THIRD QUARTER 2011 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

Notes:

- For Dioxins and Furans, laboratory results may have been reported in picograms/liter (pg/L). However, the permit limit is stated in micrograms/liter (μg/L). To evaluate permit compliance, the laboratory results have been converted to μg/L, as necessary, to calculate the TCDD TEQ.
- 2. TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's TEF. The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as

THIRD QUARTER 2011 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

- *10 value was estimated detect or estimated non detect (J,UJ) due to deficiencies in quantitation of the constituent including constituents reported by the laboratory as Estimated Maximum Possible Concentration (EMPC) values
- *11 no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
- ANR analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed (annual, semi-annual, etc.)
- B laboratory method blank contamination
- C calibration %RSD or %D were noncompliant
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TIC)

THIRD QUARTER 2011 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

- pg/L picograms per liter
- Q matrix spike recovery outside of control limits
- R as a validation qualifier, results are rejected; the presence or absence of analyte cannot be verified
- R (reason code in parentheses) %R for calibration not within control limits
- RL laboratory reporting limit

RL-1 reporting limit raised due to sample matrix effects

%RSD percent relative standard deviation

- S surrogate recovery was outside control limits
- TEQ toxic equivalent
- T presumed contamination, as indicated by a detect in the trip blank
- TU_c toxicity units (chronic)
- U result not detected
- µg/L micrograms per liter
- UJ result not detected at the estimated reporting limit
- umhos/cm micromhos per centimeter
- WHO TEF World Health Organization toxic equivalency factor
- A analysis not completed due to hold time exceedence or insufficient sample volume
- [#] Per ORDER NO. R4-2010-0090 page 23 Footnote 1. The effluent limitations for total suspended solids and settable solids are not applicable for discharges during wet weather. During wet weather flow, a discharge event is greater than 0.1 inches of rainfall in a 24hour period. No more than one sample per week need be obtained during extended periods of rainfall or the discharge of collected stormwater. A storm event must be preceded by at least 72 hours of dry weather.
- (4.0)3.1/- Represents (Dry Weather Limit) Wet Weather Limit / Monthly Average Limit.

OUTFALL 018

THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

OUTFALL 019 (Treatment System)

THIRD QUARTER 2011 REPORTING SUMMARY THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

July 1 through September 30, 2011

			08/10-11/2011 (Comp)			09/07-08/2011 (Comp)		
ANALYTE	UNITS	Permit Limit	RESULT	MDA	VALIDATION	RESULT	MDA	VALIDATION
		Daily			QUALIFIER			QUALIFIER
		Max/Monthly						
		Avq						
RADIOACTIVITY								
Gross Alpha	pCi/L	15/-	0.472 ± 1.1	1.78	UJ (C)	0.717 ± 1.2	2.04	UJ (C)
Gross Beta	pCi/L	50/-	6.82 ± 2.3	3.55		7.87 ± 0.89	1.13	
Strontium-90	pCi/L	8.0/-	-0.073 ± 0.37	0.904	U	-0.292 ± 0.34	0.93	U
Total Combined Radium-226 & Radium 228	pCi/L	5.0/-	0.29 ± 0.38	1.01	U	0.57 ± 0.46	1.18	U
Tritium	pCi/L	20000/-	13.7 ± 93	156	U	-15.4 ± 91	155	U
Uranium, Total	pCi/L	20/-	0.115 ± 0.018	0.028	J (DNQ)	0.04 ± 0.011	0.022	J (DNQ)
Potassium-40	pCi/L	-/-	ND < 22.4	22.4	U	ND < 20.3	20.3	U
Cesium 137	pCi/L	200/-	ND < 1.12	1.12	U	ND < 1.48	1.48	U