



U.S. DEPARTMENT OF
ENERGY

Hanford Site Overview

Gail Splett, DOE-RL

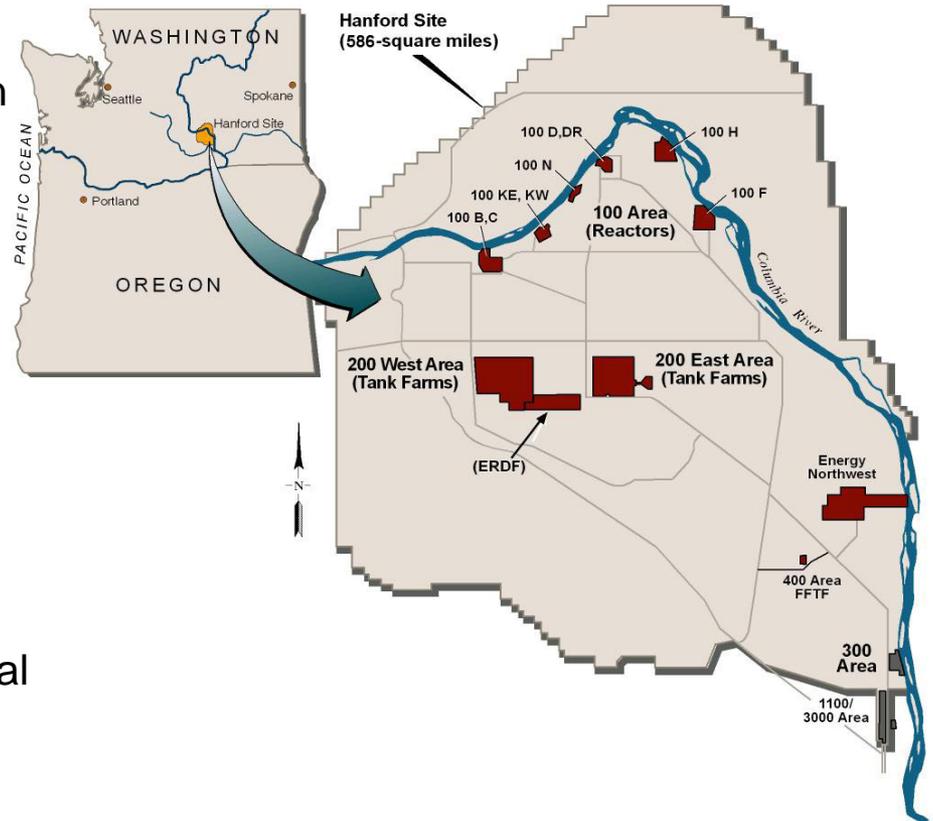
***EEOICPA Program Manager for
Hanford Site and PNNL***

May 23, 2013



The Hanford Site

- Originally 640 square miles – now 586 miles
- Established as part of the Manhattan Engineering District – defense mission
- 1943 – 1,500 people in residence
1944 – 51,000 people in residence
- Currently 8,700 DOE, prime and pre-selected subcontractor employees (excludes many)
 - Hanford - \$2.03 B/annual budget
- Currently 4,500 employees at PNNL
 - \$1B/annual budget
- From defense mission to environmental in late 1980's – now largest environmental cleanup in the world



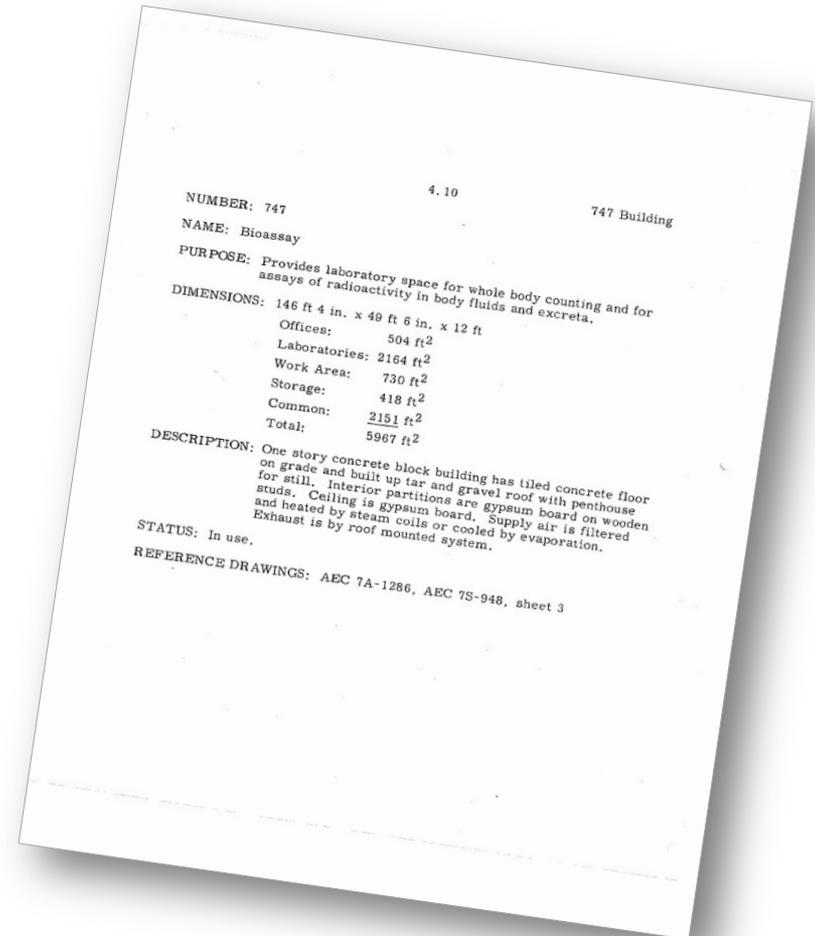
DOE Richland Presence

- Richland Operations Office (RL) – management and oversight of Hanford Site – established in 1943
- Office of River Protection (ORP) – management and oversight of tank farm operations and waste vitrification plant construction and operation – established in 1998
- Pacific Northwest Site Office (PNSO) – management and oversight of Pacific Northwest National Laboratory (PNNL) – established in 2003

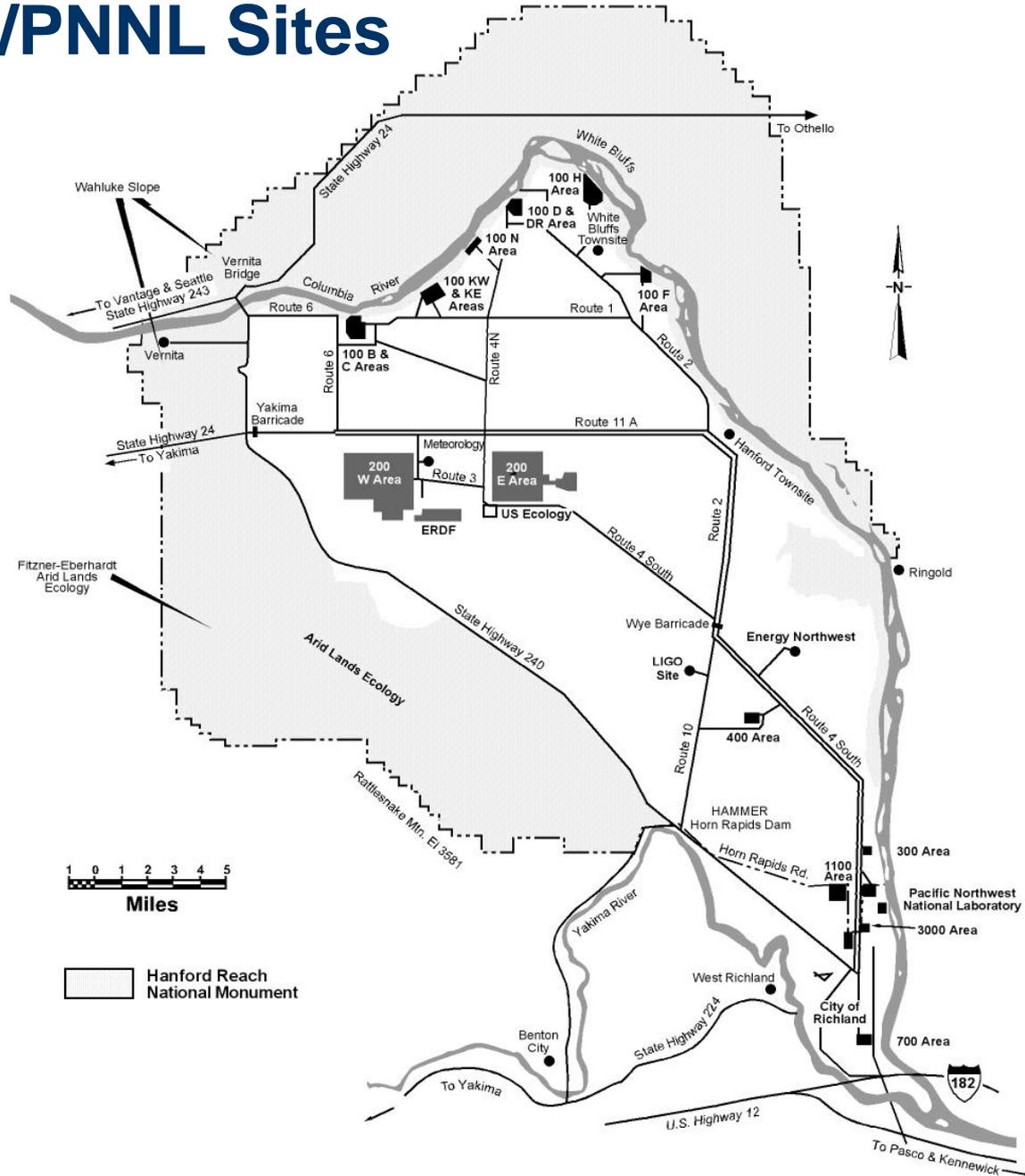


Hanford Building Status

- Currently there are ~2,800 structures
 - Buildings
 - Trailers
 - Mobiles
 - Missile silos
 - Towers
 - Tanks
 - Quonset huts
- Historically ~5,400 structures
- Catalog of buildings provided



Hanford/PNNL Sites





DEPARTMENT OF ENERGY

Office of the Secretary
Ernest J. Moniz
 Secretary
 Daniel B. Poneman,
 Deputy Secretary*

Advanced Research
 Projects Agency - Energy
 Loan Programs
 Office

Chief of Staff

Federal Energy
 Regulatory Commission
 Inspector General

**Office of the
 Under Secretary for
 Nuclear Security**
 Neile L. Miller (Acting)
 Under Secretary for Nuclear Security

**Office of the
 Under Secretary for
 Science**
 Vacant
 Under Secretary for Science

**Office of the
 Under Secretary**
 Vacant
 Under Secretary

U.S. Energy Information
 Administration
 Bonneville Power
 Administration
 Southwestern Power
 Administration
 Southeastern Power
 Administration
 Western Area Power
 Administration
 Management
 Health Safety &
 Security
 Hearings & Appeals

Assistant Secretary for
 Policy & International
 Affairs
 Assistant Secretary for
 Congressional &
 Intergovernmental Affairs
 General Counsel
 Chief Financial
 Officer
 Chief Human Capital
 Officer
 Economic Impact
 & Diversity
 Chief Information
 Officer
 Intelligence &
 Counterintelligence
 Public Affairs

National Nuclear
 Security Administration

Deputy Administrator
 for Defense Nuclear
 Nonproliferation
 Deputy Administrator
 for Defense Programs
 Deputy Administrator
 for Naval Reactors
 Deputy Under Secretary
 for Counter-terrorism &
 Counter-proliferation
 Associate Administrator
 for Defense Nuclear
 Security
 Associate Administrator
 for Emergency
 Operations
 Associate Administrator
 for External Affairs
 Associate Administrator
 for Infrastructure &
 Operations
 Associate Administrator
 for Management
 & Budget
 Associate Administrator
 for Acquisition &
 Project Management
 Associate Administrator
 for Safety & Health
 Associate Administrator
 for Information Management
 & Chief Information Officer

Assistant Secretary
 For Environmental
 Management
 Legacy Management

Office of Science
 Advanced Scientific
 Computing Research
 Basic Energy Sciences
 Biological &
 Environmental Research
 Fusion Energy Science
 High Energy Physics
 Nuclear Physics
 Workforce Development
 for Teachers & Scientists

Assistant Secretary
 For Energy Efficiency
 And Renewable Energy
 Assistant Secretary
 for
 Fossil Energy
 Assistant Secretary
 for Electricity Delivery and
 Energy Reliability
 Assistant Secretary
 for
 Nuclear Energy
 Indian Energy
 Policy and Programs

Office of
 General Counsel

RL and ORP
 PNSO
 EEOICPA

* The Deputy Secretary also serves as the Chief Operating Officer



PNNL (BATTELLE)

- PNNL Operated as part of DOE Richland Operations Office (Hanford) from 1965-2005
- Still DOE funded – not part of the EM funded part of the complex



PNNL Site Map



U.S. DEPARTMENT OF
ENERGY

Pacific Northwest
Site Office



U.S. DEPARTMENT OF
ENERGY

100 Area

- The Hanford 100 Area is a 26-square-mile piece of land along the Columbia River where nine water-cooled plutonium reactors were constructed between 1943-1963. There are six reactor areas (three of which contain two reactors each and three that contain one reactor each) in the 100 Area. All nine reactors were operating at one point during the early 1960s, but only N Reactor (which produced both plutonium and electricity) remained in operation after 1971.



100 Areas

All 9 reactors along the river banks
*Currently being cocooned –
contaminated soil being excavated*

- B reactor
 - First full scale reactor in the world – operational 9/44
 - National Historic Register – public tours
- N reactor
 - first dual purpose reactor
 - standby status in 1987
 - cocooning under way
- K East/K West Basins
 - until 2000, 2,300 tons of spent fuel was in the water basins
 - 80% of DOE's total inventory
 - 2004 - 2012 - spent fuel removed and dried
 - by 2017 – sludge removal scheduled for completion
- KE Basin demolition completed



River Corridor



Cleanup in D Area. To date 15 million tons of waste has been moved away from the Columbia River



Cleanup of K Reactor Areas



100-B-C Cleanup



200 Areas – Central Plateau

- Chemical processing of fuel irradiated at the reactors
 - separate out the plutonium
 - multiple facilities
- T Plant
 - first chemical processing at Hanford and first of its kind in the world
 - still operating
- PFP
 - Z Plant
 - convert plutonium to metal oxide
- PUREX
 - started in 56
 - mission over in 1997
- Tank Farms
 - single and double shell tanks
- Vitrification construction project



Plutonium Finishing Plant



Plutonium Finishing Plant employees work in confined spaces to safely remove 230 gloveboxes and hoods



Disposal of large glovebox



Crane repair at Plutonium Reclamation Facility

Environmental Restoration Disposal Facility (ERDF)

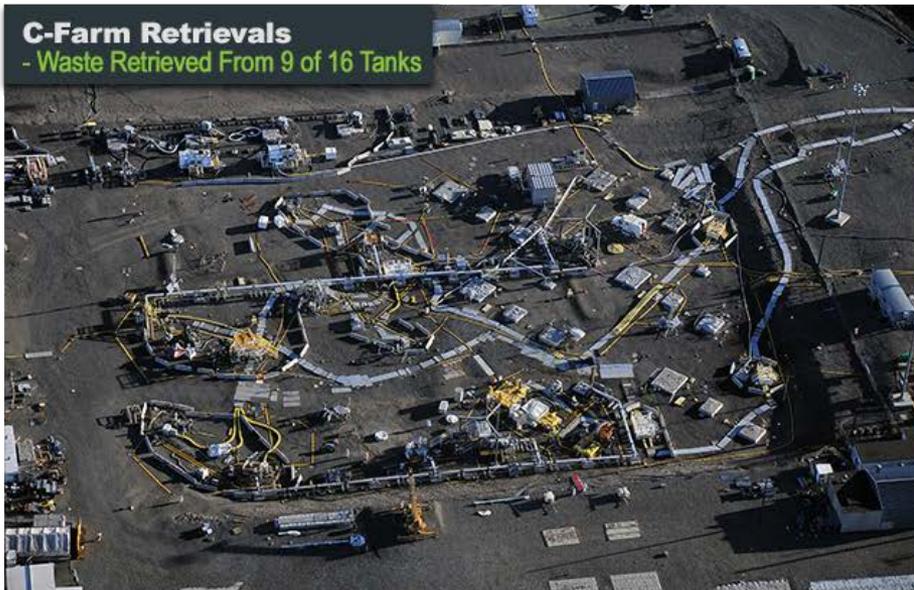
Approximately 15M tons of contaminated material from the River Corridor disposed



Tank Farms Overview

C-Farm Retrievals

- Waste Retrieved From 9 of 16 Tanks



AY-102

- First Discovered Double-Shell Tank Leak



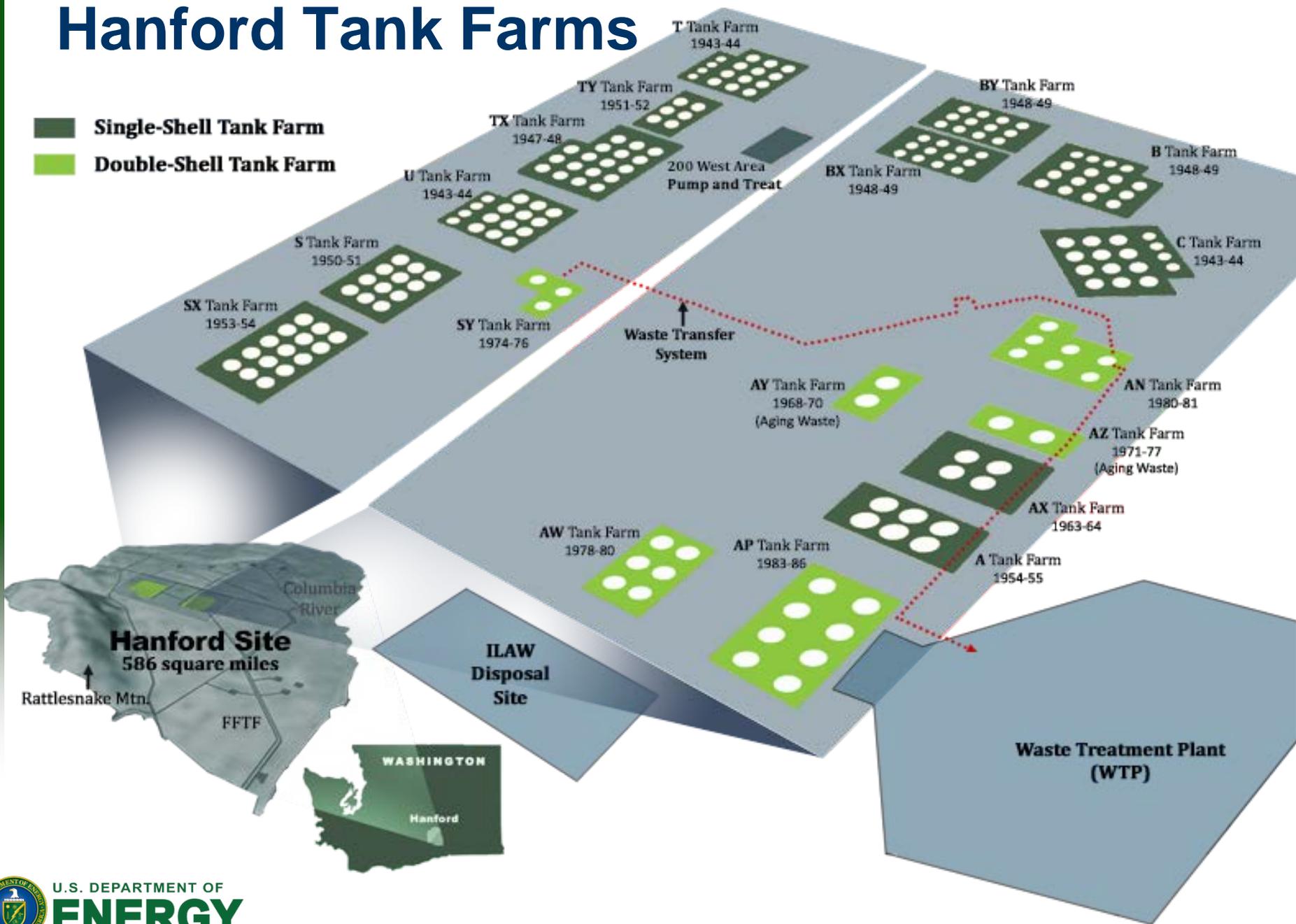
T-111

- Single-Shell Tank Level Decrease



Hanford Tank Farms

- Single-Shell Tank Farm**
- Double-Shell Tank Farm**



Waste Treatment Plant Overview

Low-Activity Waste Facility
- 63% Complete



High-Level Waste Facility
- 62% Complete (on hold)



Analytical Laboratory
- 68% Complete



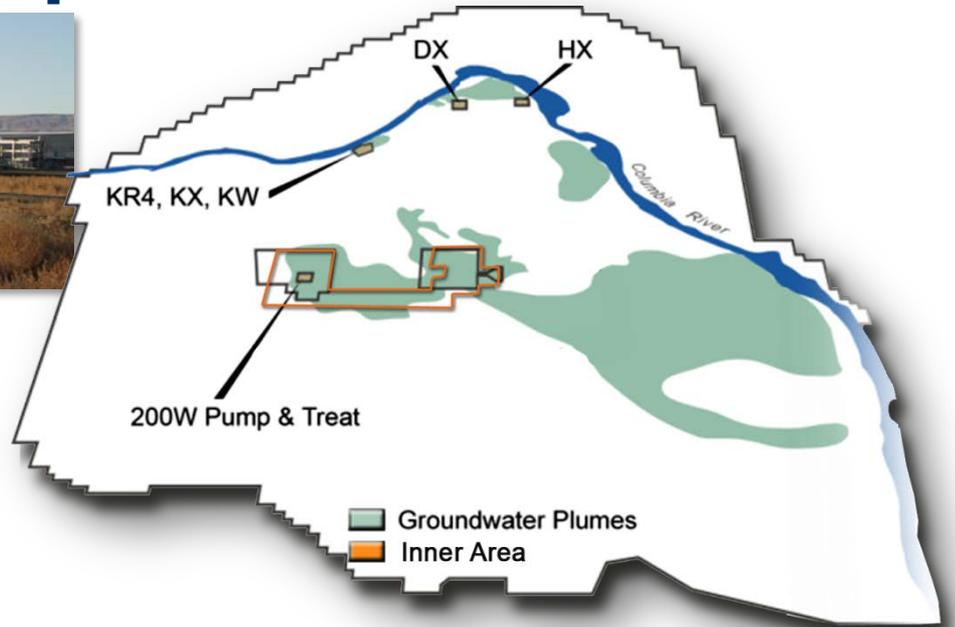
Pretreatment Facility
- 56% Complete (on hold)



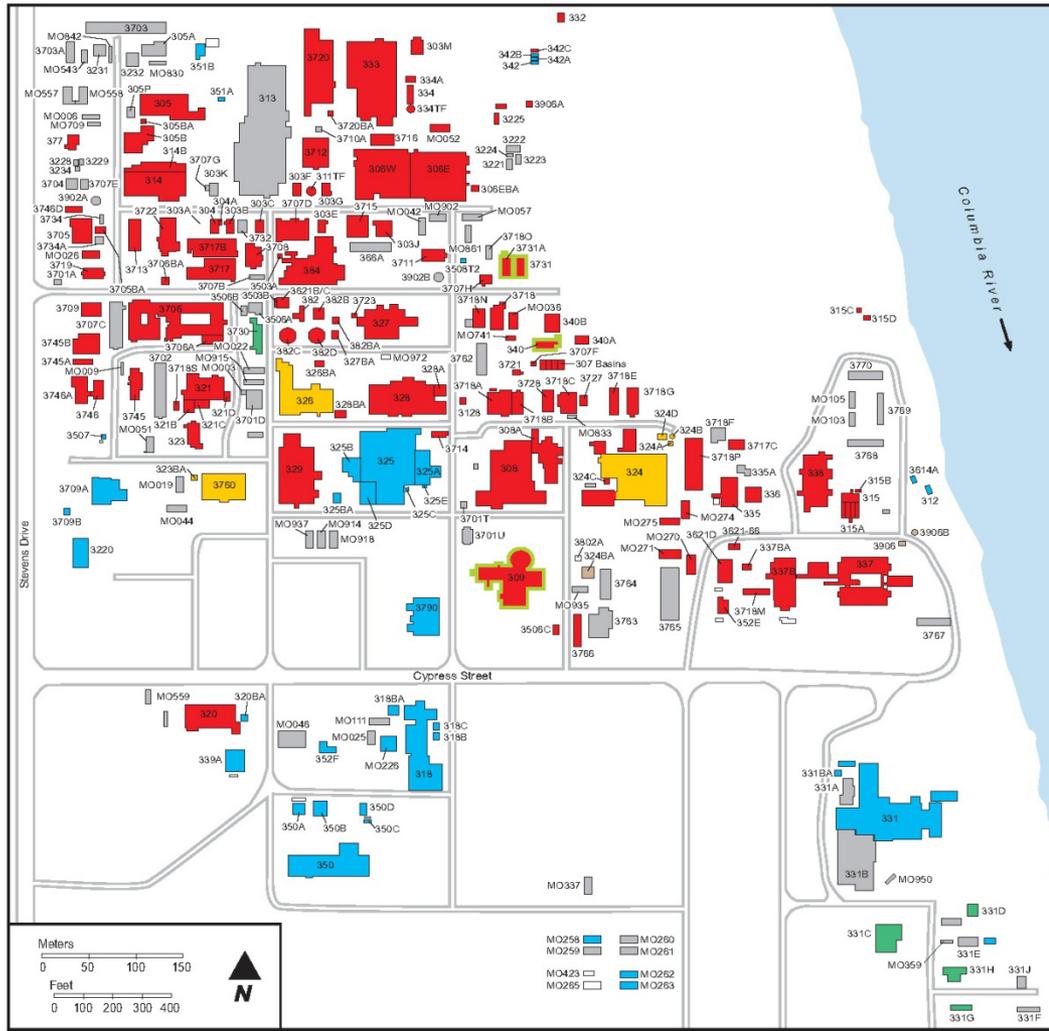
Waste Treatment Plant



Groundwater Cleanup



300 Area Building Demolition



Facility D4* Status

- Initial Characterization in Progress
- Ready for Deactivation / Deactivation in Progress
- Ready for Demolition / Demolition in Progress
- Demolition & Loadout Complete
- Demolished prior to RCCC
- Retained Facilities
- In Use
- Remaining SPIF Scope

* Deactivation, Decontamination, Decommissioning & Demolition

Status Description

- Initial Characterization in Progress**
Historical site assessment and scoping surveys in progress.
- Ready for Deactivation / Deactivation in Progress**
Historical site assessment and scoping surveys complete. Work packages in place.
- Ready for Demolition / Demolition in Progress**
Haz. mat removal and equipment stripout complete. Sample analysis and waste profile complete.
- Scope Removed from RCC Contract**

Demolition/SPIF Progress

SPIF

Remaining	Complete								
309	303A	305B	311TF	321D	334TF	382	3503B	3727	MO336
340	303B	306BA	314	323	335	382B	3506A	3728	MO352
3731	303C	306P	314B	323BA	336	382BA	3506B	3745	MO359
3731A	303E	306E	315	327	337	382C	3506C	3745A	MO270
	303F	306W	315A	327BA	337B	382D	3621-66	3745B	MO271
	303G	306EBA	315B	328	337BA	384	3621B/C	3746	MO274
	303J	307	315C	328A	338	3128	3621D	3746A	MO275
	303M	308	315D	328BA	340A	3225	3707H	3746D	MO443
	304	308A	320	332	340B	3229	3718E	3783	MO741
	304A	310	321	333	342C	3231	3718G	3786	MO744
	305	31077A	321B	334	352E	3232	3718M	3906A	MO905
	305A	31077B	321C	334A	377	3503A	3723	MO026	

Non-SPIF

Remaining	Complete	Remaining	Complete	Remaining	Complete	Remaining	Complete
323BA	3730	303K	3224	3706BA	3717	3722	MO319
324	3780	313	3228	3707B	3717B	3732	MO022
324A	3802A	324C	3234	3707C	3717C	3734	MO025
324B	3906	329	3701	3707D	3718	3734A	MO042
324BA	3906B	331A	3701A	3707E	3718A	3762	MO044
324D	MO265	331B	3701D	3707F	3718B	3764	MO046
326	MO423	331E	3701T	3707G	3718C	3765	MO051
331C		331F	3701U	3708	3718F	3767	MO057
331D		331J	3702	3709	3718N	3768	MO105
331G		335A	3703	3710A	3718O	3769	MO111
331H		351C	3703A	3711	3718P	3770	MO259
3701D (Basement)		352C	3704	3712	3718S	3902A	MO280
		386A	3705	3713	3719	3902B	MO281
		3221	3705BA	3714	3720	MO003	MO337
		3222	3706	3715	3720BA	MO006	MO359
		3223	3706A	3716	3721	MO009	MO543

Retained Facilities

310S	325A	350	3709A
310T1	325B	350A	3709B
310T2	325BA	350B	3799
310T3	325C	350C	MO226
310V	325D	350D	MO258
312	325E	351A	MO262
318	331	351B	MO263
318B	331BA	352F	
318BA	339A	3220	
318C	342	3507	
320BA	342A	3508T2	
325	342B	3614A	



400 Area - Fast Flux Test Facility (FFTF)



The 400 Area at Hanford is home primarily to the Fast Flux Test Facility (FFTF), completed in 1978, and initial criticality was achieved in early 1980, with full power initiated in late 1980. Following an additional year of acceptance testing, FFTF operated successfully from 1982 to 1992. FFTF is currently shut down, all systems drained and non-operational.

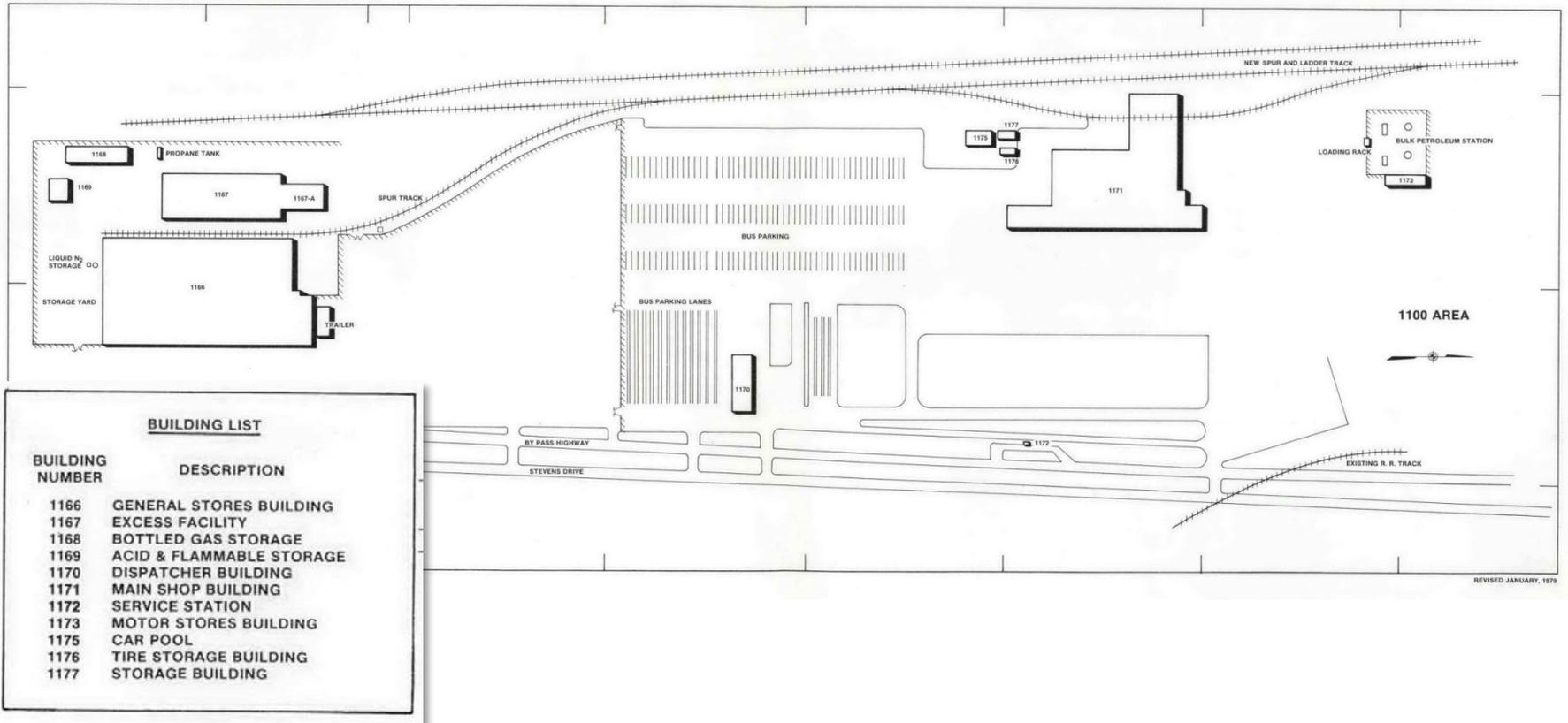


600 AREA

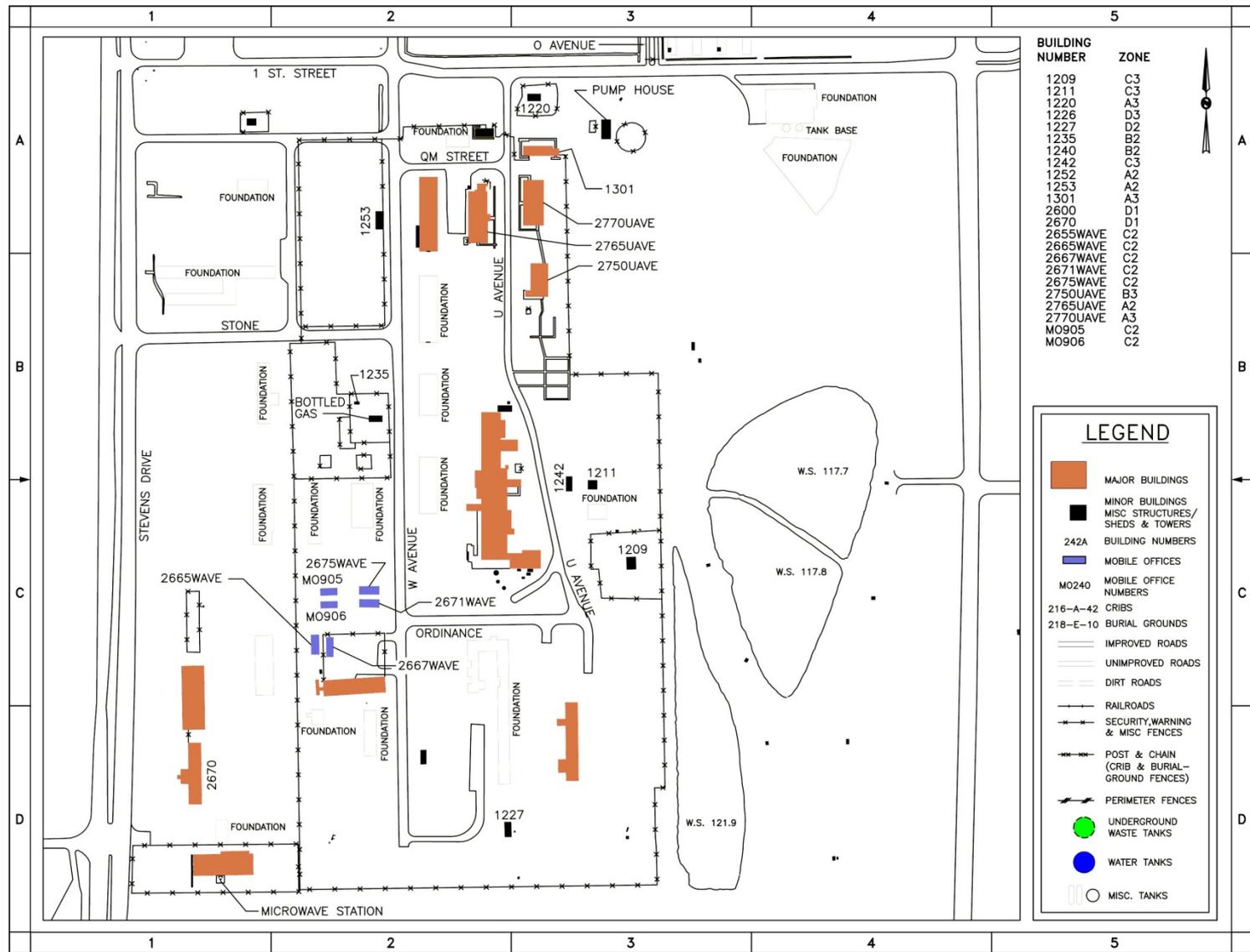
- The 600 Area consists of all property on the Hanford Site not specifically included in other area designations.
- The 600 Area includes Hanford's roads, railroads, fire station, an old concrete batch plant site, contaminated storage vaults in the east end of Gable Mountain, the former town sites of Hanford and White Bluffs, the Hanford meteorology station, the Wahluke Slope, and the Arid Lands Ecology Reserve (including Rattlesnake Mountain).



1100 Area - 1979



3000 Area - 1995



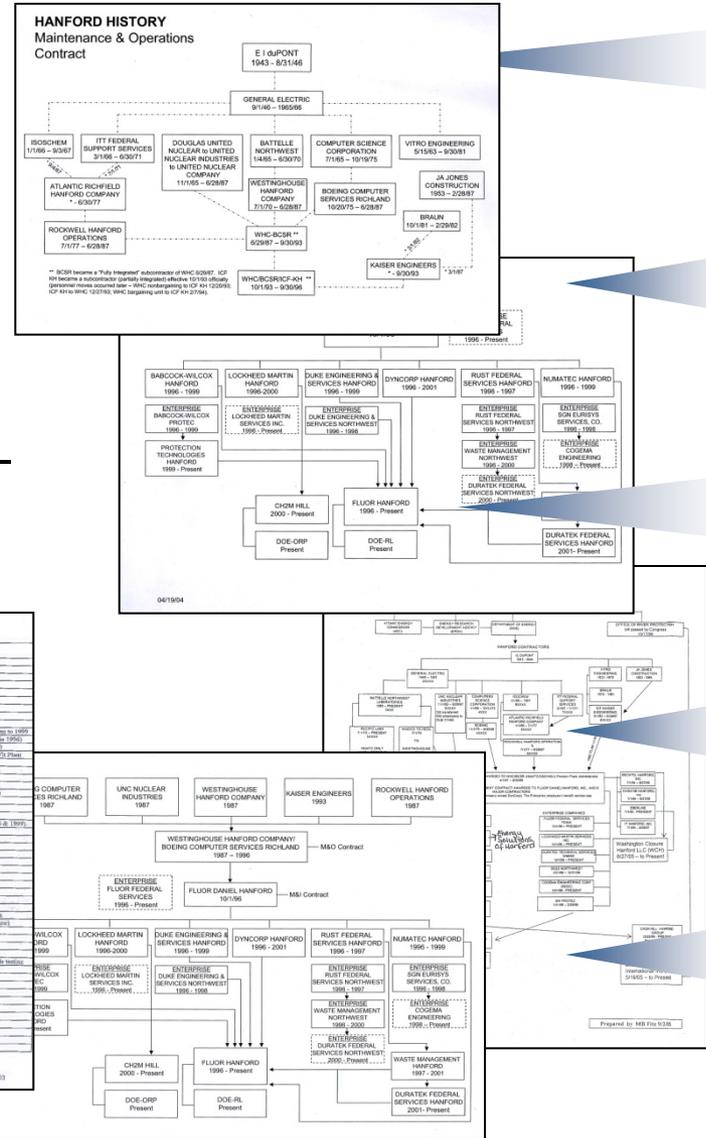
Who We are Now?

- Richland Operations Office (RL)
 - Mission Support Alliance
 - Lockheed Martin Services
 - Washington Closure Hanford
 - HPM Corporation
 - Navarro (EEOICPA small contractor)
- Office of River Protection (ORP)
(tank farms and vitrification project)
 - CH2MHill
 - Bechtel National
 - Washington River Protection Solutions
- Pacific Northwest Site Office
 - Pacific Northwest National Laboratory operated by Battelle
- Thousands of subcontractors



Who Were We Then? -- Why Does that Matter to EEOICPA?

- Complex infrastructure of contractors
- Approximately 300,000 cubic feet – 75M pieces of paper over 586-square miles
- Records moratorium since 1989
- Ownership of records clauses difficult – being partially successful at obtaining personnel records prior to contract termination
- Formalizing/automating contractor structure/flows/site presence project completed in 2012



Hanford Site Prime Contractors and Customer

Order Entry	Est	Contractor	Scope
1943	10/18/43	Environmental Monitoring Institute (EMI)	Environmental Monitoring Institute (EMI)
1944	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1945	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1946	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1947	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1948	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1949	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1950	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1951	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1952	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1953	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1954	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1955	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1956	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1957	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1958	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1959	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1960	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1961	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1962	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1963	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1964	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1965	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1966	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1967	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1968	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1969	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1970	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1971	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1972	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1973	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1974	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1975	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1976	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1977	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1978	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1979	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1980	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1981	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1982	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1983	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1984	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1985	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1986	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1987	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1988	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1989	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1990	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1991	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1992	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1993	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1994	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1995	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1996	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1997	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1998	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
1999	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2000	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2001	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2002	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2003	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2004	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2005	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2006	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2007	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2008	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2009	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2010	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2011	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)
2012	10/18/43	Bechtel Hanford, Inc.	Developmental Construction (DC)

Contractors/Companies

- Combined, we have listings for thousands of contractors, subcontractors, procurements, vendors, military branches, etc.
- These records vary and are compiled from multiple sources
- Some include contract numbers, time frames, work performed, areas, and job descriptions etc.
- Some companies include associations to other contractors, sub-contractors, to sub-contractors

Individual Record Types

- Employment
 - Hanford has over 500,000 records indexed to verify employment, which include employment files, employment lists, union cards, badging books, dispatch records, etc.
- Site presence (EV DAR)
 - Hanford also relies on the dosimetry data base records, the badging data base, and work history data base to validate employment or show a record of presence on the site
- DAR
 - Occupational medical records, detailed dosimetry records, industrial hygiene searches, incident and accidents reports and workers compensation records searches are also performed when a DAR is requested

Employment Records Search



EEOICPA

Energy Employees Occupational Illness Compensation Program Act

[Return To Main](#)

Search All (No wildcard characters)

Name Fields |

(First, Last, Middle, Nickname, Suffix, Maiden and Relative name fields)

Date Fields | Beginning Through

(Date of Birth, Hire/Rehire, Termination, Record, Exam and Record Added date fields)

Search Specific

Last Name

Nickname

First Name

Maiden Name

Middle Name

Relative name

SSN

Suffix

	<i>Beginning</i>	<i>Through</i>		<i>Beginning</i>	<i>Through</i>		<i>Beginning</i>	<i>Through</i>
DOB	<input type="text"/>	<input type="text"/>	Hire/Rehire Date	<input type="text"/>	<input type="text"/>	Termination Date	<input type="text"/>	<input type="text"/>
Record Date	<input type="text"/>	<input type="text"/>	Exam Date	<input type="text"/>	<input type="text"/>	Record Added	<input type="text"/>	<input type="text"/>
Company	<input type="text"/>		Payroll Number	<input type="text"/>		Badge Number	<input type="text"/>	
Box Number	<input type="text"/>		Logbook Page	<input type="text"/>		Source Name	<input type="text"/>	
Comments	<input type="text"/>		Job Description	<input type="text"/>				
<input type="button" value="Search"/>								

For questions or comments, please send a message to [Gail Splett](#)

For Official Use Only.

This webpage may contain personal data covered by the Privacy Act of 1974.
Please ensure this information is protected from unauthorized access and/or disclosure.
05/21/2013 09:49 AM