APPENDIX E

THIRD QUARTER 2007 SUMMARY OF PERMIT LIMIT EXCEEDENCES

THIRD QUARTER 2007 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

Notes:

- 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 1998 World Health Organization's (WHO) toxic equivalency factor (TEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 46 of the NPDES permit.
- 2. For some sample dates, pH was determined with a field instrument to obtain a more representative result and was noted as such. These results were not validated.
- 3. The NPDES permit limits for mercury of 0.10 g/L (Outfalls 001, 002, 011, and 018) and 0.13 g/L (Outfalls 3-10) are not achievable by the laboratory; therefore, the laboratory reporting limit of 0.20 g/L was used to determine compliance.
- 4. The following assumptions and rationale were used to report the DMR Quantity or Loading results:

<u>Loading (lbs/day)</u> = Measured Sample Concentration (mg/L) x 8.34 x Outfall flow (MGD) <u>Monthly Average Loading (lbs/day)</u> = Sum of Event Mass Discharges within a Month / Number of Days of Flow for all Sample Events Where:

Event Mass Discharge = Measured Sample Concentration for Event (mg/L) x 8.34 x Total Flow for Sample Event (MGD)

In Compliance with the Permit (Page 44, Section D), for Monthly Average Discharge Values:

For calculating the monthly average, one-half of the MDL was used for concentration results reported as ND.

For calculating the monthly average, the estimated value was used for concentration results reported as DNQ.

If all pollutants belonging to the same group are reported as ND or DNQ, the sum of the individual pollutant concentrations were considered zero for calculation of the monthly average.

5. Data presented in the report tables are reported as quantified to the MDL (ND < MDL) and includes estimated detections (DNQ values) to provide low-level information and to give an indication of the sensitivity of the methods used. The laboratory-derived MDLs are designed to be reliable however, the data generation and validation procedures are designed to establish defensibility of quantified data to the RL. Data presented in the tables are accurate and reliable as qualified, but the final laboratory data reports and data validation reports must be used to determine legal defensibility. This does not affect compliance determination, since values below the RL are not used for compliance purposes.</p>

THIRD QUARTER 2007 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

Symbols and Abbreviations:

The following symbols and abbreviations may occur on report tables:

-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 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

THIRD QUARTER 2007 REPORTING SUMMARY NOTES THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

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

lbs/day pounds per day

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

M-3 Results exceeded the linear range in the MS and/or MS duplicate and

therefore are not available for reporting. The batch was accepted based on

acceptable recovery in the Blank Spike (LCS).

MDA minimum detectable activity
MDL method detection limit
MGD million gallons per day
mg/L milligrams per liter
ml/L milliliters per liter

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 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 (as a 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

SUMMARY OF PERMIT LIMIT EXCEEDANCES

THIRD QUARTER 2007 THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

			DAILY MAX PERMIT LIMIT EXCEEDANCE	S			
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	PERMIT LIMIT DAILY MAX/ MONTHLY AVERAGE	DAILY MAX RESULT	UNITS	VALIDATION QUALIFIER
Outfall 002	South Slope below R-2 Pond	09/22/07	Arsenic	10/-	35	ug/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Barium	1.0/-	2.3	mg/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Beryllium	4.0/-	11	ug/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Cadmium	3.1/2.0	6.9	ug/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Chronic Toxicity	1.0/-	16.0	Tuc	*
Outfall 002	South Slope below R-2 Pond	09/22/07	Chromium	16.3/8.1	100	ug/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Copper	14.0/7.1	100	ug/L	
Outfall 002	South Slope below R-2 Pond	09/22/07	Gross Alpha	15/-	701±170	pCi/L	J (H,R)
Outfall 002	South Slope below R-2 Pond						

SUMMARY OF PERMIT LIMIT EXCEEDANCES

THIRD QUARTER 2007 THE BOEING COMPANY SANTA SUSANA FIELD LABORATORY NPDES PERMIT CA0001309

DATENATE ATEDATEDATE

			MONTHLY AVERAGE PERMIT LIMIT EXCEED	ANCES			
OUTFALL	LOCATIONS	SAMPLE DATE	ANALYTE	PERMIT LIMIT DAILY MAX/ MONTHLY AVERAGE	MONTHLY AVERAGE RESULT	DATIESO	ATEDATE
				<u> </u>			