### APPENDIX E

### THIRD QUARTER 2011 SUMMARY OF PERMIT LIMIT EXCEEDENCES

# 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.
- 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 specified on Page 40 of the NPDES permit.
- 3. For some sample dates, pH was determined with a field instrument and was noted as such. These results were not validated. Since pH does not have an RL, the possible pH range is shown in the RL column.
- 4. The NPDES permit limit or benchmark limit for mercury of 0.10  $\mu$ g/L (Outfalls 001, 002, 011, 018 and 019) and 0.13  $\mu$ g/L (Outfalls 003-010) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20  $\mu$ g/L was used to determine compliance.
- 5. All of the following abbreviations and/or notes may not occur on every table.

-92.9 +/-200	A negative radiochemical analytical result indicates the count rate of					
\$	the sample was less than the background condition reported result or other information was incorrectly reported by the					
Ψ	laboratory; result was corrected by the data validator					
	based on validation of the data, a qualifier was not required					
-/-	no permit limit established for daily maximum or monthly average					
<(value)	analyte not detected at a concentration greater than or equal to the DL,					
	MDL, or RL (see laboratory report for specific detail)					
*	result not validated					
*1	improper preservation of sample					
*2	the ICP/MS ppb check standard was recovered above the control limit;					
	therefore, the constituent detected was qualified as estimated (J)					
*3	initial and or continuing calibration recoveries were outside acceptable					
	control limits					
*5	blank spike/blank spike duplicate relative percent difference was outside the control limit					

### 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

C5 Calibration verification %R was outside method control limits

%D percent difference between the initial and continuing calibration relative

response factors

deg F degrees Fahrenheit

DL detection limit

DNQ detected but not quantified (constituent value greater than or equal to

the laboratory method detection limit and less then the laboratory

reporting limit)

E duplicates show poor agreement H holding time was exceeded

I ICP interference check solution results were unsatisfactory

J estimated value

K The sample dilution's set-up did not meet the oxygen depletion criteria

of at least 2 mg/l. Therefore, the reported result is an estimated value

only.

L2 the laboratory control sample %R was below the method control limits

L laboratory control sample %R was outside control limits

LOD limit of detection

M1 matrix spike (MS) and/or MS duplicate were above the acceptance

limits due to sample matrix interference

M2 the MS and/or MS duplicate were below the acceptance limits due to

sample matrix interference

MDL method detection limit MGD million gallons per day

MHA\* Due to high level of analyte in the sample, the MS/MSD calculation

does not provide useful spike recovery information.

mg/L milligrams per liter

ml/L/hr milliliters per liter per hour

NA not applicable; no permit limit established for the constituent and/or

outfall

ND analyte value less than the LOD or MDL

NM not measured or determined NTU nephelometric turbidity unit

pCi/L picocurries per liter

## 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<sub>c</sub> 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

^ analysis not completed due to hold time exceedence or insufficient

sample volume

<sup>#</sup> 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 24-hour 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.

#### **SUMMARY OF PERMIT LIMIT EXCEEDANCES**

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

DAILY MAX PERMIT LIMIT EXCEEDANCES									
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	PERMIT LIMIT DAILY MAX	DAILY MAX RESULT	UNITS	VALIDATION QUALIFIER		
Outfall 019	Treatment System	9/07-08/2011	Chloride	150	170	mg/L			