

Stack Effluent Sampling Program: Reduction in Sample Analyses

Briefing for DOH Staff

April 19, 2012

Sample Analysis Reduction Overview

- Overall goal...maximize program efficiency and reduce overall cost by minimizing number of stack sample analyses
 - *Key constraint...maintain compliance with license/NOC sampling and monitoring requirements*
- Final Result
 - ❖ Reduced number of analyses (both gross alpha/beta and isotopic composite) for almost all stacks
 - ❖ Sampling frequency unchanged (still bi-weekly in most cases)
- MSA coordinated program evaluation and sample analysis reductions with CHPRC, WCH and WRPS
 - Future sampling requirement changes will need to be coordinated with MSA to maintain program efficiency and cost

What does this mean in practical terms?

For Major Stacks

- Fewer samples receive gross alpha-beta analysis (biweekly to either monthly to quarterly)
- Composite isotopic analyses now conducted semiannually rather than quarterly in most cases
- Continuous monitoring maintained to meet regulatory requirements

What does this mean in practical terms?

For Minor Stacks

- Fewer samples receive gross alpha/beta analysis (will cover at least the typical “4 week sample/year” prescribed in most minor stack NOCs)
- Composite isotopic analyses now conducted semiannually rather than quarterly in most cases
- Periodic confirmatory measurement requirements will be met with fewest number of samples feasible

Stack Samples and Analyses for Calendar Year 2012.

[shown with both new and previous number of analyses for comparison, "new / old"]

Facility or Project	Stack or Emission Point ID ^a	EDP Code (aka location code)	Time Period per Sample	Analysis and Number of Samples Planned for Analysis						
				Particulate Gross Alpha and Gross Beta	Periodic Isotopic Particulate Composite					Ag-Zeolite
					GEA	⁹⁰ Sr	Isotopic Pu	²⁴¹ Pu	²⁴¹ Am	
K Basin Closure Project	105-KW	Y234	BW	4 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
		Y236	BW	4 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
	105-KW Sparger Vent	Y249 ^b	A	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	1 / 1	
	296-K-142	Y201	M	12 / 12	4 / 4	4 / 4	4 / 4	4 / 4	4 / 4	
PUREX	291-A-1	A006	M	12 / 12	2 / 4	2 / 4	2 / 4		2 / 4	
		A007	M							2 / 12
B Plant	296-B-1	B001	M	4 / 12	2 / 4	2 / 4				
WESF	296-B-10	B748	BW	12 / 12	2 / 4	2 / 4				
East Tanks Farms	296-A-18	E060	BW	3 / 4						
	296-A-19	E061	BW	3 / 4						
	296-A-20	E197	BW	3 / 4						
	296-A-28	E272	BW	3 / 4						
	296-A-30	E903	BW	3 / 4						
	296-A-40	E013	BW	3 / 4						
	296-A-41	E015	BW	3 / 4						
	296-A-42	E147	BW	12 / 26	2 / 4	2 / 4	2 / 4		2 / 4	
	296-A-43	E148	V	3 / 4						
	296-A-44	E920	BW	12 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
	296-A-45	E922	BW	12 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
	296-A-46	E924	BW	12 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
	296-A-47	E926	BW	12 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
	296-P-45	E047	V	2 / 2	1	1	1		1	
	296-P-47	E096	BW	3 / 12	2 / 4	2 / 4	2 / 4		2 / 4	
	296-P-48	E098	BW	3 / 12	2 / 4	2 / 4	2 / 4		2 / 4	
296-P-107	E104	BW	3 / 12	2 / 4	2 / 4	2 / 4		2 / 4		
242-A Evaporator	296-A-21A	E651	BW	4 / 4						
	296-A-22	E643	BW	12 / 26	2 / 4	2 / 4	2 / 4		2 / 4	
ETF	296-E-1	E036	Q	1 / 4						
CSB	296-H-212	C601	M	12 / 12	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
222-S Lab	296-S-16	S264	BW	3 / 4						
	296-S-21	S289	BW	4 / 26	2 / 4	2 / 4	2 / 4		2 / 4	
S Plant	291-S-1	S006	M	1 / 1						
T Plant	291-T-1	T785	BW	26 / 26	4 / 4	4 / 4	4 / 4	4 / 4	4 / 4	
	296-T-7	T154 ^c	M	4 / 4	4 / 4					

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	296-P-22	W191	BW	3 / 4						
West Tank Farms	296-P-23	W190	V	3 / 4						
	296-P-44	E046	V	3 / 4	1 / 1	1 / 1	1 / 1		1 / 1	
	296-S-18	W096	V	1 / 1						
	296-S-25	W145	V	3 / 4						
WRAP	296-W-4	W123	BW	4 / 26	2 / 4	2 / 4	2 / 4	2 / 4	2 / 4	
WSCF	696-W-1	W010	M	4 / 4						
	696-W-2	W011	M	4 / 4						
PFP	291-Z-1	Z810	BW	12 / 26			2 / 4	2 / 4	2 / 4	
	296-Z-15	Z915	A	1 / 1						
324 Building	EP-324-01-S	F025	M	12 / 12	2 / 4	2 / 4	2 / 4		2 / 4	
MASF	437-MN&ST	F014	M	1 / 4						
	437-1-61	F019	M	1 / 4						
Totals				263 / 506	51 / 87	47 / 83	45 / 79	27 / 45	47 / 79	2 / 12