-43 F001-7	511, 512, 513
Filters (used oil/fuel)	D001, 6, 8	223
Flammable liquids (n.o.s.)	D001-2	134
Fuels (Waste gasoline, diesel, JP-5)	D001, 8, 18 U239	213, 223, 331 341, 342, 343 722-724, 726

Inorganic Waste (off-spec and other inorganics)	D002	141, 181
Laboratory chemicals	P/U Series	551
Machining waste (metal dust, sandblast grit)	D006-8, P015	172
Metal compounds	D001-11 P015, U032, U151	135, 141, 181 721-728
Oil (waste oil and grease)	N/A	221, 223
Organic Solvent: Halogenated	D001, 4-11, 19 D021, 22, 27-29 D039, 40, 43 F001-2 U037, 43-45, 61 U066, 70, 74, 75, 77 U078, 79, 80, 165 U208, 209, 210 U211, 226-228	211, 214, 251 331, 343, 741
Organic Solvent: Nonhalogenated	D001, 23, 26, 30, 35 D038, F003-5, P022 U019, 67, 165 169 U196, 220, 239	213
Organic Solvent: Oxygenated	D001, 4-11, U002 U031, 52, 112, 117 U122, 154, 159, 188	212
Oxygen Breathing Apparatus (OBA's)	D001, 3, 5	121, 141
Paint (Solvent and water based waste)	D001 D004-11 D035, F002-5	171, 212, 213, 214, 291, 351, 352, 461, 721-728, 751
Pesticides	D012-17, P096	231, 232, 801
Phenol	U188	212

Photochemical	D001-2, D007 D009, D011	214, 541 791, 792
Plating solutions (cadmium, chromium, lithium, nickel, copper, cyanide)	D002-3, D006-7 F007-9, F039 P030, U032	131, 132, 135 491
Poisons: Liquid	D001, 3, 11, P030	343, 711
Poisons: Solid	D001, D009 P021, 029, 095, 098 P104, 106, 121, 123 U223	181, 331, 352
Resins	D001	271, 272
Sludge: Unspecified	D040-11	451, 491
Soil: Contaminated	D001-43, F001-9	611, 751

TABLE CST-2-1
LIST OF HAZARDOUS WASTES ALLOWED FOR STORAGE IN CONTAINERS AT THE CST-2 STORAGE UNIT

WASTE CATEGORY	USEPA Waste Codes	CA Waste Codes
Absorbent (dry sweep & rags w/oil, paint, solvents; debris)	D001 F001-005	151,181 223, 352
Adhesives	D001, D018 D035, F002 F003, F005	281,725 741,751
Aqueous Solution (unspecified)	N/A	132, 133, 134 135, 223, 722
Asbestos	N/A	151
Batteries	D002, 3, 6 D007-10	722, 724, 725 726, 792
Corrosives: General	D002, F006, U133	181, 791, 792
Corrosives: Acids	D002, D005-11 F006, U032, U103, U131, U134	135, 141, 181 791, 792
Corrosives: Bases	D002-9, D011 F006	121, 122, 123 141, 181 722, 724, 725
Detergent/soap	D001-2	121, 122, 561, 791, 792
Empty containers (oil, paint, pesticides, solvent)	D001-43 F001-7	511, 512, 513
Filters (used oil/fuel)	D001, 6, 8	223
Flammable liquids (n.o.s.)	D001-2	134
Fuels (Waste gasoline, diesel, JP-5)	D001, 8, 18 U239	213, 223, 331 341, 342, 343 722-724, 726

Inorganic Waste (off-spec and other inorganics)	D002	141,181
Laboratory chemicals	P/U Series	551
Machining waste (metal dust, sandblast grit)	D006-8, P015	172
Metal compounds	D001-11 P015, U032, U151	135, 141, 181 721-728
Oil (waste and grease)	N/A	221, 223
Organic Solvents: Halogenated	D001, 4-11, 19 D021, 22, 27-29 D039, 40, 43 F001-2 U037, 43-45, 61 U066, 70, 74, 75, 77 U078, 79, 80, 165 U208, 209, 210 U211, 226-228	211, 214, 251 331, 343, 741
Organic Solvents: Nonhalogenated	D001, 23, 36, 30, 35 D038, F003-5, P022 U019, 67, 165 169 U196, 220, 239	213
Organic Solvents: Oxygenated	D001, 4-11, U002 U031, 52, 112, 117 U122, 154, 159, 188	212
Oxygen Breathing Apparatus (OBA's)	D001, 3, 5	121, 141
Paint (Solvent and water based waste)	D001 D004-11 D035, F002-5	171, 212, 213, 214, 291, 351, 352, 461, 721-728, 751
Pesticides	D012-17, P096	231, 232, 801
Phenol	U188	212

Photochemical	D001-2, D007 D009, D011	214, 541 791, 792
Plating solutions (cadmium, chromium, lithium, nickel, copper, cyanide)	D002-3, D006-7 F007-9, F039 P030, U032	131, 132, 135 491
Poisons: Liquid	D001, 3, 11, P030	343, 711
Poisons: Solid	D001, D009 P021, 029, 095, 098 P104, 106, 121, 123 U223	181, 331, 352
Polychlorinated Biphenyl	PCB-1,2	261, 731
Resins	D001	271, 272
Sludge: unspecified	D004-11	451, 491
Soil: Contaminated	D001-43, F001-9	611, 751

TABLE IW/OW-1
LIST OF HAZARDOUS WASTES ALLOWED FOR STORAGE IN CONTAINERS AT THE IW/OW WASTE CONTAINER STORAGE UNIT

WASTE CATEGORY	USEPA Waste Codes	CA Waste Codes
IW Filter Cake	F002, F007, F009, D006, D007, D008, D011	491
IW Filter Cloths	F002, F007, F009, D006, D007, D008, D011	491
IW Contaminated Media (including contents of T-10A, T-10B, T-10C and V1-4 tanks)	F002, F007, F009, D006, D007, D008, D011	491
OW Filter Cake	N/A	222, 352
OW Tank Bottoms	N/A	241
OW Strainer Debris	N/A	223

III.B.2 Storage and Treatment in Tanks

The owner and/or operator is authorized to store the following wastes in tanks at the facility, subject to the conditions of this Permit, the requirements of CCR, Title 22, Division 4.5, Chapter 14, Article 10, and as follows:

III.B.2.a Table IWTP-2-1 lists all hazardous wastes that are treated and stored in tanks at the New Industrial Waste Treatment Plant (IWTP-2).

III.B.2.b Table ORP-1 lists all hazardous wastes that are treated and stored in tanks at the Oil Recovery Plant (ORP).

TABLE IWTP-2-1
LIST OF HAZARDOUS WASTES ALLOWED FOR STORAGE AND TREATMENT IN TANKS AT THE IWTP-2

Waste Category	USEPA Waste Codes	CA Waste Codes
Acids	D002-3, D007	135, 141, 791, 792
Aqueous Solution (unspecified)	N/A	135
Bases	D002	121, 122, 123
Detergent/soap mixture	D002, D008	561
Metal compounds	D001-11, P015, U032, U151	135, 141, 181, 721-728
Organic Liquids (Nonsolvent): Halogenated	D001	223, 341, 343
Organic Liquids (Nonsolvent): Nonhalogenated	D001, P022, U165, U196	223, 341, 343
Organic Solvents: Halogenated	D001, 4-11, 19 D021, 22, 27-29 D039, 40, 43 F001-2 U037, 43-45, 61 U066, 70, 74, 75, 77-80 U165, 208-211, 226-228	211, 214, 251, 331, 343, 741
Organic Solvents: Nonhalogenated	D001, 23, 26, 30, 35 D038, F003-5, P022 U019, 67, 165, 169 U196, 220, 239	213

Oxygenated	D001, 4-11, U002 U031, 52, 112, 117 U122, 154, 159, 188	212
ORP effluent	D002, D008, D018	134, 223
Paint (solvent and water based waste)	D001 D004-11 D035, F002-5	171, 212, 213, 214, 291, 351, 461, 721- 728, 751
Pesticides	D012-17, P096	231, 232, 801
Phenol	U188	212
Plating solutions (cadmium, chromium, and cyanide)	D002-3, D006-7 F007-9, P030 P098, U032	131, 132, 135, 491
Poisons (liquid)	D001, 3, 11, P030	343, 711
Sludge	D004-011. F006	181, 251, 252, 451 461, 491, 751

TABLE ORP-1
LIST OF HAZARDOUS WASTES ALLOWED FOR STORAGE AND TREATMENT IN TANKS AT THE ORP

Waste Category	USEPA Waste Codes	CA Waste Codes
Waste oils:	D001	221
Oily wastewater: ORP influent and effluent	D001, D002, D003, D008, D018	134, 223
Sludge:	D004-011, D018	222, 241
Scum:	D004-011, D018	223

III.B.2.c. The Backup ORP Tanks (T-23B, T-24B and T-25B) and Regular ORP Tanks (T-23A, T-24A and T-25A) shall not be operated simultaneously. The Backup Tanks shall be operated only during the maintenance and repair activities of the Regular ORP Tanks.

III.C Capacity

III.C.1 The maximum treatment capacity for IWTP-2 shall not exceed the maximum design capacity, which is 700 gallons per minute for each of two pumps. Tables IWTP-2-2 lists the capacity of each individual tank.

III.C.2 The maximum treatment capacity for ORP shall not exceed the maximum design treatment capacity, which is 200 gallons per minute for each of two pumps. Tables ORP-2 lists the capacity of each individual tank.

III.C.3 The maximum amount of hazardous wastes that may be stored at the CST-1 storage unit at any given time shall not exceed total of 832, " 55-gallon drums" or 45,760 gallons. Table CST-1-2 lists the maximum design capacity of each storage compartment at CST-1 unit.

III.C.4 The maximum amount of hazardous waste that may be stored at the CST-2 storage unit at any given time shall not exceed a total of 3,128, "55-gallon drums" or 172,040 gallons. Table CST-2-2 lists the maximum design capacity of each storage compartment at CST-2 unit.

III.C.5 The maximum amount of hazardous waste that may be stored at IW/OW Container Storage Unit at any given time during the normal operations shall not exceed a total of two 14.2-cubic-yard covered roll off bins. The maximum quantity of hazardous waste that may be stored at the IW/OW Container Storage Unit at any given time during the tank maintenance and repair activities shall not exceed a total of (A) four 20-cubic-yard roll off bins and two 20,000-gallon-portable tanks OR (B) six 20-cubic-yard-roll-off bins. Table IW/OW-2 shows the maximum storage capacity during normal operation and maintenance and repair activities.

III.C.6 *The current status of the OWTP is inactive.*

III.D Type of Waste Handled

The types of hazardous wastes and their EPA and California waste codes authorized under this permit are present in Table CST-1-1, CST-2-1, IWTP-2-1 and ORP-1.

III.E Loading/Unloading Area

The owner and/or operator shall not consolidate any hazardous waste in the loading/unloading area. Additionally, the owner and operator shall not store any

hazardous waste in the loading/unloading area for any period longer than two working days.

III.F The Hazardous Waste Management Practices

III.F.1 Special Conditions for Managing Containers.

III.F.1.a In no case may any hazardous waste be stored in any container storage areas or at the facility in excess of one year without an authorization from DTSC.

III.F.1.b The owner and/or operator may store wastes in containers as described in section IV-(A)(1)(c) of the Permit Application (Pages, IV-IWTP-1, IV-CST-1 and IV-CST2-1). The drums containing hazardous wastes must be kept closed at all times unless at the time samples are being taken, consolidation is being done, or waste is being added to or removed from. Once such operation is completed, the drums must be closed immediately.

III.F.1.c All containers must be arranged in rows with a minimum of 3 feet of aisle space between each adjacent row.

III.F.1.d All containers in CST-1 and CST-2 should be stored on pallets. Containers less than 55-gallon capacity may be stacked no more than two containers high. Containers equal to 55-gallon capacity may be stacked no more than two containers high, provided that the upper container contains solid waste. Containers greater than 55-gallon capacity shall not be stacked. Furthermore, containers will follow the arrangement of pallets shown on pages IV-CST-12 (Fig. IV-CST-3) and IV-CST2-13 (Fig. IV-CST2-3) of the approved Part B Permit Application. NASNI may change the arrangement, but must submit the new arrangement to DTSC prior to any changes.

III.F.1.e The CST-1 and CST-2 storage units are designed to segregate and isolate incompatible wastes. Wastes are typically segregated by compatible wastes. Each compatible hazard class is assigned a dedicated storage compartment isolated from other compartment by a berm or wall (see table CST-1-2 and CST-2-2). Table CST-1-2 and CST-2-2 show the proposed assignment of the storage compartment for each hazard class wastes and maximum storage capacity for each storage compartment. The facility may change this assignment, however, only containers containing compatible wastes are permitted to occupy the same assigned compartment.

TABLE CST-1-2
STORAGE REQUIREMENTS AT CST-1

CST-1	
Container types	5-gallon to 85-gallon metal, fiber, and plastic drums containers; 3-mil double plastic or 6-mil single plastic bags; 1-gallon or smaller glass bottles; 1 pint-5 gallon metal containers; 5-gallon or smaller plastic bottles; and 200-gallon triwall cardboard containers.
Waste Codes	See Table no. CST-1-1
Delivery	via trucks
Total Storage Capacity	720 55-gallon drums or 39,600 gallons

STORAGE COMPART-MENT	STORAGE CAPACITY (55-GALLON DRUMS)	AISLE SPACE (FEET)	CONTAINER HIGH	SEPARATION BARRIER
Acid (inside)	64	3	No more than two containers high	6" asphalt berm covered with an impermeable coating
Base (inside)	56	3	No more than two containers high	6" asphalt berm covered with an impermeable coating
Oxidizer (inside)	16	3	No more than two containers high	6" asphalt berm covered with an impermeable coating
Poison (inside)	16	3	No more than two containers high	6" asphalt berm covered with an impermeable coating

Reactive (inside)	16	3	No more than two containers high	concrete enclosed room
Toxic (inside)	368	3	No more than two containers high	6" asphalt berm covered with an impermeable coating
Flammable/ Ignitable (outside)	296	3	No more than two containers high. Class I flammable liquids are not stacked	N/A

TABLE CST-2-2
STORAGE REQUIREMENTS AT CST-2

CST-2	
Container types	1-119 gallon metal, fiber, and plastic drum containers; 3-mil double plastic or 6-mil single plastic bags; 1-gallon or smaller glass bottles, 1- pint to 5- gallon metal containers; 5-gallon or smaller plastic bottles; and 200-gallon triwall cardboard containers.
Waste Codes	see Table No. CST-2-1
Delivery	via trucks
Total Storage Capacity	3128 55-gallon drums or 172,040 gallons

STORAGE BAYS	STORAGE CAPACITY (55-GALLON	AISLE SPACE (FEET)	CONTAINER HIGH	SEPARATION BARRIER

	DRUMS)			
Bay # 1 Toxic	320	3	No more than two containers high	8" concrete block walls extending 12' high
Bay # 2 Oxidizer	320	3	No more than two containers high	8" and 12" concrete block walls extending 12' high
Bay # 3 Flammable	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 4 Toxic	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 5 Toxic	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 6 Flammable	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 7 Acid	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 8 Base	352	3	No more than two containers high	8" and 12" concrete block walls extending 8' high
Bay # 9 Module # 1	152	3	No more than two containers high	8" concrete block walls extending 12' high

Bay # 10 Repackaging	224	3	No more than two containers high	8" and 12" concrete block walls extending 12' high

III.F.1.f. The IW/OW Container Unit is designated to store filter cake generated from the filter press systems from IWTP/OWTP as well as maintenance-related waste. During normal operations, only filter cake generated from the IWTP/ORP filter presses shall be stored at this unit. During the IWTP/ORP tank maintenance and repair period, the Permittee may store the tank maintenance related waste at this unit for ninety days or less after notification to DTSC regarding the maintenance activities. The Table IW/OW-2 shows the proposed maximum storage capacity during the normal operation and maintenance and repair activities.

III.F.1.g During the tank maintenance and repair activities, the tanks from which the maintenance-related waste originated will not be placed back into service until after the maintenance related hazardous waste stored at the IW/OW Container Storage Unit is sent offsite for disposal or the maintenance related waste is placed back into the IWTP/ORP tanks for further treatment

TABLE IW/OW-2
STORAGE REQUIREMENTS AT IW/OW CONTAINER STORAGE UNIT

IW/OW Container Storage Unit		
Normal Operation	Container types	14.2 cubic yard (2,900 gallon) covere bins with liners
	Waste Codes	See Table IW/OW-1
	Delivery	Wastes are generated by IWTP and C presses
	Total Maximum Storage Capacity	two 14.2- cubic- yard covered roll off
Maintenance Operation	Container Types	Up to 20 cubic-yard-roll off bins which covered and lined with polyethylene Up to 20,000 gallon portable tanks
	Waste Codes	See Table IW/OW-1
	Delivery	Wastes are generated by IWTP and C maintenance activities
	Total Maximum Storage Capacity	(A) Four 20-cubic-yard roll off bins an 20,000-gallon-portable tanks, OR (B) six 20-cubic-yard-roll-off bins

III.F.2 Special Conditions for Managing Hazardous Waste Treatment and Storage Tanks

III.F.2.a All tanks shall be inspected daily and recorded. However, for the tank system assessment, including internal inspections and shell thickness, leak test or other tank integrity examination, the facility shall follow the tank inspection schedule given in tables IWTP-2-2, and ORP-2. The tank assessment shall include ancillary equipment such as ORP pump stations (1351, 1352 and K) and ORP pipeline leak detection panels.

III.F.2.b All tanks are operated at ambient temperature, which ranges from 30 - 100 degrees F.

III.F.2.c All tanks and ancillary equipment are either secondarily contained or located within a bermed secondary containment area.

III.F.2.d All tanks are identified as described in tables IWTP-2-2 and ORP-2,

III.F.2.e The chemicals used in treatment (Table 1) may be changed if the facility notifies the DTSC with a justification prior to the change.

TABLE IWTP-2-2
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Batch Treatment Tank (2 tanks)	
Identification	T-1A & T-1B
Open Tank	No (closed with vent to atmosphere or GAC adsorber)
Waste Treated/handled	Organic compounds, Mixed Metals, Chrome Waste, Cyanide Waste, Petroleum Contaminated Waste and wastes listed in Table No. IWTP-2-1
Waste delivery to this tank	Via trucks by using 6" fiberglass reinforced polyester pipe or pipelines
Treatment process/ Chemicals added	Oxidation, metal reduction, pH adjustment, precipitation, chlorination, skimming, sludge removal/ Oxidizers, caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter	32 ft
Sidewater Depth	24 ft
Volume (Gallons)	138,400
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Novolac Epoxy Resin for T-1A and Phenolic Epoxy Resin for T-1B
Corrosion Allowance	API 653 standards (20% metal loss)
Freeboard	2 ft
Estimated Life	25 years
Design Minimum Thickness	1/4 "+/- 1/16"
Actual Manufactured Thickness	1/4"

Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	Liquid level indicator, low level cut-off, mid-level mixer controls, and high level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1991 UBC
Tank Design Code	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Fenton's Reactor *(removed, see section I.B.1.a)*	
Identification	T-2
Open tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluents from T-1A and T-1B
Waste delivery to this tank	Via 6" stainless steel pipe
Treatment process/ Chemicals added	Oxidation/H_2O_2 and $FeSO_4$
Diameter	5 ft
Sidewater Depth	12 ft
Volume (Gallons)	860
Year of Installation	1994
Construction Materials	Stainless Steel
Lining Materials	Not Required
Corrosion Allowance	1/16"
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4"
Actual Manufactured Thickness	1/4"
Schedule of Internal inspection	N/A (inactive)
Level Control Devices	N/A (inactive)
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1991 UBC
Tank Design Code	API

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Industrial Waste Load Equalization Tank	
Identification	IWLET or T-4B
Open tank	No (closed with vent to atmosphere or GAC adsorber)
Waste Treated/handled	Organic compounds, Mixed Metals, Chrome Waste, Cyanide Waste, Petroleum Contaminated Waste, ORP influent, ORP effluent, T-1A/B effluent, T-6A/B effluent, T-5A/B effluent, TN-1/2 effluent, and wastes listed in Table No. IWTP-2-1
Waste delivery to this tank	General industrial waste: via 10" fiberglass reinforced polyester pipe; Effluent from T-1A/B or T-2: via 6" polyvinyl chloride pipe; Effluent from batched T-6A/B, T-5 A/B, and TN-1/2: 4" polyvinyl chloride pipe; Other wastes: via trucks by using 6" fiberglass reinforced polyester pipe Effluent from ORP: via 6" fiberglass reinforced polyester pipe Influent to ORP/IWLET: via 8" polyvinyl chloride pipe Backwash from dual media filters
Treatment process/ Chemicals added	Oxidation, metal reduction, pH adjustment, precipitation, chlorination, skimming, sludge removal Oxidizers, caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter	60 ft
Sidewater Depth	24 ft
Volume (Gallons)	465,000
Year of Installation	1994
Construction Materials	Carbon Steel

Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal inspection	1999 and every 5 years thereafter
Level Control Devices	Liquid level indicator, low level cut-off, mid-level mixer controls, and high level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Code	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Batch Treatment Tank (2 tanks)	
Identification	T-5A & T-5B
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Organic compounds, Mixed Metals, Chrome Waste, Cyanide Waste, Petroleum Contaminated Waste, ORP influent, ORP effluent, and wastes listed in Table No. IWTP-2-1
Waste delivery to this tank	Via trucks by using 6" fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	Oxidation, metal reduction, pH adjustment, precipitation, chlorination, skimming, sludge removal/ oxidizers, caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter	11 ft
Sidewater Depth	16 ft
Volume (Gallons)	10,700
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Novolac Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated Life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"

Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	High level alarm and low level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Code	1994 UBC
Tank Design Code	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Batch Treatment Tank (2 Tanks)	
Identification	T-6A & T-6B
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Organic Compounds, Mixed Metals, Chrome Waste, Cyanide Waste, Petroleum Contaminated Waste, ORP influent, ORP effluent, and wastes listed in Table No. IWTP-2-1
Waste delivery to this tank	Via trucks by using 6" fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	Oxidation, metal reduction, pH adjustment, precipitation, chlorination, skimming, sludge removal/ oxidizers, caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter	11 ft
Sidewater Depth	16 ft
Volume (Gallons)	10,700
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"

Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	High level alarm, low level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Codes	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Aqueous Batch Treatment Tank (2 Tanks) *(The original 2 tanks were closed as part of the IWTP closure with certification sent to DTSC on June 18, 1999. They have been replaced by 2 smaller tanks in this table.)*	
Identification	Aqueous Waste Batch Treatment (TN-1, TN-2)
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Organic compounds, Mixed Metals, Chrome Waste, Cyanide Waste, Petroleum Contaminated Waste, ORP influent, ORP effluent, and wastes listed in Table No. IWTP-2-1
Waste delivery to this tank	Via trucks by using 3" polyvinyl chloride pipe
Treatment process/ Chemicals added	Oxidation, metal reduction, pH adjustment, precipitation, chlorination, skimming, sludge removal/ oxidizers, caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter	8 ft
Sidewater Depth	7 ft
Volume (Gallons)	2,500
Year of Installation	1999
Construction Materials	Cross-linked Polyethylene
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	1 ft
Estimated Life	30 years
Design Minimum Thickness	0.335 inches
Actual Manufactured	0.335 inches

Thickness	
Schedule of Internal Inspection	2001 and every 2 years thereafter
Level Control Devices	N/A
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Codes	ASTM-D-1998-91

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Phenol Reactor or Reaction Tank *(inactive)*	
Identification	T-3
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-2
Waste delivery to this tank	Via 6" line
Treatment process/ Chemicals added	No treatment
Diameter	9 ft
Sidewater Depth	26 ft
Volume (Gallons)	11,600
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	1/4"+/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	N/A (inactive)
Level Control Devices	N/A, flow through tank
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1991 UBC

Tank Design Codes	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Clarifier Tank	
Identification	T-7
Open Tank	No (closed with vent to atmosphere or GAC adsorbers)
Waste Treated/handled	Effluent from T-1A/B, T-5A/B, T-6A/B, TN-1/2, backwash of dual media filters, and IWLET
Waste delivery to this tank	Effluent from IWLET: Via 8" polyvinyl chloride pipe Effluent rom cyanide and chrome batch: via 4" polyvinyl chloride pipe Backwash from Media Filters: via 8" polyvinyl chloride pipe
Treatment process/ Chemicals added	pH adjustment, precipitation, skimming, sludge removal/Caustics, acids, coagulants, flocculants, other (see Table 1) (chemical addition occurs using in-line static mixers in the pipelines between the treatment tanks and clarifier or by addition directly to T-7 using portable tanks)
Diameter	43 ft
Sidewater Depth	12.5 ft
Volume (Gallons)	108,000
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	N/A
Estimated life	25 years

Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	N/A, flow through tank
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Codes	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Surge Tank *(This tank does not handle hazardous waste, but is part of IWTP-2)*	
Identification No.	T-8
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-7 or T-4B
Waste delivery to this tank	Effluent from T-7 or T-4B: via 8" polyvinyl chloride pipe
Treatment process/ Chemicals added	No treatment
Diameter	14 ft
Sidewater Depth	12.5 ft
Volume (Gallons)	12,000
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	Liquid level indicator, high level shut-off
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1994 UBC
Tank Design Codes	API 650

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

IW Sludge Tank	
Identification	T-34
Open Tank	No (closed with vent to atmosphere or GAC adsorber)
Waste Treated/handled	Sludge from T-7 and batch treatment tanks
Waste delivery to this tank	Effluent from T-7 via 6" polyvinyl chloride pipe Manual pumping from batch treatment tanks and IWLET
Treatment process/Chemical added	No treatment
Diameter	11.8 ft
Sidewater Depth	12.9 ft
Volume (Gallons)	11,000
Year of Installation	1996
Construction Materials	Cross-linked polyethylene
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	2 ft
Estimated Life	30 years
Design Minimum Thickness	0.750 inches
Actual Manufactured Thickness	0.750 inches
Schedule of Internal Inspection	2001 and every 5 years thereafter
Level Control Devices	Liquid level indicator, high level alarm and shut-off

Operating Temperature	Ambient temperature (30-160 degrees F)
Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Code	ASTM-D-1998-91

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

IW Filterpress Day Tank	
Identification	Filter Press Day Tank
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Sludge from T-34
Waste delivery to this tank	Effluent from T-34 via 6" polyvinyl chloride pipe
Treatment process/Chemical added	No treatment
Diameter	7.4 ft
Sidewater Depth	6.8 ft
Volume (Gallons)	2,100
Year of Installation	1983
Construction Materials	Fiberglass reinforced polyester
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	2 ft
Estimated Life	30 years
Design Minimum Thickness	0.750 inches
Actual Manufactured Thickness	0.750 inches
Schedule of Internal Inspection	2001 and every 5 years thereafter
Level Control Devices	Manual fill with high level alarm

Operating Temperature	Ambient temperature (30-100 degrees F)
Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Code	ASTM-D-1998-91

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS TABLE IWTP-2-2 (Continued)

UV Disinfection Units (2 units) *(This tank does not handle hazardous waste, but is part of IWTP-2. These two units were closed and removed on July 19, 2005)*	
Identification	9A and 9B
Open Tank	N/A
Waste Treated/handled	Effluent from T-8
Waste delivery to this tank	Via 8" polyvinyl chloride pipe
Treatment process/ Chemicals added	Disinfection
Diameter	58" x 22" tubes
Sidewater Depth	N/A
Volume (Gallons)	N/A
Year of Installation	1994
Construction Materials	Aluminum
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	N/A
Estimated life	10 years
Design Minimum Thickness	N/A
Actual Manufactured Thickness	N/A
Schedule of Internal inspection	N/A
Level Control Devices	N/A
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1991 UBC
Tank Design Codes	N/A

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Dual-Media Filters (3 units) *(These filters do not handle hazardous waste, but are part of IWTP-2)*	
Identification	10A, 10B & 10C
Open Tank	Pressure vessel
Waste Treated/handled	Effluent from T-8 or T-4B
Waste delivery to this tank	Via 8" polyvinyl chloride pipe
Treatment process/ Chemicals added	Filtration
Diameter	7.5 ft
Sidewater Depth	6.0 ft
Volume (Gallons)	N/A
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Vinyl Epoxy Resin
Corrosion Allowance	0.028 inches (shell); 0.054 inches (head)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	0.222 inches (shell); 0.258 inches (head)
Actual Manufactured Thickness	0.250 inches (shell); 0.3125 inches (head)
Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	N/A

Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Codes	ASTM Code, Section VIII, Division I

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Carbon Adsorbers (4 units) *(These adsorbers do not handle hazardous waste, but are part of IWTP-2)*	
Identification	V-1, V-2, V-3 & V-4
Open Tank	Pressure vessel
Waste Treated/handled	Effluent from Dual Media Filters/Clarifier (T-10)
Waste delivery to this tank	Via 8" polyvinyl chloride pipe
Treatment process/ Chemicals added	Adsorption
Diameter	10 ft
Sidewater Depth	24 ft
Volume (Gallons)	N/A
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Vinyl Epoxy Resin
Corrosion Allowance	N/A
Freeboard	N/A
Estimated life	30 years
Design Minimum Thickness	0.375 inches (shell); 0.390 inches (head)
Actual Manufactured Thickness	0.375 inches (shell); 0.390 inches (head)
Schedule of Internal Inspection	1999 and every 5 years thereafter
Level Control Devices	N/A
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	ASTM Code, Section VIII, Division I

TABLE IWTP-2-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT IWTP-2

Dewatering Tank *(demolished as part of the OWTP closure. Closure certification submitted to DTSC on February 4, 1999 and June 18, 1999. Status is inactive.)*	
Identification	1089
Waste Treated/handled	Sludges produced by IWTP-2 system
Waste delivery to this tank	Via polyvinyl chloride/polyethylene
Treatment process/ Chemicals added	Dewatering
Diameter	20 ft
Sidewater Depth	12 ft
Volume (Gallons)	35,000
Year of Installation	1973
Construction Materials	Reinforced concrete
Lining Materials	High density polyethylene
Corrosion Allowance	1/16"
Freeboard	2 ft
Estimated life	No information
Design Minimum Thickness	1/4"
Actual Manufactured Thickness	No information
Schedule of Internal Inspection	N/A (inactive)
Level Control Devices	Liquid level indicator, low level cut-off, mid-level mixer controls and high level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	UBC

Tank Design Codes	API

TABLE ORP-2
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Oily Waste Load Equalization Tank	
Identification	OWLET or T-4A
Open Tank	No (closed with vent to atmosphere or GAC adsorbers)
Waste Treated/handled	Petroleum contaminated wastewater and waste oil that may be contaminated with heavy metals (D001, D002, D003, D008, D018, 221, 134, 223) Non-hazardous general industrial waste
Waste delivery to this tank	Petroleum wastes off-loaded from ships and pier side activities: via an 8" double-walled, high density polyethylene pipe; Trucks, barges, or bowsers via 4" fiberglass pipes General industrial waste: via 10" polyvinyl chloride pipe
Treatment process/ Chemicals added	Gravity separation, skimming, sludge removal/ Caustics, acids, coagulants, flocculants
Diameter	60 ft
Sidewater Depth	24 ft
Volume (Gallons)	465,000
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"

Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	2002 and every 5 years thereafter
Level Control Devices	Liquid level indicator and high level alarm.
Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Code	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Scum Storage Tank	
Identification	Scum Tank 1092
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Sludge/scum from T-4A
Waste delivery to this tank	Via a 4" fiberglass reinforced polyester pipe Truck unloading via rubber hose
Treatment process/ Chemicals added	N/A (storage)
Diameter	25 ft
Sidewater Depth	21 ft
Volume (Gallons)	75,000
Year of Installation	1978
Construction Materials	Carbon Steel
Lining Materials	Coal Tar Epoxy
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	1998 and every 3 years thereafter
Level Control Devices	Liquid level indicator and high level alarm.
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1994 UBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Recovered Oil Storage Tank (2 tanks)	
Identification	Recovered Oil Tank 1093 and 1094
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Recovered oil and effluent from T-27
Waste delivery to this tank	Via a 4" fiberglass reinforced polyester pipe, truck unloading via rubber hose
Treatment process/ Chemicals added	N/A (storage)
Diameter	25 ft
Sidewater Depth	21 ft
Volume (Gallons)	75,000
Year of Installation	1978
Construction Materials	Carbon Steel
Lining Materials	Coal Tar Epoxy
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	40 years
Design Minimum Thickness	1/4" +/- 1/16”
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	1998 and every 3 years thereafter
Level Control Devices	Liquid level indicator and high level alarm

Operating Temperature	Ambient temperature (30 - 100 degrees F)
Seismic Design Code	1994 UBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Wastewater Surge Tank	
Identification	T-25A
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-24 and T-4A
Waste delivery to this tank	Via an 8" fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	N/A (storage tank)
Diameter	14 ft
Sidewater Depth	7 ft
Volume (Gallons)	6,000
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16”
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	2002 and every 5 years thereafter
Level Control Devices	Liquid level indicator, low level alarm, high level alarm, high level shut-off
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Wastewater Surge Tank (Backup Tank)	
Identification	T-25B
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-24B
Waste delivery to this tank	Via an 8" neoprene hose
Treatment process/ Chemicals added	N/A (surge tank prior to sewer discharge)
Diameter	5 ft 4 inches
Sidewater Depth	8 ft 3 inches
Volume (Gallons)	1,300
Year of Installation	August 2005
Construction Materials	High Density Cross Linked Polyethylene (HDXLE)
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	N/A
Estimated life	30 years
Design Minimum Thickness	0.31 inches
Actual Manufactured Thickness	0.625 inches
Schedule of Internal Inspection	2003 and every 5 years thereafter
Level Control Devices	Liquid level indicator, low level alarm, high level alarm, high level shut-off
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	ASTM-D-1998-97

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Scum Surge Tank	
Identification	T-26
Open Tank	No (closed with vent to the atmosphere)
Waste Treated/handled	Sludge and scum from oil/water separator (T-23) and dissolved air floatation unit (T-24)
Waste delivery to this tank	Via a fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	N/A (storage tank)
Diameter	3' 2"
Sidewater Depth	5 ft
Volume (Gallons)	285
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	1 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	N/A
Level Control Devices	Liquid level indicator and high level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Recovered Oil Surge Tank	
Identification	T-27
Open Tank	No (closed with vent to the atmosphere)
Waste Treated/handled	Recovered oil from oil/water separator (T-23) and dissolved air floatation (T-24)
Waste delivery to this tank	Via fiberglass reinforced polyester pipes
Treatment process/ Chemicals added	N/A (storage tank)
Diameter	3' 2"
Sidewater Depth	5 ft
Volume (Gallons)	285
Year of Installation	1996
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	N/A
Level Control Devices	Liquid level indicator and high level alarm
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Oil Skimmer Recovered Oil Tank	
Identification	T-36
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Recovered oil from T4-A/B
Waste delivery to this tank	Via carbon steel and polyvinyl chloride pipe
Treatment process/ Chemicals added	N/A (storage tank)
Diameter	4' 0"
Sidewater Depth	5' 6"
Volume (Gallons)	500
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	1 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	N/A
Level Control Devices	Liquid level indicator and overflow return to T-4A
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Grit Removal Tank	
Identification	T-35
Open Tank	No (closed with vent to the atmosphere)
Waste Treated/handled	Petroleum contaminated wastewater and waste oil that may contains solids
Waste delivery to this tank	Via a 1.5" carbon steel pipe
Treatment process/ Chemicals added	N/A (process tank)
Diameter	4' 0"
Sidewater Depth	5' 6"
Volume (Gallons)	500
Year of Installation	1996
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	1 ft
Estimated life	25 years
Design Minimum Thickness	1/4" +/- 1/16"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	N/A
Level Control Devices	Liquid level indicator
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	API 650

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Grit Removal Conical Tank (closed and removed in 2005)	
Identification	T-37
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Petroleum contaminated wastewater and waste oil that may contain solids
Waste delivery to this tank	Via a 3" carbon steel pipe
Treatment process/ Chemicals added	Physical separation
Diameter	8'6"
Sidewater Depth	10'6"
Volume (Gallons)	2,000
Year of Installation	1997
Construction Materials	Cross linked polyethylene
Lining Materials	N/A
Corrosion Allowance	N/A
Freeboard	2 ft
Estimated life	25 years
Design Minimum Thickness	0.335 inches
Actual Manufactured Thickness	0.335 inches
Schedule of inspection	2002 and every 5 years thereafter
Level Control Devices	Visual
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Design Code	1991 UBC
Tank Design Codes	ASTM-D-1998-91

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Oil/Water Separator	
Identification	T-23A
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-4A
Waste delivery (to this tank)	Via a 6" fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	Physical separation/Plate coalescer
Diameter (L x W)	8'3" x 3'5"
Sidewater Depth	16 ft
Volume (Gallons)	1,500
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20%metal loss)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	0.1 inches
Actual Manufactured Thickness	0.1875 inches
Schedule of Internal Inspection	2002 and every 5 years thereafter
Level Control Devices	N/A
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Code	1997 UBC and 2001 CBC
Tank Design Code	N/A

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Oil/Water Separator	
Identification	T-23B
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-4A and T-4B
Waste delivery (to this tank)	Via a 8" neoprene hose
Treatment process/ Chemicals added	Physical and chemical separation/Plate coalescer. Chemical added: NaOh and de-emulsifying agents
Diameter (L x W)	6ft wide x 7 ft high x 19 ft long
Sidewater Depth	7 ft
Volume (Gallons)	13,727
Year of Installation	August 2005
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 or 0.625 inches (20% metal loss)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	0.25 inches
Actual Manufactured Thickness	0.261 inches
Schedule of Internal Inspection	2003 and every 5 years thereafter
Level Control Devices	N/A
Operating Temperature	Ambient temperature (30 - 100 degrees F)

Seismic Code	1997 UBC and 2001 CBC
Tank Design Code	API 650 Appendix E

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Dissolved Air Floatation Unit	
Identification	T-24A
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-23 and T-4A
Waste delivery to this tank	via a 6" fiberglass reinforced polyester pipe
Treatment process/ Chemicals added	Metal reduction, pH adjustment, precipitation, skimming, sludge removal/ Caustics, acids, coagulants, flocculants, other (see Table 1)
Diameter (L x W)	33' x 5"
Sidewater Depth	8'6"
Volume (Gallons)	6,000
Year of Installation	1997
Construction Materials	Carbon Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	0.1 inches
Actual Manufactured Thickness	0.1875 inches
Schedule of Internal Inspection	2002 and every 5 years thereafter
Sacrificial Anode Inspection	Six month from 2005 and every year thereafter

Level Control Devices	N/A (flow through)
Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Codes	N/A

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Dissolved Air Floatation Unit (Backup Tank)	
Identification	T-24B
Open Tank	No (closed with vent to atmosphere)
Waste Treated/handled	Effluent from T-23B
Waste delivery to this tank	via a 8" neoprene hose
Treatment process/ Chemicals added	Physical separation (Induced Air Flotation)
Diameter (L x W)	4 ft
Sidewater Depth	6ft
Volume (Gallons)	565
Year of Installation	August 2005
Construction Materials	Stainless Steel
Lining Materials	Phenolic Epoxy Resin
Corrosion Allowance	API 653 or 0.625 inches (20% metal loss)
Freeboard	N/A
Estimated life	25 years
Design Minimum Thickness	0.25 inches
Actual Manufactured Thickness	0.258 inches
Schedule of Internal Inspection	2003 and every 5 years thereafter
Level Control Devices	N/A
Seismic Design Code	1997 UBC and 2001 CBC

Tank Design Codes	ASME (pressurized vessel) Unicel Mfg

TABLE ORP-2 (Continued)
HAZARDOUS WASTE TREATMENT AND STORAGE TANKS AND PROCESS EQUIPMENT AT ORP

Rotary Drum Vacuum Tank	
Identification	Sludge Pretreatment Tank (T-801)
Open Tank	No (located inside building)
Waste Treated/handled	Sludge and scum from oil/water separator and dissolved air floatation unit, sludge from tank and process cleaning operations
Waste deliver to this tank	Via 4" double-wall polyethylene and rubber hose
Treatment process/Chemicals added	Perlite, diatomaceous earth
Diameter	7.5'
Sidewater Depth	7'
Volume (Gallons)	2,300
Year of Installation	1994
Construction Materials	Carbon Steel
Lining Materials	Coal Tar Epoxy
Corrosion Allowance	API 653 (20% metal loss)
Freeboard	1 ft
Estimated Life	25 years
Design Minimum Thickness	1/4"
Actual Manufactured Thickness	1/4"
Schedule of Internal Inspection	2001 and every 5 years thereafter
Sacrificial Anode Inspection	Six months from July 2005 and every year thereafter

Operating Temperature	Ambient temperature (30-100 degrees F)
Seismic Design Code	1997 UBC and 2001 CBC
Tank Design Code	API 650

Table 1
TREATMENT CHEMICAL USED AT THE IWTP AND ORP UNITS

Treatment Chemicals	Empirical Formula
ACIDS	
Sulfuric Acid	H_2SO_4
Hydrochloric Acid	HCl
Nitric Acid	HNO_3
Phosphoric Acid	H_3PO_4
Sulfamic Acid	H_3NO_3S
CAUSTICS	
Sodium Hydroxide	$NaOH$
Potassium Hydroxide	KOH
Calcium Hydroxide	$Ca(OH)_2$
Lithium Hydroxide	$LiOH$
Sodium Bicarbonate	$NaHCO_3$
OXIDIZERS	
Calcium Hypochlorite	$Ca(ClO)_2$
Sodium Hypochlorite	$NaClO$
Potassium Hypochlorite	$KClO$
Hydrogen Peroxide	H_2O_2
REDUCING AGENTS	
Ferrous Sulfate	$FeSO_4$

	Sodium Metabisulfite/Sodium Bisulfite	$Na_2S_2O_5$
	Ferrous Chloride	$FeCl_2$
	Aluminum	Al
FLOCCULENTS		
	Organic anionic/cationic flocculents	
	Ferrous Sulfate	$FeSO_4$
	Polyacrylamide	
COAGULANTS		
	Polyaluminum Chlorides	
	Surface Active Organic Compounds	
	Polyamines	
OTHER		
	Carbonates/Carbamates	
	Calcium Chloride	$CaCl_2$
	Antiform Agents	
	Charge Neutralizing Agents (Betz 647)	
	Non-Carbamate Heavy Metal Grabbers	
	Diatomaceous Earth	

III.G Prohibited Wastes

Except as otherwise provided by H&SC, Division 20, Chapter 6.5 and CCR, Title 22, Division 4.5, the owner and/or operator shall not receive, store or handle any hazardous wastes which are not listed in Section III.B.1.a, Section III.B.1.b, Section III.B.2.a and Section III.B.2.b of this Permit.

III.H Traffic

As a condition of any agreement with any waste hauler for purposes of on-site receipt of or off-site shipment of hazardous waste, the owner/operator shall require by contract in writing with said haulers that haulers shall only use routes of transportation according to the truck routes adopted by the City Council of the City of Coronado, Resolution No. 6944 (Resolution) (Appendix I). In addition, the owner/operator shall require that any hauler, whether shipping or receiving the owner/operator's hazardous waste, shall refrain from using streets stated in the Resolution during the hours of 7:00 to 8:00 a.m. and 4:00 to 5:00 p.m.

As of an effective date of this permit, whether by oral instruction, task orders, or contact amendments, the owner/operator shall ensure that this condition is observed by all hazardous waste haulers transporting waste to or from the hazardous waste management activities authorized pursuant to this Permit.

If the Resolution is superseded by a new resolution of the City Council of the City of Coronado, which specifies truck routes applicable to shipments of hazardous waste, the owner/operator shall notify DTSC of the change in routing requirements and shall require waste haulers to comply with the new resolution in accordance with this subsection.

III.I Ninety-day Accumulation Area

The owner and/or operator may continue ninety-day hazardous waste accumulation activities within the fence lines of the Hazardous Waste Treatment Complex subject to the following conditions:

1. The ninety-day accumulation activities shall not be located within the designated perimeter of any permitted units in order to easily differentiated between wastes stored pursuant to the ninety-day onsite accumulation rules and wastes managed

in the permitted units, and to ensure that each type of waste is being managed in accordance with applicable requirements.

2. The ninety-day accumulation activities shall be in accordance with Title 22, CCR, Division 4.5, Chapter 12, Standards Applicable to Generators of Hazardous waste, and other applicable requirements of any local regulatory agency or agencies.

3. The ninety-day hazardous waste accumulation activities shall not interfere with the owner and/or operator's ability to comply with conditions applicable to the permitted units, or to otherwise safely perform the activities authorized by the Permit.

4. The ninety-day hazardous waste accumulation activities shall not jeopardize the owner and/or operator's ability to safely move waste into, out of, and within the permitted units.

III.J Seismic Requirements

The owner and operator shall submit to DTSC an update on the seismic requirements for the regulated units pursuant to the applicable Uniform Building Code (UBC), California Building Code (CBC) and CCR, Title 22, Section 66270.14(b)(11)(A) within six months of the effective date of this permit. The update shall include an evaluation of the expected ground-shaking, potential for liquefaction, amount of densification proposed to prevent liquefaction from occurring (if applicable), and potential for surface rupture, tsunami and seiche. *(Seismic requirement updates were submitted to DTSC during 1998, 1999 and 2005 for several tanks.)*

IV COMPLIANCE SCHEDULE

IV.A Reporting

The owner and operator shall comply with the compliance schedule requirements of 22 CCR, 66270.30(l)(5).

IV.B Summary of Compliance Schedule

The following compliance time schedule items shall be met:

IV.B.1 Schedule for final closure of the OWTP Unit *(Closure certifications submitted to DTSC on February 4, 1999 and June 18, 1999. Status is inactive.)*

Item	Activity	Date of Completion
1.	Notify DTSC of intended closure.	Within 180 days after the effective date of the permit.
2.	Begin to reduce treatment chemical inventory.	Within 60 days after the closure notification or an alternate date approved by DTSC.
3.	Receive final volume of oily waste.	Within 120 days after the closure notification or an alternate date approved by DTSC.
4.	Process all oily waste in inventory at the activity. Return: scum decant, and recovered oil decant to the OWTP for further processing. Flushing all incoming lines, sumps, and pumps with fresh water, with the OWTP in continued operation. Effluent discharged appropriately, recovered oil sent to the storage tanks, and sludges to the vacuum filter unit. Remove all remaining sludges and waste material from the vacuum filter unit.	Within 60 days after the final volume of oily waste is received or an alternate date approved by DTSC.

5.	Decontaminate concrete containment structures, pumps, piping, appurtenance, and drain lines, as well as surfaces such as concrete located adjacent to the facility. Control Building surfaces will also be decontaminated if they appear to be contaminated.	Within 90 days after the final volume of oily waste is received or an alternate date approved by DTSC.
6.	Analysis of liquid waste generated during cleaning operations pending discharge to ORP at NASNI, or to a permitted, commercial hazardous waste management facility.	Within 150 days after the final volume of oily waste is received or an alternate date approved by DTSC.
7.	Collect, package and transport liquid waste and solid waste off-site. Decontaminate equipment and tools. Send liquid waste to the ORP.	Within 180 days after the final volume of oily waste is received or an alternate date approved by DTSC.
8.	Install a clay soil cap, synthetic liner, site pavement, groundwater extraction and injection wells, and water treatment system.	These are possible actions that may be addressed by the RCRA Corrective Action Plan.

IV.C Alternate Schedule of Compliance

The owner and/or operator shall comply with the requirements of 22 CCR, 66270.33(b)(3)(D).

IV.D Option to Cease Operation

If the owner and/or operator decides to cease conducting regulated activities rather than continue to operate and meet permit requirements, the owner and/or operator shall comply with the applicable requirements of 22 CCR, 66270.33(b).

V CORRECTIVE ACTION

The owner and/or operator is required to conduct corrective action at the facility pursuant to Health and Safety Code Section 25200.10. On May 30, 1997, DTSC issued a Corrective Action Order (Docket No. HWCA P4-96/97-006) to the United States Navy, Public Works Center, Naval Air Station North Island in order to implement the Section 25200.10 requirements for this permit. On January 3, 1999, the facility and DTSC entered into a Federal Facility Site Remediation Agreement ("FFSRA") in which DTSC agreed to accept satisfactory performance under the FFSRA in lieu of corrective action requirements imposed by the Corrective Action Order and this permit. All State approvals of hazardous waste interim measures, corrective measures or other clean up activities conducted in compliance with the FFSRA, within the scope of corrective action, required by Health and Safety Code Section 25200.10 to be addressed through the issuance of this permit are incorporated into, and enforceable as a requirement of, this permit.

Appendix A

PERMIT MODIFICATION HISTORY

1. June 9, 2000 Class 1 permit Modification

1.1. Section I.B.1.b.: Pier J/K was replaced by Pier J. This is a Class I Permit Modification for the replacement and relocation of the oily waste pipelines that extend from Pier J to the Oily Waste Pump Station, which is an accessory of the Oil Recovery Plant.

2. June 19, 2000 Class 1 Permit Modification

2.1. Section III.I.: This is a Class 1 Permit Modification initiated by DTSC. Section III.I. was modified to attach minor additional controls to existing 90-day hazardous waste accumulation activities within the fence lines of the PWC Treatment Complex to assure that there will be no interference between the 90-day generator accumulation activities and the permitted storage and treatment activities.

3. June 29, 2001 Class 1 Permit Modification (Application dated August 10, 1998)

3.1. The following are administrative changes requested by the owner/operator:

Section I.A.: The name of the facility and treatment complex was changed. This is an informational change.

Section I.B.: The description of permitted units is revised to provide more accurate information and clarity. Additional information is provided to better describe the function of each tank listed in Table IWTP-2-2 and ORP-2 and to correct some administrative errors. These changes are administrative.

The tank IWLET was upgraded with a skimmer to separate the oil from water. This is an equipment upgrade.

The Induced Air Flotation Tank was replaced with a functionally equivalent Dissolved Air Flotation tank.

Treatment effluent from the batch treatments is no longer discharged to the IWLET but directly to the clarifier (T-7) and then to the sewer to comply with the regulations in the discharge permit.

A grit removal system added to the ORP LET to improve the oil/water separation. This is an equipment upgrade.

Section II.M.1. The condition is revised to incorporate the approval of the Part B Permit Modification Application, dated August 10, 1998.

Section III.F.1.e.: Condition revised to provide more accurate information and clarity regarding the storage requirements for compatible wastes. This change is administrative.

Section III.J. Information regarding the submittal of the seismic update is added. This is an informational change.

Table CST-1-2: The description of the separation barrier was changed from six feet to 6 inches. This is an administrative change.

The description of the separation barrier for reactives was changed from explosion -proof room to concrete enclosed roof. This is an administrative change.

Table CST-2-1 Change of the unit of measurement from “foot” to “inch” and vice-verse. This change is administrative.

Tables IWTP-2-2 and ORP-2

Three tanks (TN-1, TN-2 and 1089) were closed and replaced by smaller tanks (TN-1, TN-2 and T-34). The tables are revised accordingly.

These tables were revised to provide more accurate information regarding the waste treated and handled by each tank, treatment processes, corrosion allowance,

tank inspection schedule, tank design code and shell thickness. These changes are administrative.

Table 1: Added to identify possible chemicals used in the treatment. This is an informational change.

Section V: Revised to update the information regarding the FFSRA. This is an informational change.

3.2. The following are administrative changes requested by DTSC:

Section I.A.: Information regarding the closure status of the PCB Storage Unit and OWTP was added. This is an informational change.

Section II.B.: The name of the DTSC's Permitting Branch was changed. This change is administrative.

Section IV.B.1: Information regarding the closure of the OWTP is added. This is an informational change.

4. September 30, 2002 Class 1 Permit Modification - Modification requested by the facility

Section I.B.1.a. The description was revised to include the removal of two inactive tanks (T-2 and T-3) from the Industrial Waste Treatment Plant. Table IWTP-2-2 was also revised to include this information.

Section I.B.2.a: The description of the permitted storage unit (CST-1) was revised to include the addition of a roof, replacement of the existing 10' chainlink fence by an 8' inch steel fence and puncturing of Universal Waste Aerosol Cans at the CST-1 unit.

Part B Application: In addition to above changes, the name, address and phone numbers of the owner/operators and points of contacts were revised and the air emission control systems were also upgraded in the tanks of the Industrial Waste Treatment Plant.

5. June 28, 2006 Class 1* and Class 1 Permit Modification – Modification requested by the facility

Section 1.A. Ownership, Operation, and Location

Revisions was made to change the facility's owner/operator and the name of the hazardous waste complex.

Section 1.B.1.a. Industrial Waste Treatment Plant (IWTP_2)

The Ultraviolet system was removed from IWTP-2 system.
Cyanide Waste - The treated waste from T-6 and T-6B were originally discharged to T-7 and LET for further treatment. The revision is made to allow the discharge to T-7, mixed media beds, wet GAC beds and the filter press for the further treatment.

General Industrial Waste Train - Revision is made to allow the wash water from the dual media filters to pumped back to a batch treatment tank for further treatment.

Section I.B.1.b. Oil Recovery Plant

Depot Maintenance Facility is added to the list of the piers where vessels are located.

Operation of three "Backup Tanks" (T-23B, T-24B and T-25B) is added.

Name of a container storage area for the dewater sludge cake is added. The container area is now known as Industrial Waste/Oily Waste Container Storage area.

Section I.B.2.a. Container Storage, and Transfer (CST-1) Unit

Statement to clarify that aerosol puncturing is not currently being conducted at the facility is added to the permit.

I.B.2.c Industrial Waste/Oily Waste (IW/OW) Container Storage Area

Description of the containment is added.

Section III Special Conditions

List of hazardous waste to be handled at IW/OW Container Storage Area is added (Special Conditions III.B.1.c. and Table IW/OW-1)

Condition to allow the operation of Backup Tanks (T-23B, T-24B and T-25B) and restrict simultaneous operation of the normal and backup tanks is added (Special Condition III.B.2.c.)

Storage capacity for IW/OW Container Storage Unit is added. The storage capacity for CST-1 was reduced to offset the storage capacity allowed for IW/OW Container Storage Unit (Special Conditions III.C.3 and III.C.5, and Table CST-1-2)

Storage requirements for IW/OW Container Storage Unit is added or revised (Special Condition III.F.1.f., Table IW/OW-2 and Special Condition III.F.1.b.)

Revisions are made to clarify that the tank system assessment and secondary containment are required for tanks and its ancillary equipment (Special Conditions III.F.2.a and III.F.2.c)

Tables IWTP-2-2 and ORP-2 are updated to based on the most recent tank assessment.

III.J Seismic Requirements

Compliance with the California Building Code is added to the condition.

6. June 7, 2007 Class 1 and Class 2 Permit Modification – Modification requested by the facility

6.1. Class 2 Permit Modification requested on February 27, 2006:

Section I.B.1.a. A revision was made to allow the placement of a 14.2 cubic yard roll off bin under the filter press for the Industrial Waste Treatment Plant (IWTP-2). The secondary containment was also modified to comply with the regulation regarding secondary containment capacity.

Section I.B.1.b. A revision was made to allow the placement of a 14.2 cubic yard roll off bin under the filter press for the Oil Recovery Plant. To comply with the secondary containment storage capacity, the secondary containment was modified and the

	rainwater from the Building 788 was diverted to outside the containment.
Section I.B.2.c	A description of the maintenance waste was added.
Section III.C.3	The maximum storage capacity for CST-1 was reduced from 832 55-gallon drums (45,760 gallons) to 720 55-gallon drums (39,600 gallons) to off-set the increased storage capacity at two filter presses.
Section III.C.5	The maximum storage capacity for IW/OW Container Storage Unit is added.
Section III.F.1.f	A revision was made to clarify the storage of hazardous waste generated from the tank maintenance/repair activities during the tank maintenance/repair activities.
Section III.F.1.g.	A condition is added to restrict the operation of the tanks to ensure that the quantity of hazardous waste stored within the Hazardous Waste Complex remains unchanged.
Table CST-1-2	The maximum storage capacity was reduced from 832 55-gallon drums (45,760 gallons) to 720 55-gallon drums (39,600 gallons) to offset the increased storage capacity at the two filter press areas.
Table IW/OW-2	The maximum storage capacity was added during the tank maintenance period.

In addition to the above modifications, the facility also modified the secondary containments of the North Loading and Offloading Area and the South Offloading area to increase their capacities to comply with the regulations. No changes are made to the Permit due to these changes.

6.2. Class 1 Permit Modification requested on June 1, 2007:

The facility updated the Emergency Coordinators list, notification procedures, location of equipment and figures in the Contingency Plan. No changes to the Permit were made due to these updates.

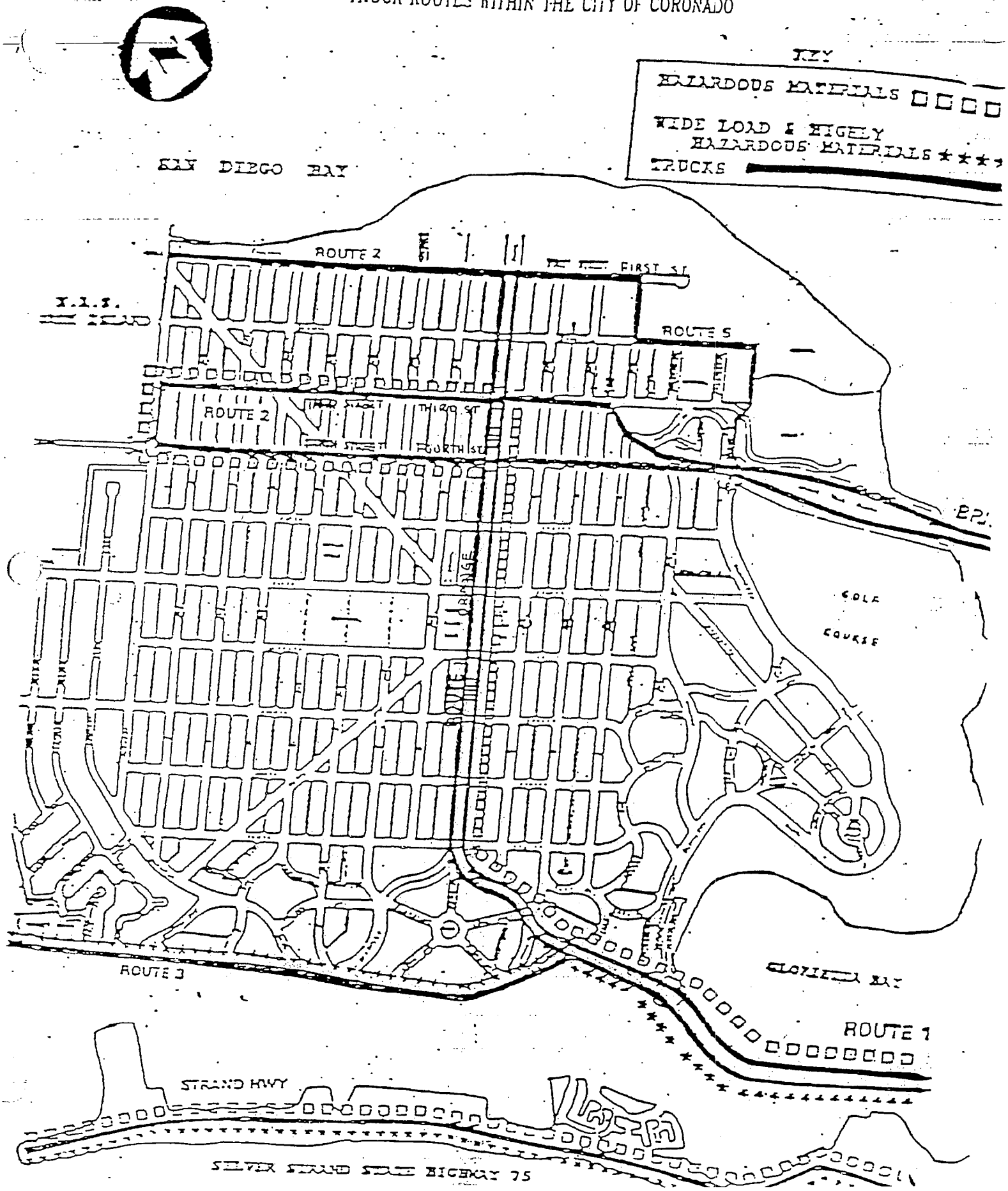
APPENDIX B

TABLE T-1
INTERSECTIONS OPERATIONS WITH LOS BELOW D

NO	INTERSECTION	TYPE	TIME	LOS
1	Orange Avenue/Third Street	Signalized	AM peak hour	E
2	Orange Avenue/Fourth Street	Signalized	PM peak hour	E
3	Fourth Street/ Alameda Boulevard	signalized by police control	AM and PM peak hour	E
4	Alameda Boulevard/Third Street	Unsignalized	AM and PM peak hour	F
5	Pomona Avenue/SR75 (Orange Avenue	Unsignalized	AM and PM peak hour	F
6	Glorietta Boulevard/Fourth Street	Unsignalized	AM peak hour	E

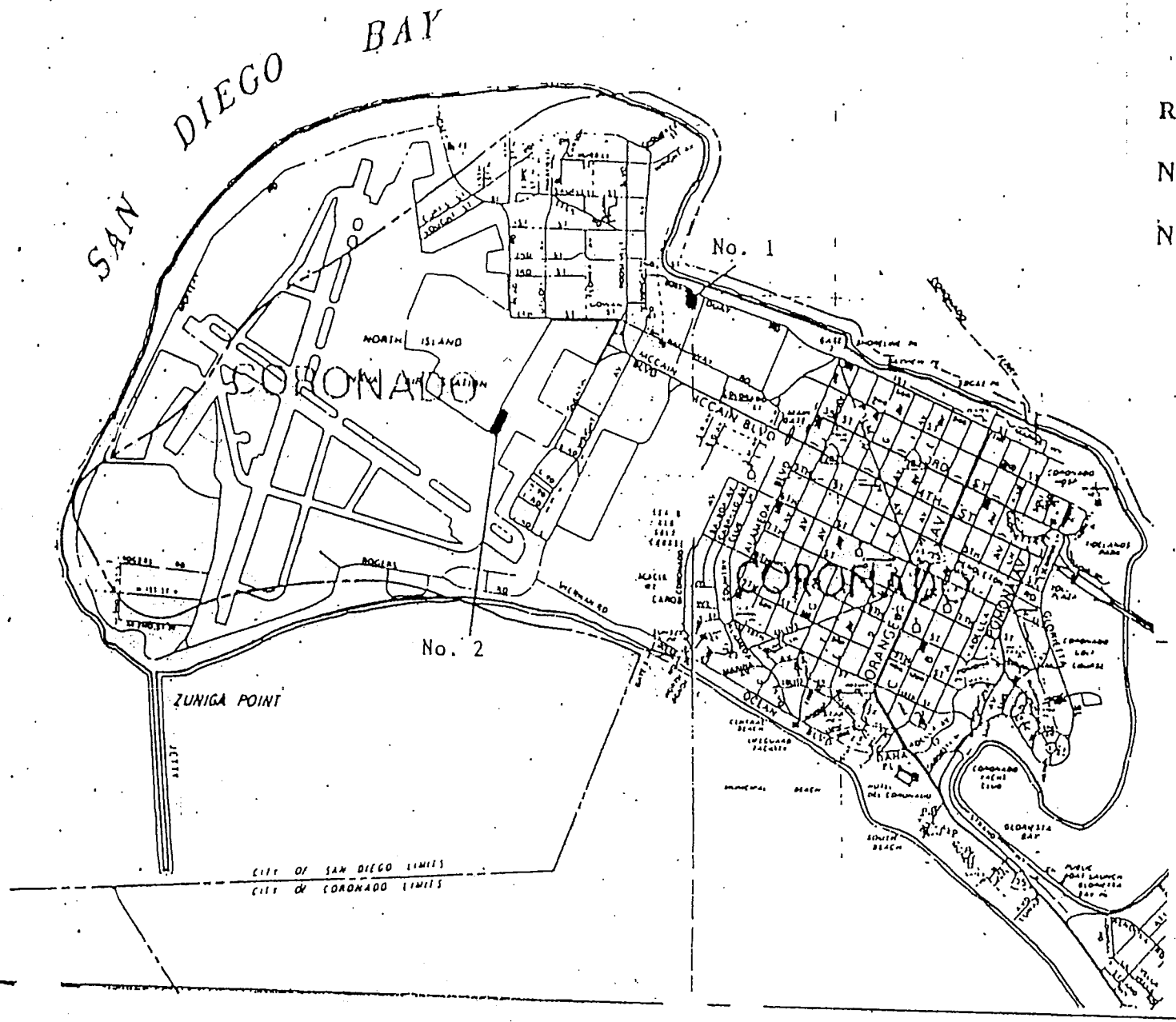
APPENDIX C

TRUCK ROUTES WITHIN THE CITY OF CORONADO



APPENDIX D

LOCATION OF REGULATED UNITS



Regulated Units:

No. 1: PCB Storage Unit

No. 2: CST-1
CST-2
IWTP
ORP
OWTP