## APPENDIX D

## FOURTH QUARTER 2012 RADIOLOGICAL MONITORING DATA

2012 Δ Α D Α A0001309

:

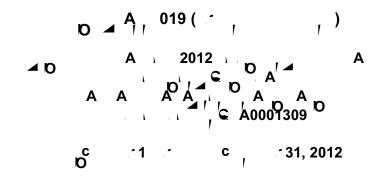
- TCDD TEQs for the purpose of determining permit compliance are the sum of the products of the detected dioxin congener concentration multiplied by that congener's toxicity equivalency factor (TEF) and bioaccumulation equivalency factor (BEF). The resulting compliance TCDD TEQ does not include those congener concentrations that are reported as DNQ, as specified on Page 37 of the NPDES permit.
- 2. pH was determined with a field instrument and was noted as such. These results were not validated.
- 3. The NPDES monthly average permit limit for mercury of 0.05  $\mu$ g/L (Outfall 019) is not achievable by the laboratory; therefore, the laboratory MDL of 0.10  $\mu$ g/L was used to determine compliance.
- 4. 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
	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



- \*11 no calibration was performed for this compound; result is reported as a tentatively identified compound (TIC)
- \* II \*III Unusual problems found with the data that have been described in Section II, "sample management", or Section III, "method analysis". The number following the asterisk (\*) will indicated the validation report section where a description of the problem can be found.
- ANR analysis not required; e.g., constituent or outfall was not required by the permit to be sampled and analyzed over the reporting period (annual, semi-annual, etc.)
- B laboratory method blank contamination
- BA relative percent difference out of control
- BEF bioaccumulation equivalency factor
- BU analyzed out of holding time
- BV sample received after holding time expired
- 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
- ft/sec feet per second
- H holding time was exceeded
- I ICP interference check solution results were unsatisfactory
- J estimated value, result lower than the detection limit
- J, DX estimated value, value < lowest standard (MQL), but > than MDL
- 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
- LQ LCS/LCSD recovery above method control limits

A 1 2012  $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$   $A = \begin{bmatrix} 2012 \\ 0 \\ 0 \end{bmatrix}$ 



]			10/03-04/2012			11/01-02/2012		
Α, ι	I		` I	A		` I	A	
		<b>A</b> '						
	pCi/L							
A, A		15/-	0.523 ± 0.97	1.85	UJ (C)	0.938 ± 1.1	1.73	UJ (C)
Gross Beta		50/-	2.4 ± 1.5	2.45	U	2.24 ± 1.3	2.01	J (DNQ)
Strontium-90		8.0/-	0.111 ± 0.36	0.8	U	-0.05 ± 0.32	0.779	U
Total Combined Radium-226 & Radium 228		5.0/-	0.62 ± 0.48	1.46	U	$0.44 \pm 0.49$	1.21	U
Tritium		20000/-	-121 ± 110	189	U	35.7 ± 100	173	U
Potassium-40		-/-	-2.53 ± 25	25.4	U	-4.98 ± 17	36.2	U
Uranium, Total		20/-	0.234 ± 0.028	0.021	J (DNQ, L)	0.591 ± 0.066	0.023	J (DNQ)
Cesium 137		200/-	0.533 ± 6.6	2.35	U	0.12 ± 0.77	1.3	U