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WARZYN

Engineers & Scientists
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RESPONSE BRANCH

January 15, 1990
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Mr. Bernard J. Schorle
Remedial Project Manager
U.S. Environmental Protection Agency
Region V (5H S-11)
230 South Dearborn Street
Chicago, Illinois 60604

RE: Update of Table 3 in QAPP
Winnebago Reclamation Landfill

Dear Mr. Schorle:

In preparation for Round 3 groundwater sampling as required by the work plan for the Remedial Investigation and Feasibility Study, Pagel's Landfill, Table 3 of the QAPP has been updated to be consistent with the number of samples to be collected and the laboratories to be used.

Note that CompuChem has been added as a participating laboratory for analysis of Rounds 3 and 4 groundwater samples, Round 5 leachate samples and Round 2 surface water samples. Because CompuChem is a current CLP laboratory in good standing and since all required analysis are of a routine analytical services (RAS) nature, this addition should not require additional information or revision of the QAPP.

Warzyn's ability to use CompuChem will provide additional flexibility in scheduling analysis to obtain needed turnaround of results as we approach the desired delivery date for the RI/FS and ROD.

Please contact me at (708) 691-5138 should you have any questions or comments.

Sincerely,

WARZYN ENGINEERING INC.

Gary E. Parker

Gary E. Parker, P.E.
Manager, Hazardous Waste

Enclosure

cc: G. Marzorati
J. Holmstrom
R. Hall
J. Hill

160L04GEP/rcs/JAH

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2100 Corporate Drive
Addison, Illinois 60101
(708) 691-5000
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TABLE 3
SAMPLE TYPES AND ESTIMATED SAMPLE NUMBERS
PAGEL'S PIT LANDFILL

(1) MATRIX	(2) LAB	NO. OF SAMPLES	FIELD DUPLICATES	(3) FIELD BLANKS	(4) MATRIX SPK/DUP	(5) GC/MS CONFIRM	(6) TOTAL SAMPLES	(7) TEST PARAMETERS
GROUNDWATER								
ROUND 1	HAZLETON	44	5	3	6	5	63	VOLATILES HAZLETON'S METHOD
	HAZLETON	17	2	1	2		22	EPA HSL BNA'S AND PEST/PCB'S
	HAZLETON	17	2	1			20	EPA HSL METALS, DISSOLVED
	WARZYN	17	2	1			20	CYANIDE
	WARZYN	44	5	3			52	PHENOL
	WARZYN	44	5	3			52	ALKALINITY, CHLORIDE
	WARZYN	27	3	2			32	METALS, DISSOLVED (As, Ba, Cd)(8)
ROUND 2	HAZLETON	44	5	3	6	5	63	VOLATILES HAZLETON'S METHOD
	WARZYN	44	5	3			52	PHENOL
	WARZYN	44	5	3			52	ALKALINITY, CHLORIDE
	WARZYN	44	5	3			52	METALS, DISSOLVED (As, Ba, Cd)(8)
ROUND 3 (optional)	COMPUCHEM	15	2	1	2		20	EPA TCL VOCS AND BNAS
	WARZYN	15	2	1			18	PHENOL, CYANIDE
	WARZYN	15	2	1			18	ALKALINITY, CHLORIDE
	WARZYN	15	2	1			18	METALS, DISSOLVED (As, Ba, Cd)(8)
ROUND 4 (optional)	COMPUCHEM	15	2	1	2		20	EPA TCL VOCs AND BNAs
	WARZYN	15	2	1			18	PHENOL, CYANIDE
	WARZYN	15	2	1			18	ALKALINITY, CHLORIDE
	WARZYN	15	2	1			18	METALS, DISSOLVED (As, Ba, Cd)(8)
LEACHATE								
ROUND 1	HAZLETON	6	1	1	2	1	11	VOLATILES HAZLETON'S METHOD
	HAZLETON	6	1	1	2		10	EPA HSL BNA'S AND PEST/PCB'S
	HAZLETON	6	1	1			8	EPA HSL METALS, TOTAL
	WARZYN	6	1	1			8	CYANIDE
	WARZYN	6	1	1			8	PHENOL
	WARZYN	6	1	1			8	ALKALINITY, CHLORIDE
ROUND 2	HAZLETON	6	1	1	2	1	11	VOLATILES HAZLETON'S METHOD
	WARZYN	6	1	1			8	PHENOL, CYANIDE
	WARZYN	6	1	1			8	ALKALINITY, CHLORIDE
	WARZYN	6	1	1			8	METALS, TOTAL (As, Ba, Cd)
ROUND 3	HAZLETON	6	1	1	2	1	11	VOLATILES HAZLETON'S METHOD
	WARZYN	6	1	1			8	PHENOL, CYANIDE
	WARZYN	6	1	1			8	ALKALINITY, CHLORIDE
	WARZYN	6	1	1			8	METALS, TOTAL (As, Ba, Cd)
ROUND 4	HAZLETON	6	1	1	2		10	EPA TCL VOCS
	WARZYN	6	1	1			8	PHENOL, CYANIDE
	WARZYN	6	1	1			8	ALKALINITY, CHLORIDE
	WARZYN	6	1	1			8	METALS, TOTAL (As, Ba, Cd)

TABLE 3
SAMPLE TYPES AND ESTIMATED SAMPLE NUMBERS
PAGEL'S PIT LANDFILL
(Continued)

MATRIX (1)	LAB (2)	NO. OF SAMPLES	FIELD DUPLICATES	FIELD BLANKS (3)	MATRIX SPK/DUP (4)	GC/MS CONFIRM (5)	TOTAL SAMPLES (6)	TEST PARAMETERS (7)
ROUND 5	COMPUCHEM	6	1	1	2		10	EPA TCL VOCS, BNAS, PEST/PCBS
	WARZYN	6	1	1			8	PHENOL, CYANIDE
	WARZYN	6	1	1			8	ALKALINITY, CHLORIDE
	WARZYN	6	1	1			8	EPA TCL METALS
SURFACE WATER								
ROUND 1	HAZLETON	5	1	1	2	1	10	VOLATILES HAZLETON'S METHOD
	WARZYN	5	1	1			7	PHENOL, CYANIDE
	WARZYN	5	1	1			7	ALKALINITY, CHLORIDE
	WARZYN	5	1	1			7	METALS, TOTAL (As, Ba, Cd)
ROUND 2	COMPUCHEM	5	1	1	2	1	10	EPA TCL VOCS
	WARZYN	5	1	1			7	PHENOL, CYANIDE
	WARZYN	5	1	1			7	ALKALINITY, CHLORIDE
	WARZYN	5	1	1			7	METALS, TOTAL (As, Ba, Cd)
SEDIMENT								
	HAZLETON	5	1				6	EPA HSL VOLATILES
	HAZLETON	5	1				6	EPA HSL BNA'S AND PEST/PCB'S
	HAZLETON	5	1				6	EPA HSL METALS
	WARZYN	5	1				6	CYANIDE
AIR								
	RADIAN	4	3	1			8	VOLATILES

(1) All samples are considered low concentration samples
(2) Hazleton - Hazleton Laboratories America
3301 Kinsman Boulevard
Madison, Wisconsin 53704
Warzyn - Warzyn Engineering Inc.
One Science Court
University Research Park
Madison, Wisconsin 53705
Radian - Radian Corporation
Progess Center
3200 E. Chapel Hill Rd/Nelson Hwy.
P.O. Box 13000
Research Triangle Park, North Carolina
CompuChem - Compuchem Laboratores, Inc.
3308 Chapel Hill Road/Nelson Highway
Research Triangle Park, North Carolina 27709
(3) A trip blank for volatiles will be included with each shipment.
(4) Sample numbers reflect extra volume required for matrix spike/matrix spike duplicate analyses.
(5) Ten percent of all volatiles analyses by Hazleton's method will be confirmed by GC/MS analysis.
(6) Sample totals do not include trip blanks for volatiles.
(7) See Appendix A for CLP TCL list. See Appendix D for analyte list for volatiles analysis by Hazleton's method. See Appendix F for analyte list for volatiles analysis of air samples using Radian's method.
(8) Groundwater samples from private wells will not be filtered

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