

## Los Angeles Regional Water Quality Control Board

June 27, 2019

Mr. David Dassler, Program Director  
Santa Susana Site Closure  
The Boeing Company  
Santa Susana Field Laboratory  
5800 Woolsey Canyon Road  
Canoga Park, CA 91304-1148

**SUBJECT: PARTIAL APPROVAL OF THE REQUEST FOR RELIEF PURSUANT TO WATER CODE SECTION 13385(j)(1)(B) – THE BOEING COMPANY, SANTA SUSANA FIELD LABORATORY, CANOGA PARK, CALIFORNIA (NPDES Permit No. CA0001309, CI No. 6027)**

Dear Mr. Dassler:

On April 15, 2019, the Los Angeles Regional Water Quality Control Board (Regional Water Board) received The Boeing Company's (Boeing's) request for relief from mandatory minimum penalties levied for violations of effluent limitations contained in its National Pollutant Discharge Elimination System (NPDES) permit that were reported by Boeing during the Fourth Quarter of 2018 (SHEA-116034). The request was made pursuant to California Water Code (Water Code) Section 13385(j)(1)(B) due to effects of the Woolsey Fire, which started on November 8, 2018 and burned a large portion of the Santa Susana Field Laboratory (SSFL) site.<sup>1</sup> Based on data submitted by Boeing and additional information outlined below, the Regional Water Board has determined that the request for relief from mandatory minimum penalties pursuant to Water Code Section 13385(j)(1)(B) is appropriate and is approved for effluent limitation violations, with the exception of TCDD,<sup>2</sup> during the portion of the Fourth Quarter 2018 from November 8, 2018 through December 31, 2018. The Board has also determined that such relief is appropriate for effluent limitation violations reported by Boeing during the First Quarter of 2019 from January 1, 2019 through March 31, 2019.

This letter summarizes the rationale used by the Regional Water Board in reaching this decision in the following sections:

- Background
- NPDES Permit

<sup>1</sup> DTSC (2018) DTSC Interim Summary Report of Woolsey Fire: Impacts at SSFL & Surrounding Communities Sampling Results. December 2018.

<sup>2</sup> Second Amended and Restated Consent Judgment Pursuant to Stipulation of the Parties; Order (Water Code, Division 7, Chapter 5.5.), California Superior Court, County of Ventura Case No. 56-2010-00371686-CU-MC-SIM Section 6.4, Civil Penalties for TCDD Violation Occurring Between January 1, 2010 and December 31, 2021.

- Consent Judgment
- Woolsey Fire and Associated Damage
- 4<sup>th</sup> Quarter 2018 and 1<sup>st</sup> Quarter 2019 Permit Effluent Limitation Violations
- Historical Effluent Data from Discharge Outfalls 008 and 009
- California Water Code Section 13385(j)(1)(B)
- Conclusion

### **I. Background**

The SSFL site occupies approximately 2,850 acres and is located at the top of Woolsey Canyon Road in the Simi Hills, Ventura County, California. Historical activities at SSFL included research, development, assembly, disassembly, and testing of small-scale nuclear reactors, rocket engines, and chemical lasers. Current activities are limited to assessment and cleanup operations of the soil and groundwater contamination present on the site as a result of historical operations. The assessment and cleanup are overseen by the California Department of Toxic Substances Control. The Regional Water Board regulates discharges of stormwater and treated groundwater to surface waters through an NPDES permit.

### **II. NPDES Permit**

Order No. R4-2015-0033 is SSFL's NPDES permit (NPDES Permit No. CA0001309) (NPDES Permit). It was adopted by the Regional Water Board on February 12, 2015 and became effective on April 1, 2015. The NPDES Permit regulates the discharge of approximately 187 million gallons per day (mg/d) of stormwater runoff and treated groundwater to surface waters, including Bell Creek, Dayton Canyon Creek, and Arroyo Simi. The NPDES Permit includes effluent limitations for discharges of stormwater and treated groundwater from the SSFL site. Stormwater traversing the site has the potential to transport contamination present in the surface soils offsite. Historical monitoring has documented violations of numeric effluent limitations developed to protect human health and the environment. As a result of historical violations, the Regional Water Board and Boeing entered into a legal agreement which stipulates how the civil penalties are calculated and how they are paid to the Regional Water Board.

### **III. Consent Judgment**

In 2010, Boeing and the Regional Water Board entered into a Consent Judgment Pursuant to Stipulation of the Parties Order (Water Code, Division 7, Chapter 5.5.), California Superior Court, County of Ventura Case No. 56-2010-00371686-CU-MC-SIM (Consent Judgment) relating to Boeing's failure to comply with the terms of its NPDES Permit. The Consent Judgment stipulated that Boeing be automatically penalized for violations occurring between January 1, 2010 and December 31, 2014. Pursuant to Section 6.1 of the Consent Judgment, titled Types of Penalties, "Boeing shall pay stipulated penalties for: 1) each NPDES permit violation that constitutes a 'serious violation' requiring the imposition of mandatory minimum penalties, as defined in Water Code Section 13385, subdivision (h), or 2) each permit violation that requires the imposition of mandatory minimum penalties, as defined in Water Code section 13385, subdivision (i)...." Pursuant to Section 6.4 of the Consent Judgment, titled Civil Penalties for Each TCDD Violation Occurring Between January 1, 2010 and December 31, 2014, "Boeing shall be automatically penalized for TCDD NPDES violations occurring between January 1, 2010, and December 31, 2014. The amount of the penalty for each violation shall be a total of seven thousand dollars per violation. Violations pertaining to TCDD shall not be exempt from stipulated penalties by Water Code section 13385 subdivision (j)(1)(B)." (Emphasis added). The Consent Judgment also states

that Boeing shall pay to the Regional Water Board the amount of money owed based on the self-reported violations that meet the mandatory minimum penalty definition within sixty (60) days of reporting the violations.

The Consent Judgment was first amended on December 30, 2014. The amended Consent Judgment was effective from January 1, 2015 to December 31, 2016. A second amended Consent Judgment, filed on July 27, 2017, is effective from January 1, 2017 to December 31, 2021. The stipulations regarding ongoing violations remained the same in each amendment.

#### **IV. Woolsey Fire and Associated Damage**

The Woolsey Fire, one of the most destructive wildfires in Los Angeles County history, began on November 8, 2018 during a high wind event. The fire was first noted on the north end of SSFL near the helipad. It moved rapidly and approximately 80% of the SSFL site burned. Much of the adjacent area in Bell Canyon also sustained damage and the fire burned through the surrounding canyons, reaching Malibu and Pacific Coast Highway.

On the SSFL site, sampling equipment and other best management practices (BMPs) at Outfalls 003, 004, 005, 006, 007, 009, and 010 were not affected by the fire, though a portion of the drainage to Outfall 009 burned. However, the same cannot be said for the rest of the SSFL site. For example, the piping used to transport collected storm water around the site to the storage ponds and to the on-site storm water treatment system at Silvernale Pond was destroyed, including the piping used to transport collected storm water from Outfalls 003-007 to Silvernale Pond. The area around Outfalls 001, 002, 008, 011, 018 and the Southern Buffer Zone burned. The BMPs and the tubing for sample collection in those areas were damaged. The passive treatment system and the sample equipment at Outfall 018 were destroyed. The storm water treatment system next to Silvernale Pond had some damage due to the proximity to the fire.<sup>3</sup> Overall, the effects of the Woolsey Fire included, but were not limited to, the incomplete combustion of vegetation, BMPs, piping used to transport water around the site, and utility poles, as well as the resultant exposure of contaminants and ash to runoff due to the denuding of the SSFL site from the fire.

#### **V. 4<sup>th</sup> Quarter 2018 and 1<sup>st</sup> Quarter 2019 Permit Effluent Limitation Violations**

After the Woolsey Fire, rain events occurred on November 20-21, and on November 28-29, 2018. No runoff was generated from the SSFL site during these rain events, however. The first rain event that generated runoff began on December 5, 2018. Discharges from Outfalls 002, 008, and 009 began on December 6, 2018 and both composite and grab samples were collected. Other NPDES outfalls did not discharge. During the 1<sup>st</sup> Quarter 2019, Boeing reported six qualifying rain events generating runoff from Outfalls 001, 002, 004, 006, 008, 009, 011 and 018 resulting in eleven sampling events. Boeing reported the following daily maximum effluent limitation violations.

<b>Daily Maximum Effluent Limitation Exceedances During 4<sup>th</sup> Quarter 2018 and 1<sup>st</sup> Quarter 2019</b>				
<b>OUTFALL</b>	<b>SAMPLE DATE</b>	<b>ANALYTE</b>	<b>DAILY MAXIMUM PERMIT LIMIT</b>	<b>DAILY MAXIMUM RESULT</b>
Outfall 008	12/07/2018	Copper	14 µg/L	15 µg/L

<sup>3</sup> After the Woolsey Fire, much of the equipment at the outfall locations was operated using generators that had been installed temporarily until the power lines were repaired and power could be restored throughout the SSFL site.

Daily Maximum Effluent Limitation Exceedances During 4 <sup>th</sup> Quarter 2018 and 1 <sup>st</sup> Quarter 2019				
OUTFALL	SAMPLE DATE	ANALYTE	DAILY MAXIMUM PERMIT LIMIT	DAILY MAXIMUM RESULT
Outfall 008	12/07/2018	Cyanide	9.5 µg/L	15 µg/L
Outfall 008	12/07/2018	Lead	5.2 µg/L	54 µg/L
Outfall 009	12/07/2018	TCDD*	2.8E-08 µg/L	3.7E-08 µg/L
Outfall 008	01/07/2019	Lead	5.2 µg/L	38 µg/L
Outfall 008	01/07/2019	Copper	14 µg/L	16 µg/L
Outfall 008	02/01/2019	Lead	5.2 µg/L	7.5 µg/L
Outfall 009	02/01/2019	Nickel	86 µg/L	170 µg/L
Outfall 011	02/03/2019	Arsenic	10 µg/L	11 µg/L
Outfall 011	02/03/2019	Iron	0.3 mg/L	9.6 mg/L
Outfall 011	02/03/2019	Lead	5.2 µg/L	8.4 µg/L
Outfall 011	02/03/2019	Manganese	50 µg/L	170 µg/L
Outfall 011	02/03/2019	TCDD*	2.8E-08 µg/L	1.7E-07 µg/L
Outfall 008	02/08/2019	Nitrite Plus Nitrate (as N)	8 mg/L	8.6 mg/L
Outfall 008	02/08/2019	Nitrate, Total (as N)	8 mg/L	8.6 mg/L
Outfall 008	02/10/2019	Nitrite Plus Nitrate (as N)	8 mg/L	8.6 mg/L
Outfall 008	02/10/2019	Nitrate, Total (as N)	8 mg/L	8.6 mg/L
Outfall 011	02/15/2019	Iron	0.3 mg/L	4.6 mg/L
Outfall 011	02/15/2019	Manganese	50 µg/L	86 µg/L
Outfall 011	02/15/2019	TCDD*	2.8E-08 µg/L	3.9E-08 µg/L
Outfall 018	03/06/2019	pH	6.5-8.5 s.u.	6.41 s.u.
Outfall 011	03/07/2019	TCDD*	2.8E-08 µg/L	3.3E-08 µg/L
Outfall 011	03/07/2019	Iron	0.3 mg/L	0.84 mg/L

\*TEQ without Detected, but not Quantified (DNQ) values.

### VI. Historical Effluent Data from Outfalls 008, 009, 011 and 018

Generally, historical NPDES permit sampling results from Outfalls 008, 009, 011, and 018 do not indicate violations of the effluent limitations for the pollutants that had elevated concentrations during the storm events after the Woolsey Fire. There were seven qualifying rain events that produced stormwater discharges from July 2016 through October 2018. Shown below are the three effluent limitation violations that occurred at Outfalls 008, 009, and 011. Discharges from Outfall 018 remained in compliance throughout the time period. Therefore, the exceedances noted in the table above were likely the result of the fire.

Historical Sample Results at Outfalls 008, 009 and 011				
OUTFALL	SAMPLE DATE	ANALYTE	DAILY MAXIMUM PERMIT LIMIT	DAILY MAXIMUM RESULT
Outfall 008	01/20/2017	pH	6.5-8.5	6.2
Outfall 011	01/24/2017	Iron	0.3 mg/L	0.77 mg/L
Outfall 009	02/18/2017	Lead	5.2 µg/L	9.5 µg/L

### VII. California Water Code Section 13385(j)(1)(B)

California Water Code Section 13385(j)(1)(B) states "Subdivisions (h) and (i) do not apply to an unanticipated, grave natural disaster or other natural phenomenon of an exceptional, inevitable,

and irresistible character, the effects of which could not have been prevented or avoided by the exercise of due care or foresight." Subdivisions (h) and (i) stipulate that mandatory minimum penalties in the amount of \$3,000 shall be assessed for violations except as provided in subdivisions (j), (k), and (l). Section 13385(j)(1)(B) thus exempts Boeing from paying certain penalties under the Consent Judgment if those penalties are due to a violation caused by an unanticipated, grave natural disaster like the Woolsey Fire and its effects, the effects of which could not have been prevented or avoided by the exercise of due care or foresight.

### **VIII. Conclusion and Partial Relief**

During the Fourth Quarter of 2018 and the First Quarter of 2019, Boeing reported effluent limitation exceedances at Outfalls 008, 009, 011, and 018 based on sampling data collected after the Woolsey Fire. Based on information regarding the drainage areas of the site that burned and historical data, the Regional Water Board has determined that the effluent limitation violations are likely due to the effects of the Woolsey Fire.

The Regional Water Board has further determined, based on information available to it, that the effects of the fire could not have been prevented or avoided by the exercise of due care or foresight by Boeing. Based on lessons learned during previous fire events such as the 2005 Topanga Fire, the framework for fire response related to stormwater discharges was in place and Boeing immediately implemented it. Additionally, Boeing has a Fire Station onsite that immediately responded when the Woolsey Fire began; the onsite fire crew received support within an hour of the fire's discovery from neighboring fire crews in Los Angeles and Ventura counties.

The Regional Water Board further understands that Boeing has undertaken a variety of efforts to clean up fire-related debris at SSFL and repair the damaged stormwater management infrastructure after the Woolsey Fire. During site inspections conducted by Regional Water Board staff on November 20, 2019 and November 28, 2019 crews were collecting burned debris, vacuuming ash, repairing sampling equipment, replacing pipelines used to transport stormwater around the site, and hydromulching approximately 31 acres. The flow-through treatment system at Outfall 018, which was destroyed by the fire, has been removed and an alternative sampling station has been installed temporarily. The storm water treatment system next to Silvernale Pond was repaired and resumed operating on January 13, 2019 using generator power. The power infrastructure was restored on March 15, 2019. The Regional Water Board further understands that Boeing continues to work towards restoring the systems that were previously in place to control the discharge of pollutants in storm water runoff, including work to address damage to the storm water treatment system next to Perimeter Pond, optimize operation of the system and to design and implement a new flow-through treatment system at Outfall 018.

The Regional Water Board has determined that the request for relief from the mandatory minimum penalties pursuant to Water Code Section 13385(j)(1)(B) is appropriate and is approved for effluent limitation violations occurring during the portion of the Fourth Quarter of 2018 from November 8, 2018, when the Woolsey Fire began, through December 31, 2018 with the exception of TCDD violations for which relief is precluded by the Consent Judgment. The Board has also determined that the same relief is appropriate for effluent limitation violations occurring during the First Quarter of 2019 from January 1, 2019 through March 31, 2019 with the exception of TCDD violations as noted above. The effluent limitation violations, identified in the table in Section V above, occurred after the Woolsey Fire and prior to and during actions to clean up debris, remove burned BMPs, install temporary and/or new BMPs, and make required repairs to infrastructure at the site.

Mr. David Dassler  
The Boeing Company

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For that period, Boeing will only be assessed penalties for the TCDD effluent limitation violations of the NPDES Permit identified in the table in Section V, above. Boeing must continue its efforts to replace and/or repair BMPs damaged or destroyed. Should Boeing require additional relief pursuant to Water Code Section 13385(j)(1)(B), it may request such relief from the Regional Water Board. The Regional Water Board will consider each request on a case-by-case basis.

The Regional Water Board received a check in the amount of \$25,750 to cover exceedances initially reported during the Fourth Quarter of 2018. Because four exceedances of TCDD cannot be granted relief from mandatory minimum penalties as explained above, there is an outstanding amount of \$2,250 [(4 TCDD x \$7,000) - \$25,750] that is due by July 15, 2019.

Should you have any questions about this matter, please contact Ms. Cassandra Owens at (213) 576-6750 / [cassandra.owens@waterboards.ca.gov](mailto:cassandra.owens@waterboards.ca.gov) or Mr. Russ Colby at (213) 620-6375 / [russ.colby@waterboards.ca.gov](mailto:russ.colby@waterboards.ca.gov).

Sincerely,

  
Hugh Marley  
Assistant Executive Officer