STATE OF CALIFORNIA

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION
320 W. 4th Street, Suite 200, Los Angeles

FACT SHEET
WASTE DISCHARGE REQUIREMENTS
for
DEFENSE ENERGY SUPPLY CENTER POINT
(Defense Fuel Supply Point, Norwalk Facility)

NPDES Permit No.: CA0059137
Public Notice No.: 05-041

FACILITY ADDRESS
Defense Fuel Supply Point, Norwalk Facility
15306 Norwalk Blvd.
Norwalk, CA 90650

FACILITY MAILING ADDRESS
Defense Energy Supply Center Point
Los Angeles
3171 N. Gaffey Street
San Pedro, CA 90731
Contact: Joseph Trani
Telephone: (810) 241-2809

I. Public Participation

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) is considering the issuance of waste discharge requirements (WDRs) that will serve as a National Pollutant Discharge Elimination System (NPDES) permit for the above-referenced facility. As an initial step in the WDR process, the Regional Board staff has developed tentative WDRs. The Regional Board encourages public participation in the WDR adoption process.

A. Written Comments

The staff determinations are tentative. Interested persons are invited to submit written comments concerning these tentative WDRs. Comments should be submitted either in person or by mail to:

Executive Officer
California Regional Water Quality Control Board
Los Angeles Region
320 West 4th Street, Suite 200
Los Angeles, CA 90013

Written comments regarding this tentative Order must be submitted to the Regional Board staff no later than 5 p.m. on July 15, 2005, in order to be evaluated by Board staff and included in the Board's agenda folder. The Regional Board chair may exclude from the record written materials received after this date. (See Cal. Code Regs., tit. 23, § 648.4.).

B. Public Hearing

The Regional Board will hold a public hearing on the tentative WDRs during its regular Board meeting on the following date and time and at the following location:

Date: September 1, 2005
Time: 9:00 A.M.
Location: City of Agoura Hills
City Council Chambers
30001 Ladyface Court
Agoura Hills, California

Interested persons are invited to attend. At the public hearing, the Regional Board will hear testimony, if any, pertinent to the discharge, WDRs, and permit. Oral testimony will be heard; however, for accuracy of the record, important testimony should be in writing.

Please be aware that dates and venues may change. Our web address is www.waterboards.ca.gov/losangeles where you can access the current agenda for changes in dates and locations.

C. Waste Discharge Requirements Appeals

Any aggrieved person may petition the State Water Resources Control Board to review the decision of the Regional Board regarding the final WDRs. The petition must be submitted within 30 days of the Regional Board's action to the following address:

State Water Resources Control Board, Office of Chief Counsel
ATTN: Elizabeth Jennings, Senior Staff Counsel
1001 I Street, 22nd Floor
Sacramento, CA 95814

D. Information and Copying

The Report of Waste Discharge (ROWD), related documents, tentative effluent limitations and special conditions, comments received, and other information are on file and may be inspected at 320 West 4th Street, Suite 200, Los Angeles, California 90013, at any time between 8:30 a.m. and 4:45 p.m., Monday through Friday. Copying of documents may be arranged through the Los Angeles Regional Board by calling (213) 576-6600.

E. Register of Interested Persons

Any person interested in being placed on the mailing list for information regarding the WDRs and NPDES permit should contact the Regional Board, reference this facility, and provide a name, address, and phone number.

II. Introduction

The Defense Energy Supply Center Point owns the Defense Fuel Supply Point (hereinafter DFSP-Norwalk or Discharger) which discharges wastewater from its Norwalk Facility (Facility) under waste discharge requirements (WDRs) and a National Pollutant Discharge Elimination System (NPDES) permit contained in Board Order No. 99-133 (NPDES Permit No. CA0059137), adopted by the Regional Board on December 9, 1999. Order No. 99-133 expired on October 10, 2004.

DFSP-Norwalk filed a Report of Waste Discharge (ROWD) and applied for renewal of its WDRs and a NPDES permit on September 13, 2004. The Discharger submitted a revised renewal application on December 20, 2004, and provided additional information on March 9, 2005. A NPDES permit compliance evaluation inspection (CEI) was conducted at the facility on September 1, 2004.

III. Description of Facility and Waste Discharge

DFSP-Norwalk Facility is a former bulk fuel storage facility (tank farm) and distribution point for jet fuels. The Facility is located at 15306 Norwalk Boulevard, Norwalk, California. The Facility has twelve individually-bermed aboveground storage tanks. There are no longer fuel distribution activities at the Facility. The Facility was decommissioned in 2002, and all tanks have been emptied. However, there is an active soil vapor extraction and groundwater treatment system for remediation activities on the site to treat soil and groundwater that is contaminated with petroleum hydrocarbons and volatile organic compounds (VOCs). Several of the tanks have been demolished as part of remediation activities. The treated groundwater from the remediation activities is separately contained, and discharged through a separate outfall under a General NPDES permit No. CAG834001 (Waste Discharge Requirements for Discharges of Treated Groundwater from Construction and Project Dewatering to Surface Waters).

DFSP-Norwalk Facility intermittently discharges up to 540,000 gallons per day (gpd) of storm water runoff that may pick up pollutants from the tank farm area and other areas of the facility. The storm water runoff passes through an oil-water separator prior to discharge to Discharge Serial No. 001, a storm drain located at Norwalk Boulevard at a point 100 feet north of the main entrance to the facility. The storm water runoff flows into a storm drain, thence to Coyote Creek, tributary to San Gabriel River, a water of the United States, above the San Gabriel River Estuary. The point of discharge is located at Latitude 33° 53' 33" North, and Longitude 118° 04' 19" West. Storm water is typically stored within the bermed areas around each tank and allowed to percolate or evaporate.

There has been only one discharge from the Facility since March 2003, and that discharge occurred during intense rainfall in February 2005.

The Regional Board and the U.S. Environmental Protection Agency (U.S. EPA) have classified the DFSP facility as a minor discharge.

Data were submitted with the U.S. EPA Form 2-F application form. These data were from the First Quarter of monitoring periods in 2003 and are summarized below. In addition, effluent data were submitted during this permit term for the First Quarter of 2000, however, the sampling analysis data for selenium, antimony, arsenic, barium, beryllium, cadmium, chromium, cobalt, copper, lead, mercury, molybdenum, nickel, silver, thallium, vanadium, and zinc were not used for purposes of permit development as units were not documented on the report. The existing Order does not require monitoring for benzene, toluene, ethylbenzene or xylene; however, data were submitted for both quarters and are included below. The Discharger was required to monitor for priority pollutants annually; however, these data were not submitted for review. The Regional Board requested priority pollutant monitoring to be included in the most recent re-submittal of the renewal application (March 9, 2005) and all detected values are included in the summary below. No other data were available for review from either the Regional Board or the Discharger. The characterization is documented as follows:

Pollutant	Unit	Maximum Daily Effluent Limitation	Range of Values
Total gallons discharged	gallons	540,000 [1]	31,000 – 1,863,000
Reported flow	GPD	--	31,000 – 2,160,000
Temperature	°F	100	54 - 62
BOD [2]	mg/L	30	<5 [3]
	lbs/day [4]	135.1	<9.43
Oil and grease	mg/L	15	<5 - 15
	lbs/day [4]	67.5	3.878 – 270.22
Phenolic compounds [5]	mg/L	0.5	<0.1 - <0.5
	lbs/day [4]	2.25	0.129 – 1.355
Dissolved oxygen	mg/L	--	8.2 – 9.5
PH	s.u.	6.0 – 9.0	7.2 – 8.2
Total suspended solids (TSS)	mg/L	150	10 – 47
	lbs/day [4]	675	38.78 – 2,702.2
Acute toxicity	% survival	[6]	95 – 100
Benzene [7]	µg/L	--	<0.5 [8]
Toluene [7]	µg/L	--	<0.5 [8]
Ethylbenzene [7]	µg/L	--	<0.5 [8]
Xylenes (total) [7]	µg/L	--	<1.0 [8]
Antimony	µg/L	--	2.82 [9]
Chromium, Total	µg/L	--	1.82 [9]
Chromium, Hexavalent	µg/L	--	0.38 [9]
Methylene Chloride	µg/L	--	2.7 [9]

[1] The existing Order did not contain an effluent limitation for flow; however, mass limitations were based on a maximum discharge flow rate of 540,000 gpd.

[2] 5-day biochemical oxygen demand at 20°C.

[3] Both values reported at this detection level.

[4] Mass values were not reported, but were calculated based on reported flows and concentrations.
[5] According to permit, phenolic compounds include chlorinated and non-chlorinated phenolic compounds. Reported as phenols.
[6] Acute toxicity shall be such that the average survival in the undiluted effluent for any 3 consecutive 96-hour static or continuous flow bioassay tests shall be at least 90 percent, with no single test less than 70 percent survival.
[7] Monitoring not required.
[8] Only value reported (First Quarter 2003) was at this detection level.
[9] These data were included with the revised permit renewal application and represent a single sampling event (1Q 2005). These data are estimated concentrations; the results were greater than or equal to the method detection limit but less than the reporting limit.

On February 2, 2005, the Regional Board issued a Notice of Late Reports to the Discharger for late submittal of the First Quarter 2004 (48 days late), and Third Quarter 2004 (31 days late) monitoring reports. These violations are being evaluated for appropriate enforcement actions.

IV. Applicable Plans, Policies, and Regulations

The requirements contained in the proposed Order are based on the requirements and authorities contained in the following:

1. The federal Clean Water Act (CWA). The federal Clean Water Act requires that any point source discharges of pollutants to a water of the United States must be in conformance with an NPDES permit. NPDES permits establish effluent limitations that incorporate various requirements of the CWA designed to protect water quality.

2. Code of Regulations, Title 40 (40 CFR) – Protection of Environment, Chapter I, Environmental Protection Agency, Subchapter D, Water Programs, Parts 122-125 and Subchapter N, Effluent Guidelines. These CWA regulations provide effluent limitations for certain dischargers and establish procedures for NPDES permitting, including how to establish effluent limitations for certain pollutants discharged by DFSP-Norwalk Facility.

3. On June 13, 1994, the Regional Board adopted a revised *Water Quality Control Plan for the Coastal Watersheds of Los Angeles and Ventura Counties* (Basin Plan). The Basin Plan contains water quality objectives and beneficial uses for inland surface waters and for the Pacific Ocean. The Basin Plan contains beneficial uses and water quality objectives for Coyote Creek (Hydrologic Unit 405.15).

Existing Uses: preservation of rare and endangered species.

Potential Uses: municipal and domestic supply, industrial service supply, industrial processing supply, water contact recreation[1], warm freshwater habitat, wildlife habitat.

Intermittent Uses: non-contact water recreation.

[1] Access only prohibited by Los Angeles County Department of Public Works in concrete-channelized areas.

4. **Ammonia Basin Plan Amendment.** The 1994 Basin Plan provided water quality objectives for ammonia to protect aquatic life, in Tables 3-1 through Tables 3-4. However, those ammonia objectives were revised on April 25, 2002, by the Regional Board with the adoption of Resolution No. 2002-011, *Amendment to the Water Quality Control Plan for the Los Angeles Region to Update the Ammonia Objectives for Inland Surface Waters (Including Enclosed Bays, Estuaries and Wetlands) with Beneficial Use Designations for Protection of Aquatic Lif*e. The ammonia Basin Plan amendment was approved by the State Board, the Office of Administrative Law, and U.S. EPA on April 30, 2003, June 5, 2003, and June 19, 2003, respectively. Although the revised ammonia water quality objectives may be less stringent than those contained in the 1994 Basin Plan, they are still protective of aquatic life and are consistent with U.S. EPA's 1999 ammonia criteria update.

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

6. The objective of the proposed Order is to protect the beneficial uses of receiving waters. To meet this objective, the proposed Order requires Unocal to develop a Storm Water Pollution Prevention Plan (SWPPP) consistent with the SWPPP requirements in the NPDES General Permit for Storm Water Discharges Associated with Industrial Activity [State Water Resources Control Board (State Board) Order No. 97-03-DWQ, NPDES Permit No. CAS000001]. The SWPPP will outline site-specific management practices for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged into surface waters. The proposed Order includes the relevant requirements contained in the attached *Storm Water Pollution Prevention Plan Requirements* (Attachment A).

7. On May 18, 2000, the U.S. EPA promulgated numeric criteria for priority pollutants for the State of California [known as the *California Toxics Rule* (CTR) and codified as 40 CFR § 131.38]. In the CTR, U.S. EPA promulgated criteria that protect the general population at an incremental cancer risk level of one in a million (10^{-6}), for all priority toxic pollutants regulated as carcinogens. The CTR criteria for freshwater or human health for consumption of organisms, whichever is more stringent, are used to develop the effluent limitations in this Order to protect the beneficial uses of the Coyote Creek. The CTR also allows a schedule of compliance not to exceed five years from the date of permit issuance for a point source discharge if the Discharger demonstrates that it is infeasible

to promptly comply with the CTR criteria. CTR' s Compliance Schedule provisions sunseted on May 18, 2005.

8. 40 CFR section 122.44(d)(vi)(A) requires the establishment of numeric effluent limitations to attain and maintain applicable narrative water quality criteria to protect the designated beneficial uses. Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that water quality-based effluent limitations (WQBELs) may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses.

9. State and Federal antibacksliding and antidegradation policies require that Regional Board take actions to protect the water quality of a water body to ensure that the waterbody will not be further degraded. The antibacksliding provisions are specified in sections 402(o) and 303(d)(4) of the CWA and in the 40 CFR section 122.44(l). Those provisions require a reissued permit to be as stringent as the existing Order with some exceptions where effluent limitations may be relaxed.

10. Effluent limitations are established in accordance with sections 301, 304, 306, and 307 of the federal CWA, and amendments thereto. These requirements, as they are met, will maintain and protect the beneficial uses of the Coyote Creek.

11. On March 30, 2000, U.S. EPA revised its regulation that specifies when new and revised State and Tribal water quality standards (WQS) become effective for Clean Water Act (CWA) purposes (40 CFR 131.21, 65 FR 24641, April 27, 2000). Under U.S. EPA' s new regulation (also known as the Alaska rule), new and revised standards submitted to U.S. EPA after May 30, 2000, must be approved before being used for CWA purposes. The final rule also provides that standards already in effect and submitted to U.S. EPA by May 30, 2000, may be used for CWA purposes, whether or not approved by EPA.

12. Existing waste discharge requirements contained in Board Order No. 99-133, adopted by the Regional Board on December 9, 1999. In some cases, permit conditions (effluent limitations and other special conditions) established in the existing waste discharge requirements have been carried over to this permit.

V. Regulatory Basis for Effluent Limitations

The CWA requires point source discharges to control the amount of conventional, nonconventional, and toxic pollutants that are discharged into the waters of the United States. The control requirements for the discharge of pollutants is established through NPDES permits that contain effluent limitations and standards. The CWA establishes two principal bases for effluent limitations. First, dischargers are required to meet technology-based effluent limitations that reflect the best controls available considering costs and economic impact. Second, they are required to meet water quality-based effluent limitations

(WQBELs) that are developed to protect applicable designated uses of the receiving water.

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

1. Best practicable treatment control technology (BPT) is based on the average of the best performance by plants within an industrial category or subcategory. BPT standards apply to toxic, conventional, and nonconventional pollutants.

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

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

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

The CWA requires EPA to develop effluent limitations, guidelines and standards (ELGs) representing application of BPT, BCT, BAT, and NSPS. Section 402(a)(1) of the CWA and 40 CFR section 125.3 of the NPDES regulations authorize the use of best professional judgment (BPJ) to derive technology-based effluent limitations on a case-by-case basis where ELGs are not available for certain industrial categories and/or pollutants of concern or do not consider certain pollutants.

If a reasonable potential to exceed water quality standards exists for pollutants in a discharge, WQBELs are also required under 40 CFR section 122.44(d)(1)(i). WQBELs are established after determining that technology-based limitations are not stringent enough to ensure that state water quality standards are met for the receiving water. WQBELs are based on the designated use of the receiving water, water quality criteria necessary to support the designated uses, and the state's antidegradation policy. For discharges composed entirely of storm water, such as the potential discharges to inland surface waters, enclosed bays, and estuaries, the U.S. EPA's *Technical Support Document for Water Quality-Based Toxics Control (TSD) of 1991* (U.S. EPA/505/2-90-001) establishes procedures for determining reasonable potential and establishing WQBELs for priority pollutant criteria promulgated by U.S. EPA through the CTR and the National Toxics Rule (NTR), as well as the Basin Plan. With respect to a reasonable potential analysis, the TSD provides an approach for determining whether a discharge has a reasonable potential. The approach used in the TSD

is equally valid for determining the reasonable potential for discharges not comprised entirely of storm water discharges.

There are several other specific factors affecting the development of limitations and requirements in the proposed Order. These are discussed as follows:

1. Pollutants of Concern

The CWA requires that any pollutant that may be discharged by a point source in quantities of concern must be regulated through an NPDES permit. Further, the NPDES regulations require regulation of any pollutant that (1) causes; (2) has the reasonable potential to cause; or (3) contributes to the exceedance of a receiving water quality criteria or objective.

Effluent limitations for Discharge Serial No. 001 in the existing Order were established for oil and grease and phenolic compounds (chlorinated and non-chlorinated) because they may be present in materials previously stored on-site and have the potential to be present in storm water runoff from a petroleum tank farm. Wastewater discharges may affect the temperature and pH of the receiving water, and because the Basin Plan contains water quality objectives for these pollutants, they are considered pollutants of concern in the discharge. Storm water runoff from the diked areas of the tank farm may contribute to the BOD of the discharge and may contain total suspended solids. Therefore, these constituents are considered pollutants of concern. In addition, due to the nature of petroleum materials previously stored at the site benzene, ethylbenzene, toluene, xylene, total petroleum hydrocarbons (TPH), methyl tertiary butyl ether (MTBE), and tertiary butyl alcohol (TBA) are considered pollutants of concern as well.

Storm water discharges may also carry pollutants that may contribute to acute toxicity. Therefore, toxicity, an indicator of the presence of toxic pollutants, is also considered a pollutant of concern.

2. **Technology-Based Effluent Limitations**

The previous permit required the Discharger to develop and implement a *Storm Water Pollution Prevention Plan* (SWPPP). A SWPPP outlines site-specific management processes for minimizing storm water runoff contamination and for preventing contaminated storm water runoff from being discharged directly into surface waters. Therefore, this permit will continue to require that DFSP-Norwalk update and implement a SWPPP.

There are currently no national ELGs for tank farm facilities and the absence of data available to apply Best Professional Judgement (BPJ), and pursuant to 40 section CFR 122.44(k), the Regional Board will require the Discharger to develop and implement a *Best Management Practices Plan* (BMPP). The combination of the SWPPP and BMPP

and existing permit limitations based on past performance and reflecting BPJ will serve as the equivalent of technology-based effluent limitations, in the absence of established ELGs, in order to carry out the purposes and intent of the CWA.

3. **Water Quality-Based Effluent Limitations**

As specified in 40 CFR section 122.44(d)(1)(i), permits are required to include WQBELs for toxic pollutants (including toxicity) that are or may be discharged at levels which cause, have reasonable potential to cause, or contribute to an excursion above any water quality standard. The process for determining reasonable potential and calculating WQBELs when necessary is intended to protect the designated uses for the receiving water as specified in the Basin Plan, and achieve applicable water quality objectives and criteria (that are contained in other state plans and policies, or U.S. EPA water quality criteria contained in the CTR and NTR). Where numeric water quality objectives have not been established in the Basin Plan, 40 CFR section 122.44(d) specifies that WQBELs may be set based on U.S. EPA criteria and supplemented, where necessary, by other relevant information to attain and maintain narrative water quality criteria to fully protect designated beneficial uses. The procedures for determining reasonable potential, and if necessary for calculating WQBELs, are contained in the TSD for storm water discharges. Further, using BPJ, the TSD provides an approach to determine whether storm water discharges have a reasonable potential to exceed water quality standards.

(a) Reasonable Potential Analysis (RPA)

Sufficient effluent and ambient data are needed to conduct and complete an RPA. If data are not sufficient, the Discharger is required to collect the appropriate data for the Regional Board to conduct an RPA. Upon review of the data, and if the Regional Board determines that WQBELs are needed to protect the beneficial uses, the permit will be reopened for appropriate modification.

There are insufficient monitoring data available to perform the RPA for the priority pollutants. The TSD requires the dischargers to submit sufficient data to conduct the determination of priority pollutants requiring WQBELS and to calculate the effluent limitations. This permit includes an interim monitoring requirements to obtain the necessary data.

(b) Calculating WQBELs

If a reasonable potential exists to exceed applicable water quality criteria or objectives, then a WQBEL must be established in accordance with one of three procedures contained in Section 5.4 of the TSD. These procedures include:

1) If applicable and available, use of the wasteload allocation (WLA) established as part of a total maximum daily load (TMDL).

2) Use of a steady-state model to derive maximum daily effluent limitations (MDELs) and average monthly effluent limitations (AMELs).

3) Where sufficient effluent and receiving water data exist, use of a dynamic model which has been approved by the Regional Board.

(c) Impaired Water Bodies on the 303 (d) List

Section 303(d) of the CWA requires states to identify specific water bodies where water quality standards are not expected to be met after implementation of technology-based effluent limitations on point sources. For all 303(d)-listed water bodies and pollutants, the Regional Board plans to develop and adopt TMDLs that will specify WLAs for point sources and load allocations (LAs) for non-point sources, as appropriate.

The U.S. EPA has approved the State's 303(d) list of impaired water bodies on July 25, 2003. Certain receiving waters in Los Angeles County watersheds do not fully support beneficial uses and therefore have been classified as impaired on the 2002 303(d) list and have been scheduled for TMDL development.

The 2002 State Board's California 303(d) List classifies the Coyote Creek as impaired. The pollutants of concern, detected in the water column, in the sediment, and in the fish tissue, include: copper, lead, selenium, zinc, coliform and toxicity. No TMDLs for Coyote Creek have been completed. Thus, no conditions in the proposed Order are based on TMDLs.

(d) Whole Effluent Toxicity

Whole Effluent Toxicity (WET) protects the receiving water quality from the aggregate toxic effect of a mixture of pollutants in the effluent. WET tests measure the degree of response of exposed aquatic test organisms to an effluent. The WET approach allows for protection of the narrative "no toxics in toxic amounts" criterion while implementing numeric criteria for toxicity. There are two types of WET tests: acute and chronic. An acute toxicity test is conducted over the short term and measures mortality. A chronic toxicity test is conducted over the long term and measures mortality, reproduction, and growth.

The Basin Plan specifies a narrative objective for toxicity, requiring that all waters be maintained free of toxic substances in concentrations that are lethal to or produce other detrimental response from aquatic organisms. Detrimental response includes but is not limited to, decreased growth rate, decreased reproductive success of resident or indicator species, and/or significant alterations in population, community ecology, or receiving water biota. The existing permit does not contain acute toxicity limitations or monitoring requirements.

In accordance with the Basin Plan, acute toxicity limitations dictate that the average survival in undiluted effluent for any three consecutive 96-hour static or continuous flow bioassay tests shall be at least 90%, with no single test having less than 70% survival. Consistent with Basin Plan requirements, this Order establishes acute toxicity limitations.

The primary discharges at the DFSP-Norwalk facility are comprised solely of storm water and occur after a significant storm event and therefore, are not continuous. Therefore, the discharge is not only expected to contribute to long-term toxic effects. Intermittent discharges are likely to have short-term toxic effects; therefore, DFSP-Norwalk only will be required to continue to conduct acute toxicity testing and comply with acute toxicity limitations.

4. **Specific Rationale for Each Numerical Effluent Limitation**

Section 402(o) of the Clean Water Act and 40 Section CFR 122.44(l) require that effluent limitations or conditions in reissued Orders be at least as stringent as those in the existing permit. Therefore, existing effluent limitations for the regulated pollutants (BOD, total suspended solids, oil and grease, and phenolic compounds) are carried over to this permit. The effluent limitation for total suspended solids has been revised based on similar Orders that have been recently adopted by the Regional Board. The effluent limitations for pH and temperature are based on the Basin Plan. The proposed permit prescribed effluent limits for turbidity and settleable solids are based on best professional judgement (BPJ). The effluent limitations for petroluem hydrocarbons, benzene, ethylbenzene, toluene, and xylene are based on effluent limitations contained in permits recently adopted by the Regional Board for similar facilities. The Regional Board considers all of these constituents to be pollutants of concern due to the nature of the previous operation, raw materials and products handling, and storage at the site.

On October 8, 1997, Governor Pete Wilson signed Assembly Bill 592. Assembly Bill 592 requires the State of California, Department of Health Services (DHS) to adopt primary and secondary drinking water standards for MTBE. In January 1999, DHS adopted 5 µg/L as the secondary standard for MTBE based on taste and odor threshold. Based on the nature of operations (cleanup of petroleum contamination) at the facility, the proposed Order includes an effluent limitation for MTBE of 5 µg/L.

Tertiary butyl alcohol is a gasoline constituent, an impurity in commercial-grade MTBE, and/or a breakdown product of MTBE. In 1999, California' s Office of Environmental Health Hazard Assessment (OEHHA) conducted an interim assessment based on preliminary calculations of the carcinogenicity of TBA, concluding that exposures to TBA at 12 µg/L via the oral route represent a one in a million excess cancer risk. Based on this assessment, OEHHA has set a Notification Level for TBA at 12 µg/L. Based on the nature of operations (cleanup of petroleum contamination) at the facility, the proposed Order also includes an effluent limitation for TBA at 12 µg/L.

The following Table presents the effluent limitations and specific rationales for pollutants that are expected to be present in the storm water discharge through Discharge Serial No. 001 (Latitude 33° 53' 33" West and Longitude 118° 04' 19" North):

Pollutant (units)	Maximum Daily Effluent Limitation	Rationale[1]
	Concentration	
Temperature (deg. F)	86	TP
PH (pH units)	6.5 – 8.5	BP
Oil and Grease (mg/L)	15	E
Phenolic compounds (chlorinated) (mg/L)[2]	0.5	E
Total Suspended Solids (mg/L)	75	BPJ
BOD_5 @ 20°C (mg/L)	30	E
Turbidity (mg/L)	75	BPJ
Settleable solids (ml/L)	0.3	BPJ
Total Petroleum Hydrocarbons (µg/L)	100	BPJ
Benzene (µg/L)	1	BPJ
Ethylbenzene (µg/L)	700	BPJ
Toluene (µg/L)	150	BPJ
Xylene (µg/L)	1750	BPJ
Methyl Tertiary Butyl Ether (µg/L)	5	MCL
Tertiary Butyl Alcohol (µg/L)	12	MCL
Acute toxicity	[3]	E, BP

1 BP = Basin Plan Objectives are instantaneous maximum concentrations of pollutants that when not exceeded are protective of the beneficial uses of the particular water body. They are generally set at the level required to protect the most sensitive beneficial use or at an even lower level based on antidegradation principles.

BPJ = Best Professional Judgment is the method used by permit writers to develop technology-based NPDES permit conditions on a case-by-case basis using all reasonably available and relevant data. BPJ limitations are established in cases in which effluent limitation guidelines are not available for a particular pollutant of concern. Authorization for using BPJ limitations is found under section 401(a)(1) of the Clean Water Act and under 40 CFR section 125.3.

The pH shall remain in this range at all times.

For Temperature:

TP = Thermal Plan - The new temperature effluent limit is reflective of new information available which indicates that the 100^0F temperature is not protective of aquatic organisms. A survey was completed for several kinds of fish and the 86^0F temperature was found to be protective. The Basin Plan lists temperature requirements for the receiving waters. Temperature: This value represents an instantaneous maximum value, not to be exceeded at any time.

E - Existing Permit.

2 Phenolic compounds include the sum of the following individual chlorinated and non-chlorinated phenolic compounds: 2-chlorophenol; 2-nitrophenol; phenol; 2,4-dimethylphenol; 2,4-dichlorophenol; 2,4,6-

trichlorophenol; 4-chloro-3-methylphenol; 2,4-dinitrophenol; 2-methyl-4,6-dinitrophenol; pentachlorophenol; and 4-nitrophenol.

[3] Any three consecutive 96-hour static or continuous flow bioassay tests must be at least 90%, with no single test producing less than 70% survival (more information can be found in Section I.B.3.a. of the tentative permit).

VII. Monitoring Requirements

The existing Order for DFSP-Norwalk (No. 99-133) required effluent monitoring for storm water once per discharge event for pH, total waste flow, temperature, BOD, oil and grease, phenolic compounds, and total suspended solids as well as annual monitoring for acute toxicity and priority pollutants. Monitoring requirements for the proposed Order are discussed in greater detail in Section III of the Monitoring and Reporting Program (*MRP*) No. 6572.

(a) Effluent Monitoring

Because the characteristics of the wastewater being treated by the Discharger are not expected to vary significantly over time, grab samples are required for all pollutants of concern.

The Discharger is required to monitor the conventional, non-conventional, and priority pollutants as outlined in the *MRP* No. 6572 to assess the impact of the discharge on the beneficial uses of the receiving waters. Monitoring of these pollutants will characterize the storm water discharged and determine compliance with applicable effluent limitations established in the proposed Order.

This Order continues to require annual monitoring for acute toxicity and the monitoring of flow, and regulated pollutants during every storm event discharge. The proposed Order also requires monitoring for, benzene, ethylbenzene, toluene, xylene, and TPH during each discharge event due to the possible contamination of the storm water by petroleum products previously stored on-site. The Discharger is also required to continue to monitor for priority pollutants annually to provide data to evaluate reasonable potential.

(b) 2,3,7,8-TCDD Monitoring for Reasonable Potential Determination

The Regional Board is requiring, as part of the *MRP*, that the Discharger conduct effluent monitoring for 2,3,7,8-TCDD (or Dioxin) and the 16 congeners. The Discharger is required to calculate Toxic Equivalence (TEQ) for each congener by multiplying its analytical concentration by the appropriate Toxicity Equivalent Factors (TEF). The Discharger is required to monitor for dioxin and report results in accordance with Section II of the *MRP*.

(c) Storm Water Monitoring

The Discharger is required to measure and record the rainfall each day of the month. The Discharger is also required to conduct visual observations of all storm water discharges of all storm water discharge locations to observe the presence of floating and suspended materials, oil and grease, discoloration, turbidity and odor. Furthermore, the Discharger shall implement the Storm Water Pollution Prevention Plan Requirements (SWPPP) as is enumerated in Attachment M of the WDR Order No. R4-2005-0057.