



**Department of Energy**  
Richland Operations Office  
P.O. Box 550  
Richland, Washington 99352

OCT 27 1995

96-PCA-022

Mr. Moses N. Jaraysi  
200 Area Unit Supervisor  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
1315 West Fourth Avenue  
Kennewick, Washington 99336

Mr. Joseph J. Witczak  
Unit Supervisor  
Regulatory and Technical  
Support Unit  
Nuclear Waste Program  
State of Washington  
Department of Ecology  
P.O. Box 47600  
Olympia, Washington 98504-7600

Dear Messrs. Jaraysi and Witczak:

**CLOSURE CERTIFICATION FOR THE 304 CONCRETION FACILITY (TS-3-2)**

Enclosed are the completed Closure Certifications for the 304 Concretion Facility. These signatures certify that closure of the 304 Concretion Facility was implemented in accordance with the specifications of the approved closure plan. These certifications are required by Washington Administrative Code 173-303-610(6), and were prepared in accordance with Section 7.8 of the 304 Concretion Facility Closure Plan, and Condition V.11.B.e of the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit.

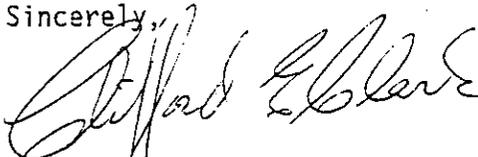
The 304 Concretion Facility is located in the 300 Area of the Hanford Site. This unit operated from 1971 until 1994 as a RCRA treatment, storage, and/or disposal unit for reactive dangerous waste from the uranium fuel fabrication process and from Pacific Northwest Laboratory activities involving depleted uranium alloys. Also, in 1988, the unit was used to repackage spent organic solvents from the uranium fuel fabrication process. Closure activities were completed in 1995 in accordance with the closure plan. Therefore, we request that Ecology inform the U.S. Environmental Protection Agency RCRA Information System that this TSD unit is now "closed". The Part A, Form 3, will be re-issued with "CLOSED" stamped on it along with the date that Ecology responds to this letter.

Messrs. Jaraysi and Witczak  
96-PCA-022

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Should you have any questions, please contact Ms. E. M. Mattlin of the U.S. Department of Energy, Richland Operations Office on (509) 376-2385 or Mr. F. A. Ruck III of Westinghouse Hanford Company (WHC) on (509) 376-9876.

Sincerely,



for James E. Rasmussen, Director  
Environmental Assurance, Permits,  
and Policy Division  
DOE Richland Operations Office

EAP:EMM



William T. Dixon, Director  
Environmental Services  
Westinghouse Hanford Company

Enclosure:  
[PE] Closure Certification  
for the 304 Concretion Facility

cc w/encl:  
EDMC, H6-08  
Ecology Library, Lacey  
D. Bartus, EPA  
R. Jim, YIN  
S. McKinney, Ecology  
D. Powaukee, NPT  
S. Price, WHC  
F. Ruck III, WHC  
D. Sherwood, EPA  
J. Wilkinson, CTUIR

cc w/o encl:  
W. Dixon, WHC  
R. Stanley, Ecology

**CORRESPONDENCE DISTRIBUTION COVERSHEET**

Author J. E. Rasmussen, RL W. T. Dixon, WHC (J. G. Adler, WHC)	Addressee M. N. Jaraysi, Ecology J. J. Witczak, Ecology	Correspondence No. Incoming 9504725 Xref 955521D
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Subject: NOTIFICATION OF INITIATION OF CLOSURE ACTIVITIES FOR THE 304  
 CONCRETION FACILITY (TS-3-2)

**INTERNAL DISTRIBUTION**

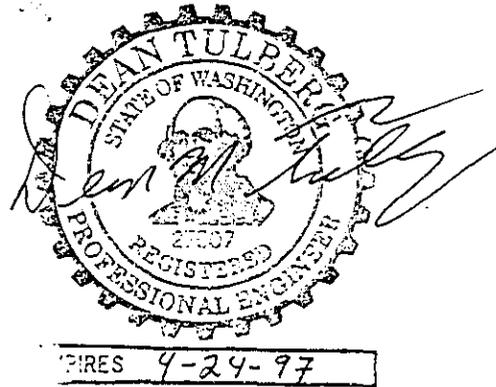
Approval	Date	Name	Location	w/att
		Correspondence Control	A3-01	X
		J. G. Adler	H6-23	
		L. D. Arnold	B2-35	
		F. T. Calapristi	B2-35	
		W. T. Dixon, Sr. Staff	H6-21	
		P. J. Mackey	B3-15	
		I. L. Metcalf	L6-26	
		S. M. Price, Assignee	H6-23	
		J. A. Remaize	L6-26	
		F. A. Ruck III	H6-23	
		W. E. Toebe	H6-22	
		RCRA File/BAO	H6-23	X
		JGA/LB	H6-23	

PROFESSIONAL ENGINEER'S CERTIFICATION STATEMENT  
304 CONCRETION FACILITY CLOSURE PLAN CERTIFICATION

I, the undersigned, an independent registered Professional Engineer, hereby certify that I have reviewed the approved Closure Plan and supporting closure documentation for the 304 Concretion Facility Closure Plan, and to the best of my information and belief, closure activities were performed in accordance with the specifications in the approved closure plan, except as discussed in the attached Specifications and Limitations of Professional Engineer's Certification. This certification is based solely on a review of documents as described in the attached Specifications and Limitations of Professional Engineer's Certification, and on the periodic observations of closure activities by me and/or my representative.

The above statements are true and complete to the best of my knowledge and within the limits of professional judgment under the prevailing standards of practice on this 28th day of September, 1995.

Dean M. Tulberg, P.E.  
Washington #27507  
Foster Wheeler Environmental Corporation



## SPECIFICATIONS AND LIMITATIONS OF PROFESSIONAL ENGINEER'S CERTIFICATION

### 304 CONCRETION FACILITY CLOSURE PLAN CERTIFICATION

Pursuant to the 304 Concretion Facility Closure Plan, decontamination of dangerous waste constituents was performed between August 3, 1994 and September 30, 1994. Sampling to verify the effectiveness of the facility decontamination was initiated on December 13, 1994 and was completed on February 2, 1995.

The approved Closure Plan, copies of field logbooks, validation data packages for the analytical results from sampling of the 304 Concretion Facility, and a copy of the 304 Concretion Facility Closure Activities and Data Evaluation Report (WHC-SD-EN-TI-301, Rev. 0) were provided to Dean M. Tulberg, P.E., of Foster Wheeler Environmental Corporation (Foster Wheeler) by Jason G. Adler of Westinghouse Hanford Company (WHC) RCRA Unit Closures. These documents were represented in conversations with Mr. Adler of WHC to be the full, accurate, complete, and representative record of closure activities at the 304 Concretion Facility as performed by WHC staff and contractors. (See attached list of documents reviewed.) Mr. Tulberg and/or his representative from Foster Wheeler performed periodic observations of closure activities. A logbook of on-site observations was kept by Foster Wheeler.

Mr. Tulberg's review was limited to those documents provided to Foster Wheeler by WHC, and the logbook kept by Foster Wheeler. The review was conducted to determine if closure activities were performed in accordance with the specifications in the approved Closure Plan. No on-site supervisory or verification data collection activities were performed. Periodic site visits were performed to observe the decontamination and sampling activities.

During the course decontamination and subsequent sampling at the 304 Concretion Facility, some activities were not performed in full accordance with the requirements of the Closure Plan. A summary of the significant deviations from the Closure Plan are:

- Two areas, the trench and sump, were not able to be decontaminated successfully due to cement crumbling of the sides and floor. The two areas were vacuumed but not wiped.
- A high lead result was found in one of the soil samples from the trench. A discussion for considering this result an anomaly is provided in the 304 Concretion Facility Closure Activities and Data Evaluation Report.
- One of the south wall sample locations specified by the sampling plan was blocked by equipment. A field change was made to move the sampling location vertically down to the next sampling grid.
- One of the east wall sample locations specified by the sampling plan was on a section of wall covered by plywood. This section of the east wall divides the change room

from the main part of the 304 Building. Since there were no metal surfaces on that wall section, the wipe sample was collected from the plywood surface at the original location.

- The Closure Plan states: "The preparation of the concrete organic samples will be performed at the 222-S Analytical Laboratory" (page APP G-12, line 28). The concrete core samples destined for organic analysis were crushed in the field and the sample was collected following crushing. This was done because the 222-S Laboratory did not have the ability to handle solid cores. Cores were placed in a plastic bag, then wrapped in a cloth and crushed on-site. A sledge hammer was used to break the cores into pieces. In all cases, the plastic bag was penetrated when the cores were broken.
- The soil beneath the 304 Concretion Facility was generally unconsolidated material with rocks up to 3 inches across. These soil conditions required multiple cores to be collected to provide a sample sufficient for analysis. Rocks were removed from the samples by hand prior to filling sample containers. One soil sample planned for the trench area was not collected because the hole was obstructed by rocks and concerns for sampler safety (radiation exposure and radiological skin contamination) prevented clearing the rocks by hand or collecting the sample by hand.
- Some minor deviations were noted in validation packages for the sample results such as contamination of equipment blanks, matrix spike recovery outside acceptance criterion, and loss of temperature tracking on coolers.
- The Closure Plan states: "The water used during coring will be vacuumed and containerized to minimize cross contamination and displacement of volatiles" (page APP G-4, line 40 and page APP G-7, line 20). Matt Schwarz, the Professional Engineer's representative who assisted in field observations, noted in the Foster Wheeler logbook that water was not vacuumed. The reason given to Mr. Schwarz for not vacuuming was that the amount of water used was considerably lower than anticipated by the sampling plan. After coring the asphalt samples, the dirt below was found to be dry; therefore, the sampling team assumed that cross contamination from the water was not likely.
- The sample logbook (WHC-N-205 #30) contains a note that the chain of custody for sample BOD2B7 was broken. The sample was shipped for analysis even though custody had been broken.
- The Closure Plan states: "The soil beneath the storage pad and building floor will be authoritatively sampled in areas of potential pathways (e.g., cracks, expansion joints)" (page 7-7, line 31) and "Each separate potential pathway will be sampled at least once" (page 7-7, line 41). Mr. Schwarz identified two cracks in the floor by the south door. Figure G-2 of the Closure Plan only identifies one crack at this location. The identified crack was sampled and no contaminants of concern were reported above the Cleanup Performance Standard. The second crack, approximately

perpendicular to the crack sampled and parallel the south door near the expansion joint, was not sampled.

- The Closure Plan states: "A new pair of gloves will be used for each wipe sample" (page APP G-6, line 38). Mr. Schwarz noted in the Foster Wheeler logbook on December 13, 1994 the following:

Note Field Change:

- 2 pair latex gloves used in sampling instead of canvas gloves.
- Outer gloves will be changed only when changing locations, not per sample.

## DOCUMENTS REVIEWED

- 1) *304 Concretion Facility Closure Plan*, DOE/RL-90-03, Rev. 2A
- 2) *304 Concretion Facility Closure Activities and Data Evaluation Report*, WHC-SD-EN-TI-301, Rev. 0
- 3) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG LK3689-LAS-023 LATA VW403.25*, dated April 11, 1995
- 4) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG LK3723-LAS-025 LATA VW403.26*, dated April 18, 1995
- 5) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG LK3706-LAS-030 LATA VW403.28*, dated April 21, 1995
- 6) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG LK3748-LAS-032 LATA VW403.27*, dated May 2, 1995
- 7) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG LK3764-LAS-028 LATA VW403.31*, dated May 17, 1995
- 8) Transmittal letter from J.M. Jones, LATA, to Karl Pool, WHC, and accompanying report, *Data Validation Report for 304 Concretion Facility Closure, SDG WHC-SD-WM-DP-096, Rev.0, LATA VW403.30*, dated May 19, 1995

- 9) Copy of Field Logbook No. WHC-N-205 #30, Pages 32, 33, 35-70
- 10) Copy of Field Logbook kept by Janet L. Wright, Pages 7-19
- 11) Foster Wheeler Logbook kept by Matt Schwarz, Foster Wheeler, Professional Engineer's representative.

CLOSURE CERTIFICATION  
FOR  
304 CONCRETION FACILITY

Hanford Site  
U.S. Department of Energy, Richland Operations Office

We, the undersigned, hereby certify that 304 Concretion Facility closure activities were performed in accordance with the specifications in the approved Closure Plan, except as discussed in the attached Specifications and Limitations of the Professional Engineer's Certification.

John D. Wagoner  
Owner/Operator  
John D. Wagoner, Manager  
U.S. Department of Energy  
Richland Operations Office

10/27/95  
Date

A. LaMar Trego  
Co-operator  
A. LaMar Trego, President  
Westinghouse Hanford Company

10/19/95  
Date