STATE OF CALIFORNIA
CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD
LOS ANGELES REGION

CEASE AND DESIST ORDER NO. R4-2007-0056

REQUIRING THE BOEING COMPANY, SANTA SUSANA FIELD LABORATORY
TO CEASE AND DESIST DISCHARGES OF CONTAMINANT CONCENTRATIONS IN EXCESS
OF APPLICABLE WATER QUALITY STANDARDS TO WATERS OF THE UNITED STATES

The California Regional Water Quality Control Board, Los Angeles Region (Regional Board) finds:

BACKGROUND

1. The Boeing Company (Permittee), Santa Susana Field Laboratory (SSFL) is located at the top of Woolsey Canyon Road in the Simi Hills, Ventura County, California. The site includes 2,800 acres of land; the developed portion of the site comprises approximately 1,500 acres. There is 1,200-acres of undeveloped land located to the south and additional 150-acres of undeveloped land to the north of the developed portion of the site. SSFL is owned by both the Permittee and the National Aeronautics and Space Administration (NASA). The United States Department of Energy (DOE) also owns several buildings located in Area IV, with the land being under the ownership of Boeing.

2. The Permittee and its predecessors’ operations at SSFL since 1950 include research, development, assembly, disassembly, and testing of rocket engines, and chemical lasers. DOE conducted past operations in research and development of energy related programs, including nuclear reactors, and seismic testing experiments. Current DOE activities onsite are solely related to facility closure, environmental remediation, and restoration.

3. Nuclear research and development for the DOE and its predecessors was conducted at the SSFL from 1954 – 1989. The activities included developing and operating reactors, and fabricating and disassembling nuclear fuel. The government began to phase out the program in the 1960s. The last reactor was shut down in 1980, and nuclear research was terminated in 1989. This research and the associated activities resulted in contamination in Area IV.

There are currently no programs at the SSFL which employ special nuclear materials. Current decommissioning activities have reduced the inventory of radioactive waste at the SSFL to approximately 5 curies. Essentially all of this material is stored in shielded vaults located at the Radioactive Materials Handling Facility (RMHF). SSFL continues to utilize radioisotopes in the form of calibration sources which are necessary to calibrate radiation detectors and counting equipment. Three radiological facilities located in Area IV of the SSFL remain to be decommissioned. Storm water run-off from Area IV of the SSFL is monitored for radioactivity. The DOE is responsible for the cost of decontamination and decommissioning, the California Department of Health Services (Radiological Health Branch) has radiological oversight responsibilities at Area IV of the SSFL.

July 30, 2007
Revised: October 15, 2007
Revised: November 1, 2007
4. Historical activities at SSFL that contributed to discharges from the site included rocket engine testing cooling water, operation of fire suppression equipment, and pressure testing of equipment used to support rocket engine testing. Other facility support activities such as cooling, heating, domestic waste treatment, and groundwater treatment also contributed to discharges from the site.

5. During the early 1950s to the mid-1970s, volatile organic compounds were utilized for the cleaning of hardware and rocket engine thrust chambers as well as other equipment. These solvents migrated into the subsurface, contaminating groundwater primarily with trichloroethylene (TCE) and 1, 2-dichloroethylene (1, 2-DCE). There is an extensive groundwater remediation/investigation program in progress at the SSFL, which historically included pumping, treating, and storing groundwater at the facility. This system was composed of eight treatment systems. These systems had the capability of producing up to 578 million gallons of treated groundwater per year. The groundwater was treated to remove volatile, and in some cases semi-volatile, organic compounds. The system was not designed to treat perchlorate or metals. Historically, treated groundwater was discharged directly into one of five water reclamation ponds via naturally occurring streambeds and in some cases man made watercourses present onsite. These treatment systems were regulated under Resource Conservation Recovery Act (RCRA) hazardous waste permits or administrative orders issued by Department of Toxic Substances Control (DTSC), and various air quality control permits issued by Ventura County.

The groundwater treatment system is being reconfigured. The plan is for one system that will be located in Area 1, near CTL-V. The groundwater from all over the site will be pumped to this location for treatment. After treatment the effluent will be tested and discharged to the streambed at Outfall 019. Outfall 019 is a new compliance point located downstream of Outfall 011 and upstream of Outfall 001. The new groundwater treatment system is scheduled to begin operation in August 2007.

6. SSFL has the potential to discharge a total of approximately 272 million gallons per day (MGD) of storm water runoff and wastewater that has the potential to contain pollutants from the facilities. Approximately 60% of the discharge exits the property via southerly discharge points (Discharge Outfalls 001, 002, 011, and 018) to Bell Creek, a tributary to the Los Angeles River, a navigable water of the United States, with its confluence located near the intersection of Bassett Street and Owensmouth Avenue in Canoga Park, above the estuary.

The remaining storm water is discharged offsite via Outfalls 003 through 007, 009, and 010 to the northwest toward the Arroyo Simi, a tributary of Calleguas Creek. Discharges from Outfall 008 in Happy Valley flows via Dayton Canyon Creek to Chatsworth Creek. Chatsworth Creek flows south to Bell Creek southwest of the intersection of Shoup Avenue and Sherman Way. Bell Creek subsequently flows southeast to the Los Angeles River.

DISCHARGE HISTORY

7. Discharges from the SSFL have been covered by a National Pollutant Discharge Elimination System (NPDES) permit since 1976.

8. On June 29, 1998, the Regional Board adopted Order No. 98-051 which prescribed waste discharge requirements to the Permittee for the discharge of storm water runoff and wastewater from the SSFL.
9. On June 27, 2001, the Regional Board issued a Notice of Violation (NOV) to the Permittee for violations of the effluent limits and monitoring and reporting requirements set forth in Board Order No. 98-051. The Permittee’s effluent discharges exceeded the limits for mercury (Hg), copper (Cu), BOD, total coliform, total suspended solids (TSS), cadmium (Cd), thallium (Tl), oil and grease, antimony (Sb), and NO$_2$ + NO$_3$ as Nitrogen (N) from January 2000 through March 2001 from various discharge outfalls at the SSFL site.

10. On October 19, 2001, the Regional Board issued a Revised NOV to the Permittee, which resulted in rescinding seven (7) effluent limit violations and two (2) monitoring and reporting violations noted in the June 27, 2001, NOV.

11. On April 29, 2002, the Regional Board issued Complaint No. R4-2002-0084 for Mandatory Minimum Penalty to the Permittee in the amount of $39,000 which was paid by the Permittee for effluent limit violations of Hg, Tl, oil and grease, total coliform, settleable solids, NO$_2$ + NO$_3$ as N, and fluoride from January 2000 through April 2001. Boeing waived a hearing and paid $33,000 to the State Board Cleanup and Abatement Account. The remaining $6,000 was used to fund a Regional Board approved Supplemental Environmental Project.

12. On February 6, 2004, the Regional Board issued a NOV to the Permittee for violations of effluent limits set forth in Board Order No. 98-051. The Permittee’s effluent exceeded the limits for Sb, Cd, Cu, TSS, and turbidity from August 1998 through November 2003. The NOV required submittal of a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. 98-051.

13. In a letter dated March 8, 2004, the Permittee responded to the February 6, 2004, NOV by listing all the corrective actions taken at the site.

14. On July 1, 2004, the Regional Board adopted Order No. R4-2004-0111 replacing Order No. 98-051, which prescribes waste discharge requirements to the Permittee for the discharge of storm water runoff and wastewater from SSFL. This order added eleven new compliance points and incorporated requirements based on the California Toxics Rule (CTR).

15. On July 30, 2004, a Petition from Committee to Bridge the Gap for Review of Regional Board Order No R4-2004-0111 was filed. The petition requested a stay of the requirements included in Order R4-2004-0111 to the extent it would remove water quality based effluent limitations for certain metals and volatile organic compounds applicable to seven outfalls at the site. On September 17, 2004, the State Board adopted Order WQO 2004-0014, which denied the petitioners request.

16. Subsequent to the adoption of Order R4-2004-0111, on August 2, 2004, the Permittee filed a petition of the permit with the State Water Resources Control Board. The permittee immediately put the petition in abeyance.

17. On March 14, 2005, the Regional Board issued a NOV to the Permittee for violations of the effluent limits set forth in Board Order No. R4-2004-0111. The Permittee’s effluent exceeded the limits for Cu, Hg, 2,3,7,8-Tetrachlorodibenzo-p-dioxin (TCDD), and pH during the 4th Quarter 2004. The NOV required submittal of a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. R4-2004-0111.
18. In a letter dated April 14, 2005, the Permittee, in response to the March 14, 2005 NOV, submitted a report detailing corrective actions taken. The Permittee asserted that most of the exceedances are the result of natural causes and/or new constituents, effluent limits or methodologies in the renewed permit. The Permittee also asserted that they planned to request that the permit be modified to remove permitted discharges that were generated by operations that have been terminated (sewage treatment plants).

19. By a letter to the Regional Board dated July 15, 2005, the Permittee requested that the Regional Board reopen and revise the NPDES permit issued in July 2004 to provide a compliance schedule for all outfalls where the Regional Board adopted more stringent numerical standards or analytical procedures that are different than the previous permit (“1998 permit”).

20. On October 7, 2005, the Regional Board issued a NOV to the Permittee for violations of effluent limits set forth in Board Order No. R4-2004-0111. The Permittee’s effluent exceeded the limits for Hg, TCDD, residual chlorine, oil and grease, sulfate, MBAS, chromium (Cr), iron (Fe), lead (Pb), manganese (Mn), total dissolved solids (TDS), and chronic toxicity from 1st Quarter 2005 through 2nd Quarter 2005. The NOV required a report detailing the corrective actions taken by the Permittee to achieve compliance with Board Order No. R4-2004-0111.

21. In a letter dated November 4, 2005, the Permittee, in response to the October 7, 2005, NOV, again asserted that the permit exceedances were consistent with the presence of naturally occurring constituents in site soils or in ash from area wildfires, rather than a result of site operations. The Permittee asserted that significant upgrades to the Best Management Practices (BMPs), to control runoff and to attempt to bring their discharge into full compliance with the waste discharge requirements had been implemented. However, due to the Topanga Wildfire on September 28, 2005, most of the BMPs were destroyed.

22. On November 22, 2005, pursuant to section 13267 of the California Water Code, the Regional Board issued a letter and directed the Permittee to submit a technical report including a workplan outlining how and when the Permittee proposed to meet the final effluent limitations of Board Order No. R4-2004-0111. The technical report was submitted to the Regional Board on December 16, 2005.

23. On November 30, 2005, a Cleanup and Abatement Order (CAO) No. R4-2005-0077 was issued to the Permittee. The CAO was issued in response to chronic exceedances of effluent limits contained in Regional Board Orders Nos. 98-051 and R4-2004-0111 as well as the increased threat of erosion of soil and ash resulting from the Topanga wildfire. The CAO ordered the Permittee to: (i) initiate a cleanup and abatement program including the implementation of all BMPs necessary to abate impacts of any erosion and ash deposition to navigable waters of the United States; (ii) implement corrective and preventative actions to bring the Permittee’s discharge into full compliance with Effluent Limitations and Receiving Water Requirements contained in Regional Board Order No. R4-2004-0111; and (iii) prepare a technical report summarizing the efforts being made to cleanup and abate the condition of pollution.

24. On November 30, 2005, tentative Order No. R4-2006-0XXX Amending Order No. R4-2004-0111 was issued for public comment. The tentative Order would incorporate new effluent limits based on the reasonable potential analysis of data collected since August 20, 2004, the effective date of Order No. R4-2004-0111. The tentative order was considered at the January 19, 2006, Board Meeting, updated by the Board and adopted as Order R4-2006-0008.
25. On January 24, 2006, tentative Order R4-2006-00XX, which incorporated updates associated with the metals and nutrients TMDLs for Los Angeles River was issued for public comment. During the March 9, 2006, Board Meeting the item was considered and the proposed amendment adopted as Order No. R4-2006-0036.

26. After the adoption of Order R4-2006-0008 in January 2006 the Permittee petitioned that order, activated the previous petition and petitioned the pending amendment, Order R4-2006-0036. The permittee also requested that the permit be stayed pending a decision on the permit on the basis of merit.

27. On April 3, 2006, there was a State Board Hearing on the Permittee’s request for a stay. Order WQ 2006-0002, which was adopted on April 7, 2006, from the State Board stayed effluent limitations for specified constituents at various outfalls. Subsequently, the State Board met en banc. After considering the evidence, the Board adopted Order WQ 2006-0007 on June 21, 2006, which vacated the previous Order and denied the request for a stay.

28. On December 13, 2006, after issuing a draft Order, the State Board held a public hearing to discuss issues related to the petition of the permit on the basis of merit. On that day, Order WQ 2006-0012 was issued by State Board. The Order:

- Remanded the permit to the Regional Board to revise the provisions concerning Outfalls 001, 002, 011, and 018,
- Stayed the effluent limitations at Outfalls 011 and 018 pending a determination by the Regional Board deleting either Outfalls 011 and 018 or Outfalls 001 and 002,
- Directed the Regional Board to issue a Cease and Desist Order with the shortest possible compliance schedule and interim effluent limitations, based on the effects of the Topanga Fire. The effective date of the CDO was to be January 19, 2006, and
- Review the permit to ensure that numeric effluent limitations for different outfalls do not count the same violation twice in such a manner as to treat a single violation as multiple violations.

In all other respects, the petitions were denied.

29. On February 21, 2007, the Permittee submitted the first of a number of deliverables with the final document delivered on May 24, 2007, which included a revised ROWD and other supplemental information considered during the update of the permit. The revised permit and this CDO will be considered by the Regional Board at the August 9, 2007 Board Meeting.

30. The Regional Board issued Complaint No. R4-2007-0035 for Administrative Civil Liability against the Boeing Company in the amount of $471,190. On August 27, 2007, Boeing waived its right to a hearing and submitted full payment of the civil liability. A Notice of Conclusion of Enforcement Action was issued referencing this case on September 11, 2007.

**EVIDENCE OF CONTAMINATION AND BASIS FOR SECTION 13301 ORDER**

31. On July 1, 2004, the Regional Board, adopted Order No. R4-2004-0111 (NPDES Permit No. CA0001309), containing Waste Discharge Requirements for the Boeing Santa Susana Field Laboratory including requirements as follows:
a) “Standard Provision A1: Neither the disposal nor any handling of wastes shall cause pollution or nuisance.”

b) “Standard Provision A2: The discharge shall not cause a violation of any applicable water quality standards for receiving waters adopted by the Regional Board or the State Water Resources Control Board as required by the Federal Clean Water Act and regulations adopted there under....”

c) “Standard Provision B3: The discharger must comply with all of the terms, requirements, and conditions of this order. Any violation of this order constitutes a violation of the Clean Water Act, its regulations and the California Water Code, and is grounds for enforcement action, Order termination, Order revocation and reissuance, denial of an application for reissuance; or a combination thereof.”

32. The Permittee, in self-monitoring reports submitted to the Regional Board, has reported violations of the waste discharge requirements contained in Order No. R4-2004-0111, R4-2006-0008, and R4-2006-0036. The Permittee has been discharging effluent that has chronically exceeded the effluent limits for TCDD, heavy metals and other pollutants from 1998 through 2006.

CONCLUSION

33. The unauthorized discharge of wastes by the Permittee was not permitted and is in violation of water quality objectives established in the 1994 Water Quality Control Plan for the Los Angeles Region, as amended, and other applicable State and Federal Water Quality Standards.

34. The Permittee has upgraded and implemented a number of new BMPs onsite since the adoption of Order R4-2004-0111. However, discharges from the facility continue to have contaminant concentrations in excess of established effluent limitations even after the implementation of the new BMPs. This indicates that efforts to control the transport of contaminants to waters of the United States have been ineffective.

35. On September 28, 2005, the Topanga Fire resulted in damage to much of the facility. Approximately 70% of the site was burned; leaving the hills denuded of vegetation and covered in ash.

36. Immediately after the Topanga Fire, the Discharger began cleanup operations. Activities undertaken to control the transport of contaminants and BMPs that have been implemented since the Topanga Fire include:

- Cleared and repaired fire damaged access roads.
- Repaired flow meter and telemetry systems.
- Removed burned debris.
- Installed new silt fencing, straw bales and/or straw waddles at various discharge locations.
- Graveled access roads in certain areas to prevent soil migration.
- Implemented daily irrigation to promote the vegetation growth in areas where it was destroyed.
- Installed new plastic tarp using new and improved techniques for anchoring and to prevent undermining at Outfall 004.
- Designed and started construction of sand/carbon under drain filter systems at a number of Outfalls.
Where required the area was re-graded to improve surface flow path.

Rip rap was installed across the access road at Outfall 006.

Implemented upgraded structural BMPs at all outfall locations in the developed portion of the site by May 2006. The upgraded BMPs in several instances included course and fine gravel beds to slow the flow of the runoff and filter bags filled with activated carbon and vermiculite, as well as silt fencing, fiber rolls, and in some cases course rip-rap.

Many of the upgraded BMPs were implemented prior to May 2006, which was reported in the Best Management Practices Effectiveness Sampling Workplan for Santa Susana Field Laboratory submitted to the Regional Board on October 2, 2006. However, the Permittee has continued to evaluate and upgrade the BMPs.

Section 13301 of the California Water Code states, in part, that:

“When a regional board finds that a discharge of waste is taking place or threatening to take place in violation of requirements or discharge prohibitions prescribed by the regional board or the state board, the board may issue an order to cease and desist and direct that those persons not complying with the requirements or discharge prohibitions (a) comply forthwith, (b) comply in accordance with a time schedule set by the board, or (c) in the event of a threatened violation, take appropriate remedial or preventive action.....”

This Cease and Desist Order (CDO) requires the Permittee to comply with established requirements or prohibitions, to comply with a time schedule, or, if the violation is threatening, to take appropriate remedial or preventative action.

40 CFR Part 122.44(f)(1) requires that when a permit is renewed or reissued, interim effluent limitations, standards or conditions must be at least as stringent as the final effluent limitations, standards or conditions in the previous permit (unless the circumstances on which the previous permit was based have materially and substantially changed since the time the permit was issued and would constitute cause for permit modification or revocation and reissuance under §122.62).

The data collected since the adoption of Order R4-2006-0008 and R4-2006-0036 provide new information about the discharge including the concentrations of contaminants in the discharge.

Review of the petition by the State Board resulted in a remand of the permit to the Regional Board with a directive to issue a CDO with the shortest possible compliance schedule and interim effluent limitations. The effective date of the CDO was stipulated as January 19, 2006.

The Topanga Fire resulted in significant alterations to the site. The exposure of the surface soils with no vegetative cover to retard runoff has increased the potential for the transport of those surface soils and associated contaminants offsite as a result of the fire. The fire created runoff conditions at SSFL over which the Permittee has limited control. Over 70 percent of the SSFL burnt with significant areas denuded of vegetation, making much of the steep terrain highly erodible. Boeing hydromulched upwards of 800 acres and installed erosion control devices throughout much of the SSFL after the fire which occurred on September 28, 2005, and prior to January 19, 2006.

After the fire Boeing immediately began efforts to replace the BMPs that were destroyed. Many of the drainage areas were vacuumed to remove accumulated ash. The Discharger hydromulched in excess of 800 acres onsite and installed erosion control devices throughout much of the SSFL site
prior to the January 19, 2006 Board Meeting. BMPs implemented prior to the fire were typical of those routinely used at construction sites to retard the transport of sediment (silt fences, plastic sheeting, etc). In most cases, the BMPs implemented after the fire were designed to slow flows (i.e. using underdrain systems) and to treat specific contaminant groups (i.e. metals) using bags filled with carbon or vermiculite.

On May 24, 2007, Boeing submitted to the Regional Board the *Phase 2 Post-Fire Vegetation Recovery Assessment Report* prepared for Geosyntech Consultants by Western Botanical Services, Inc. The report assessed the status of and time to recovery of chaparral and scrub at the project site subsequent to the Topanga Fire. The executive summary of the report asserts that chaparral and scrub represent the dominant vegetation types at SSFL and that these plant communities represent an important natural vegetation-based means of erosion control at the site. It further states that the “perennial plant cover differed by significantly more than 30 percent between burned and unburned transects, total vegetative cover differed by significantly greater than 20 percent cover and ground cover differed by significantly more than 30 percent cover.” The executive summary also states that the burned chaparral and scrub vegetation will likely recover within five to ten years.

The report also includes a section titled *Chaparral Recovery after Fire*. The section includes summaries of other studies completed on chaparral. Several studies (Guo 2001, Grace & Keeley 2006, Keeley & Keeley 1981, Horton & Kraebel 1955, Robi Chaud et al 2000) concluded that the total vegetative cover is generally high in the first two years following a fire: reported values are from 11 to 85 percent. The report estimates that between March 26 and April 12, 2007, the mean total vegetative cover within the burned areas is 46.6 percent.

42. The discharge from SSFL is currently primarily storm water runoff. The size of the site and the volume of storm water runoff generated presents challenges with treating the entire volume of rainfall. An estimate of the 85th percentile of the 1-year 24-hour storm event, the site specific “design storm” for the site resulted in a storm depth of 2.3 inches using the Los Angeles County Department of Public Works (LADWP) estimation models. The new BMPs implemented were designed to treat the storm water runoff generated by a storm depth of that size.

43. During discussions with the Permittee on February 23, 2007, there was a request to treat the discharges from Outfalls 008 and 009 differently from the other storm water only outfalls. Outfalls 008 and 009 are located in jurisdictional drainages where engineered BMP installation may be impractical. Historical data confirms that treatment is required to meet the effluent limitations included in the NPDES permit. The Permittee has proposed a conceptual natural BMP design study as the mechanism to meet the final effluent limitations proposed for discharges from these locations. The natural BMPs will be strategically located to control erosion and sediment from specific source areas, and RCRA RFI Sites throughout the subwatershed. The natural BMPs will include erosion and sediment controls (such as surface roughening and use of soil binders) and structural treatment devices (such as treatment wetlands and bioretention areas). An independent team of experts will be convened to evaluate site conditions including contaminants in the vicinity, evaluate the natural BMPs, their documented effectiveness and their performance under site conditions, to select the appropriate BMPs, the design and implementation. The goal of the natural BMPs implemented is to meet the final effluent limitations included in Order R4-2007-0055.

44. This CDO is an action taken for the protection of the environment and, as such, is exempt from the provisions of the California Environmental Quality Act in accordance with California Code of Regulations, title 14, section 15321.
The Regional Board notified Boeing, interested agencies, and parties of its intent to issue a CDO. The Regional Board heard and considered all testimony pertinent to this matter in a public hearing. All Orders referred to above and records of hearings and testimony therein are included herein by reference.

IT IS HEREBY ORDERED that, in accordance with section 13301 of the California Water Code, the Boeing Company shall cease and desist all discharges of contaminants in excess of the effluent limits stipulated in Order No. R4-2007-0055 and this CDO, by complying with the following:

1. Interim effluent concentrations specified in Tables 1 and 2, which shall be deemed effective from January 19, 2006, through August 31, 2006.

Table 1: Outfalls 001, 002, 011, and 018:

<table>
<thead>
<tr>
<th>Constituent</th>
<th>Daily Maximum</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration</td>
<td>Mass</td>
</tr>
<tr>
<td>Chromium</td>
<td>100 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Copper</td>
<td>55 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Lead</td>
<td>160 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.13 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Manganese</td>
<td>120 µg/L</td>
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<tr>
<td>TCDD</td>
<td>4.6E-06 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Iron</td>
<td>92 mg/l</td>
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</table>

Table 2: Outfalls 003 through Outfall 010:

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<th>Constituent</th>
<th>Daily Maximum</th>
<th>Basis</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Concentration</td>
<td>Mass</td>
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<tr>
<td>Antimony</td>
<td>35 µg/L</td>
<td>--</td>
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<tr>
<td>Copper</td>
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<tr>
<td>Lead</td>
<td>260 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Mercury</td>
<td>0.89 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>TCDD</td>
<td>9.1E-04 µg/L</td>
<td>--</td>
</tr>
<tr>
<td>Thallium</td>
<td>3.1 µg/L</td>
<td>--</td>
</tr>
</tbody>
</table>

2. Discharges from Outfalls 001 through 011, and 018 after August 31, 2006, shall comply with the limitations specified in Order R4-2006-0036 until the effective date of Order R4-2007-0055.

1 The permitted mass is calculated using the following formula:

\[
\text{Mass (lbs/day)} = 8.34 \times \text{Flow (MGD)} \times \text{Concentration (mg/L)}
\]

where the flow is the actual recorded flow for that discharge event.
3. Submit for approval to the Executive Officer by December 15, 2007, a workplan to evaluate, select and implement natural BMPs for Outfalls 008 and 009. The workplan shall contain the following components:


b. Assembly of a panel to review site conditions, modeled flow, contaminants of concern, and evaluate the BMPs capable of providing the required treatment to meet the final effluent limits.

c. A description of the BMPs to be utilized. Design the BMPs and develop a plan for BMP implementation. Purchase required materials.

d. A schedule for the installation of the BMPs at Outfalls 008 and 009.

e. A schedule to evaluate the BMPs’ performance.


5. Submit a final report on the results of the BMP implementation and evaluation and final recommended BMPs by August 15, 2009. The report should include a description of the new BMPs considered and/or evaluated, any sample data collected during the evaluation of BMPs, and the results of BMP effectiveness evaluations with quality assurance results.

The Permittee shall immediately comply with all other effluent limitations and requirements contained in Order R4-2007-0055.

This CDO is not intended to permit or allow the Permittee to cease any work required by any other order issued by the Regional Board, nor shall it be used as a reason to stop or redirect any investigation or cleanup or remediation programs ordered by the Regional Board or any other agency. Furthermore, this CDO does not exempt the Permittee from compliance with any other laws, regulations, or ordinances which may be applicable, and it leaves unaffected any further restrictions which may be contained in other statutes or required by other agencies.

This CDO does not preclude the Regional Board from taking any enforcement action, including but not limited to complaints for administrative civil liability for the discharge of effluent concentrations exceeding the effluent limitations specified in Order R4-2004-0111, R4-2006-0008, R4-2006-0036, or subsequent Orders.

The action taken by this Regional Board does not preclude the possibility of actions to enforce this CDO by third parties pursuant to Section 505 of the Federal Clean Water Act.

Should Permittee fail to comply with any provision of this CDO, the Executive Officer is authorized to request the Attorney General to take appropriate action against the Permittee, including injunction and civil monetary remedies, pursuant to appropriate California Water Code sections, including but not limited to, sections 13331, 13350, 13385 and 13386.
RESCISSION

Cleanup and Abatement Order No. R4-2005-0077, adopted by this Regional Board November 30, 2005, is hereby rescinded except for enforcement purposes.

I, Tracy J. Egoscue, Executive Officer, do hereby certify that the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, Los Angeles Region, on November 1, 2007.

[Signature]
Tracy J. Egoscue
Executive Officer