

Battelle
The Business of Innovation

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July 25, 2006

Mr. Mike McCann
U.S. Nuclear Regulatory Commission
Region III
2443 Warrenville Road
Suite 210
Lisle, IL 60532-4352

Dear Mr. McCann:

Subject: Submittal of the April 2006 Groundwater Sampling Events Results at Battelle's West Jefferson North Site

Enclosed are the tables for the results of the radiological analyses for the routine groundwater well samples collected in April 2006. The attached results represent the individual groundwater monitoring location results for the analyses of: gross alpha, gross beta, gamma spectroscopy, Sr-90, Pu, and U.

If you have any questions or comments please do not hesitate to call me at 614-424-4098.

Sincerely,



Joe Jacobsen
BCLDP Radiation Safety Officer

ATTACHMENTS: (2)

Cc: Jon Peckenpaugh- NRC HQ

RECEIVED JUL 26 2006

SUMMARY OF RADIOLOGICAL ANALYSES OF GROUNDWATER MONITORING WELLS
WEST JEFFERSON SITE - CY 2006

pCi/L

<i>Apr-06</i> NUCLIDE	WELL 100	WELL 118	WELL 168	WELL 206	WELL 300	WELL 306	WELL 506	WELL C-03	WELL C-09	WELL C-16
Gross Alpha	7.00E+00 *	6.00E+00 *	5.00E+00 *	7.00E+00 *	7.00E+00 *	3.00E+00	8.00E+00 *	4.00E+00 *	8.00E+00 *	4.00E+00 *
Gross Beta	4.00E+00	8.00E+00 *	1.00E+01 *	4.00E+00	6.00E+00 *	4.00E+00	9.00E+00 *	2.80E+01 *	6.40E+01 *	4.00E+00
Co-60	1.50E+00	1.18E+00	1.51E+00	1.63E+00	1.23E+00	1.44E+00	1.60E+00	1.29E+00	2.15E+00	1.46E+00
Sr-90	1.00E+00	4.90E+00 *	2.77E+00 *	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	2.26E+01 *	1.00E+00
Sb-125	4.44E+00	3.30E+00	3.47E+00	4.31E+00	3.26E+00	4.94E+00	5.15E+00	3.25E+00	4.64E+00	3.65E+00
Cs-134	1.62E+00	1.21E+00	1.27E+00	1.64E+00	1.10E+00	1.53E+00	1.81E+00	1.11E+00	1.61E+00	1.19E+00
Cs-137	1.96E+00	1.27E+00	1.44E+00	1.75E+00	1.24E+00	1.82E+00	2.06E+00	1.31E+00	1.89E+00	1.28E+00
Eu-152	7.59E+00	6.57E+00	6.45E+00	7.55E+00	6.68E+00	1.14E+01	9.71E+00	6.37E+00	8.60E+00	7.47E+00
Eu-154	3.24E+00	2.35E+00	2.54E+00	3.21E+00	2.16E+00	3.48E+00	3.65E+00	2.27E+00	3.31E+00	2.47E+00
Am-241	1.81E+01	6.53E+00	7.04E+00	1.80E+01	6.41E+00	1.98E+01	2.05E+01	6.54E+00	1.99E+01	6.90E+00
Pu-238	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
Pu-239	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
U-234 (a)	3.51E+00 *	2.04E+00 *	3.03E+00 *	1.69E+00 *	2.01E+00 *	1.30E+00 *	5.73E+00 *	3.05E+00 *	2.33E+00 *	2.22E+00 *
U-235 (a)	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00	1.00E+00
U-238 (a)	2.53E+00 *	1.00E+00	3.67E+00 *	1.00E+00	1.00E+00	1.00E+00	4.98E+00 *	2.64E+00 *	2.04E+00 *	2.77E+00 *

* DENOTES CALCULATED VALUE, ALL OTHER VALUES ARE LESS THAN OR EQUAL TO MDA

(a) DENOTES ANALYSIS PERFORMED BY ALPHA SPECTROSCOPY

SUMMARY OF RADIOLOGICAL ANALYSES OF SUPPLY WELLS WEST JEFFERSON SITE - CY 2006

pCi/L

<i>Apr-06</i> NUCLIDE	NORTH JN-W	MIDDLE JM-W	SOUTH JS-W
Gross Alpha	3.00E+00 *	5.00E+00 *	3.00E+00
Gross Beta	4.00E+00	4.00E+00	6.00E+00 *
Co-60	1.82E+00	1.29E+00	2.06E+00
Sr-90	1.00E+00	1.00E+00	1.00E+00
Sb-125	4.62E+00	3.31E+00	4.45E+00
Cs-134	1.57E+00	1.07E+00	1.70E+00
Cs-137	1.72E+00	1.31E+00	1.89E+00
Eu-152	9.91E+00	6.58E+00	9.02E+00
Eu-154	3.36E+00	2.43E+00	3.51E+00
Am-241	1.85E+01	6.46E+00	2.03E+01
Pu-238	1.00E+00	1.00E+00	1.00E+00
Pu-239	1.00E+00	1.00E+00	1.00E+00
U-234 (a)	1.92E+00 *	1.99E+00 *	1.56E+00 *
U-235 (a)	1.00E+00	1.00E+00	1.00E+00
U-238 (a)	1.00E+00	1.00E+00	1.00E+00

* DENOTES CALCULATED VALUE, ALL OTHER VALUES ARE LESS THAN OR EQUAL TO MDA

(a) DENOTES ANALYSIS PERFORMED BY ALPHA SPECTROSCOPY

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FedEx Standard Overnight
Next business afternoon. * Saturday Delivery NOT available.

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Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx Express Saver
Third business day. * Saturday Delivery NOT available.

* To meet location.

4b Express Freight Service

FedEx 1Day Freight*
Next business day. ** Friday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 2Day Freight
Second business day. * Thursday shipments will be delivered on Monday unless SATURDAY Delivery is selected.

FedEx 3Day Freight
Third business day. ** Saturday Delivery NOT available.

* To meet location.

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* Declared value limit \$500.

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