7210 R-023-208.22

URANYL NITRATE HEXAHYDRATE NEUTRALIZATION PROJECT - URANYL NITRATE HEXAHYDRATE TANKS DECONTAMINATION REPORT

10/06/95

DOE-0026-95
DOE-FN EPAS
3
REPORT

7210

Department of Energy
Fernald Environmental Management Project
P. O. Box 398705
Cincinnati, Ohio 45239-8705
(513) 648-3155

OCT 0 6 1995

DOE-0026-96

Mr. Paul Pardi, RCRA Group Leader
Southwest District Office
Ohio Environmental Protection Agency
401 East 5th Street
Dayton, OH 45402-2911

Ms. Pamela Allen, Manager
Compliance Monitoring and Enforcement Section
Division of Hazardous Waste Management
Ohio Environmental Protection Agency
P.O. Box 163669
1800 WaterMark Drive
Columbus, OH 43216-3669

Dear Mr. Pardi and Ms. Allen:

URANYL NITRATE HEXAHYDRATE NEUTRALIZATION PROJECT - URANYL NITRATE HEXAHYDRATE TANKS DECONTAMINATION REPORT

Reference:

1. Letter, T. Crepeau to J. Craig and D. Ofte, "Director's Final Findings and Orders," dated December 27, 1994.

2. Letter, T. Schneider to J. Craig, "DOE FEMP MSL #531-0297 Hamilton County UNH Orders," dated June 15, 1995.

3. Letter J. Craig to J. Saric and T. Schneider, "Decontamination of Uranyl Nitrate Hexahydrate Tanks," dated July 31, 1995.

4. Letter, P. Harris to J. Craig, "U.S. DOE-FEMP OH6890008976 Hazardous Waste Hamilton County TSD-LGQ," dated August 24, 1995.

The purpose of this letter is to provide documentation for your review and approval that the Uranyl Nitrate Hexahydrate (UNH) System's tanks have been properly decontaminated as required by Paragraph V.5 of reference 1, as clarified by references 2, 3, and 4, with the exception of Tanks F1-25 and F1-26. The enclosed table summarizes analytical results for the final rinseate from each of the decontaminated tanks.

Recycled and Recyclable

Tanks F1-25 and F1-26 previously contained UNH solution. These two tanks were utilized for dilution/neutralization of UNH during the UNH Neutralization Project. They are still being utilized for dilution/neutralization of Nitric Acid/Residual Waste for the Nitric Acid/Residual Waste Project. These two tanks will continue to be utilized for dilution/neutralization of any Nitric Acid/UNH material found in the piping in the Plant 2/3 complex. This piping in the Plant 2/3 complex is outside the scope of Reference 1. Decontamination of these two tanks, in accordance with applicable closure requirements, will take place once they are no longer required for dilution/neutralization.

If you have any questions or require additional information, please contact Chris White at (513) 648-3172.

Sincerely,

Johnny Reising

FN:White

Johnny Reising
Fernald Remedial Action
Project Manager

Enclosure: As Stated

cc w/enc:

K. H. Chaney, EM-423, GTN
B. Skokan, EM-423, GTN
N. Brown, DOE-OH
J. Reising, DOE-FN
J. A. Saric, USEPA-V, HRE-8J
G. Jablonowski, USEPA-V, HRE-8J
Manager, TSPP/DERR, OEPA-Columbus
T. E. Crepeau, OEPA-Columbus
T. A. Schneider, OEPA-Dayton
F. Bell, ATSDR
D. Ward, GeoTrans
S. McClellan, PRC
R. Vandergrift, ODH
D. J. Brettschneider, FERMCO
T. D. Hagen, FERMCO
R. P. Heck, FERMCO
A. E. Hunt, FERMCO
AR Coordinator, FERMCO

cc w/o enc:

C. Little, FERMCO
M. Yates, FERMCO

RESULTS FROM ANALYSIS OF FINAL DECONTAMINATION RINSEATE OF UNH TANKS

Tank ID Number [1]	pH	lead (mg/l)	barium (mg/l)	chromium (mg/l)	mercury (ug/l)	total uranium (mg/l)
D1-1	7.16	0.004	<0.200	0.367	<0.2	9.8
D1-2	7.16	0.029	<0.200	0.334	<0.2	9.0
D1-3	7.90	0.030	<0.200	0.061	<0.2	1.3
D1-10	5.54	0.004	<0.200	0.153	0.2	50.8
F1-1	7.71	<0.020	<0.200	0.010	<0.2	8.4
F1-2	8.58	0.008	<0.200	0.188	<0.2	21.0
F1-301	7.18	0.024	<0.200	0.162	<0.2	5.1
F1-302	8.94	<0.020	<0.200	0.054	<0.2	15.6
F1-303	8.63	0.043	<0.200	0.204	<0.2	31.1
F1-308	9.24	0.029	<0.200	0.538	<0.2	30.4
F2E-5 (SE)	5.57	0.102	0.823	0.129	<0.2	277
F2E-6 (NE)	6.89	<0.003	<0.200	0.032	<0.2	32.3
F2E-7 (NW)	3.97	0.089	0.39	0.253	<0.2	305
F2E-8 (SW)	5.56	0.102	0.852	0.124	<0.2	275
F2-605	9.67	<0.020	<0.200	<0.010	<0.2	5.5
F2-606	9.19	<0.020	0.217	0.030	<0.2	13.9
F2-607	9.32	<0.020	<0.200	0.023	<0.2	8.3
F2-608	9.55	<0.020	<0.200	<0.010	0.2	2.8
F3E-220	7.00	0.028	<0.200	0.116	<0.2	2.4
F3E-223	7.12	<0.020	<0.200	<0.010	0.3	25.4
Rinseate standards[2]	<12.5 >2.0	0.6	1.0	1.0	30.0	NA

[1] Tanks F1-25 and F1-26 are being used as part of the Nitric Acid/Residual Waste Project. Decontamination of these tanks will occur once their use is no longer required

[2] Standards based on Section 3.10 of 9/1/93 OEPA Closure plan review Guidance for RCRA Facilities. 40 CFR 141.50 specifies a Maximum Contaminant Level Goal (MCLG) of zero for lead, the rinseate standard is defined as 15x the Practical Quantitation Limit (PQL) for lead in groundwater.