HISTORIC PROPERTY INVENTORY FORM

State of Washington, Department of Community Development
Office of Archaeology and Historic Preservation
111 21st Avenue Southwest, Post Office Box 48343
Olympia, Washington 98504-8343 (206)753-4011

IDENTIFICATION SECTION

Field Site No.	334	**OAHP No.**	
Date Recorded	24 Jan 1995		
Site Name Historic	Chemical Handling Facility and Tank Farm	Revised	6 June 1997
Common	Process Sewer Monitoring Facility		
Field Recorder	I.C. Lindsay		
Owner's Name	U.S. Department of Energy, Richland Operations Office		
Address	P.O. Box 550		
City/State/Zip Code	Richland, WA 99352		

Status

- [x] Survey/Inventory
- [ ] National Register
- [ ] State Register
- [ ] Determined Eligible
- [ ] Determined Not Eligible
- [ ] Other (HABS, HAER, NHL)
- [ ] Local Designation

Photography HCRL
Photography Neg. No. Roll 178A, frames 17 & 18
(Roll No. & Frame No.) Roll 270, frames 19 & 20
View of West and south exterior facades
Date 24 January 1995 and 23 June 1997

Photo at right: Roll 270, frame 19
View of west and south exterior facades

Classification	[ ] District	[ ] Site	[x] Building	[ ] Structure	[ ] Object
District Status	[x] NR	[ ] SR	[ ] LR	[ ] INV	
Contributing	[x]	**Non-Contributing**	[ ]		

District/Thematic Nomination Name Hanford Site Manhattan Project and Cold War Era Historic District

LOCATION SECTION

Address	Building 334, 300 Area						
City/Town/County/Zip Code	Richland/Benton County/99352						
Twp. 10 N	**Range** 28 E	**Section** 11	**I/4 Section**		**1/4 1/4 Sec**		
Tax No./Parcel No.					**Acreage**		
Quadrangle or map name	Richland, Washington Quad. - 7.5 min series, 1986						
UTM References Zone	11	**Easting**	324460	**Northing**	5137860		
Plat/Block/Lot			325310		5137820		
Supplemental Map(s)			325550		5136690		
			324440		5136720		

Description Section

Materials & Features/Structural Types

Building Type	Industry
Plan	Rectangular
Structural System	Steel frame
No. of Stories	One

Roof Type

- [ ] Gable
- [ ] Flat
- [ ] Monitor
- [ ] Gambrel
- [x] Shed
- [ ] Hip
- [ ] Pyramidal
- [ ] Other (specify)

Cladding (Exterior Wall Surfaces)

- [ ] Log
- [ ] Horizontal Wood Siding
  - Rustic/Drop [ ]
  - Clapboard [ ]
- [ ] Wood Shingle
- [ ] Board and Batten
- [ ] Vertical Board
- [ ] Asbestos/Asphalt
- [ ] Brick
- [ ] Stone
- [ ] Stucco
- [ ] Terra Cotta
- [ ] Concrete/Concrete Block
- [ ] Vinyl/Aluminum Siding
- [x] Metal (specify) Fluted steel panels
- [ ] Other (specify)

Roof Material

- [ ] Wood Shingle
- [ ] Wood Shake
- [ ] Composition
- [ ] Slate
- [x] Tar/Built-up
- [ ] Tile
- [ ] Metal (specify)
- [ ] Other (specify)
- [ ] Not visible

Foundation

- [ ] Log
- [ ] Post & Pier
- [ ] Stone
- [ ] Brick
- [ ] Not visible
- Concrete
  - [ ] Block
  - [x] Poured
  - [ ] Other (specify)

Integrity (Include detailed description in **Description of Physical Appearance**)

		Intact	Slight	Moderate	Extensive
Changes to plan		x			
Changes to windows		x			
Changes to original cladding		x			
Changes to interior			x		
Other (specify)	#4 Tank removed				x

High Styles/Forms (Check one or more of the following)

- [ ] Greek Revival
- [ ] Gothic Revival
- [ ] Italianate
- [ ] Second Empire
- [ ] Romanesque Revival
- [ ] Stick Style
- [ ] Queen Anne
- [ ] Shingle Style
- [ ] Colonial Revival
- [ ] Beaux Arts/Neoclassical
- [ ] Chicago/Commercial Style
- [ ] American Foursquare
- [ ] Mission Revival
- [ ] Spanish Colonial Revival/Mediterranean
- [ ] Tudor Revival
- [ ] Craftsman/Arts & Crafts
- [ ] Bungalow
- [ ] Prairie Style
- [ ] Art Deco/Art Moderne
- [ ] Rustic Style
- [ ] International Style
- [ ] Northwest Style
- [ ] Commercial Vernacular
- [ ] Residential Vernacular (see below)
- [x] Other (specify) Industrial Vernacular

Vernacular House Types

- [ ] Gable Front
- [ ] Gable Front and Wing
- [ ] Side Gable
- [ ] Cross Gable
- [ ] Pyramidal/Hipped
- [ ] Other (specify)

NARRATIVE SECTION

Study Unit Themes (check one or more of the following)

	Agriculture		Conservation		Politics/Government/Law
	Architecture/Landscape Architecture		Education		Religion
	Arts		Entertainment/Recreation		Science & Engineering
	Commerce		Ethnic Heritage (specify)		Social Movements/Organizations
	Communications		Health/Medicine		Transportation
	Community Planning/Development		Manufacturing/Industry	x	Other (specify) Cold War Era
			Military	x	**Study Unit Sub-Theme(s)** Waste Treatment (Liquid)

Statement of Significance

Date of Construction 1961 Architect/Engineer/Builder H.E. Bovay Jr. Consulting Engineers, Spokane

x In the opinion of the surveyor, this property appears to meet the criteria of the National Register of Historic Places.

x In the opinion of the surveyor, this property is located in a potential historic district (National and/or local).

The 334 Chemical Handling Facility housed control instruments for the 333 Fuel Manufacturing Building's acid system. The south portion of the facility was a small tank farm for acid storage. The fuel fabrication acids were stored in four aboveground, 6000 gallon tanks. Acid leaks from the tanks led to much contamination during the 1960s. A large nitric acid leak from the tanks into the soil dissolved some of the contents of a near-by burial ground, causing them to spread underneath the 334 Tank Farm. The leak caused the tanks to tilt dangerously. Between 1975-1988, Tank 4 was used as an overflow tank for the 334-A storage tanks used in the Waste Acid Treatment System. In 1986, equipment problems in the 313 Building caused waste acid solutions from that facility to be transferred directly to 334 Tank 4 for storage. Shortly thereafter, Tank 4 failed near the top and was removed and buried in the 200 Areas in 1988. The building currently houses process sewer monitoring and sampling equipment. Building 334 has played a significant role in waste treatment activities associated with the 333 Fuel Manufacturing Building's acid system and in its more recent use as a process sewer monitoring facility. It is therefore the conclusion of the U.S. Department of Energy that Building 334 is eligible for inclusion in the National Register of Historic Places under Criterion A as a contributing property within the Hanford Site Manhattan Project and Cold War Era Historic District.

Description of Physical Appearance

The 334 Process Sewer Monitoring Facility is a pre-engineered steel building measuring 20.5 feet by 15.16 feet. The roof is insulated metal paneling covered with felt and roll tar paper and slopes slightly to the south. The building houses the instruments for the facility's acid system. On the west and east sides of the building, there are metal double doors. A louver is at the top of the east wall. The tank farm is located off the south wall with one 6000 gallon sulfuric acid tank and two 6000 gallon nitric acid tanks held aboveground on a steel support structure. The structure is fixed to a poured foundation with thick metal panels covering drainage basins below the tanks.

Major Bibliographic References

Gerber, M.E. 1992. *Past Practices Technical Characterization Study - 300 Area - Hanford Site* . Westinghouse Hanford Company, Richland, Washington.

Westinghouse Hanford Company. 1993. *300 Area Catalog* . Richland, Washington.

Westinghouse Hanford Company. 1993. *Condition Assessment Survey, 334 Narrative* . Richland, Washington.