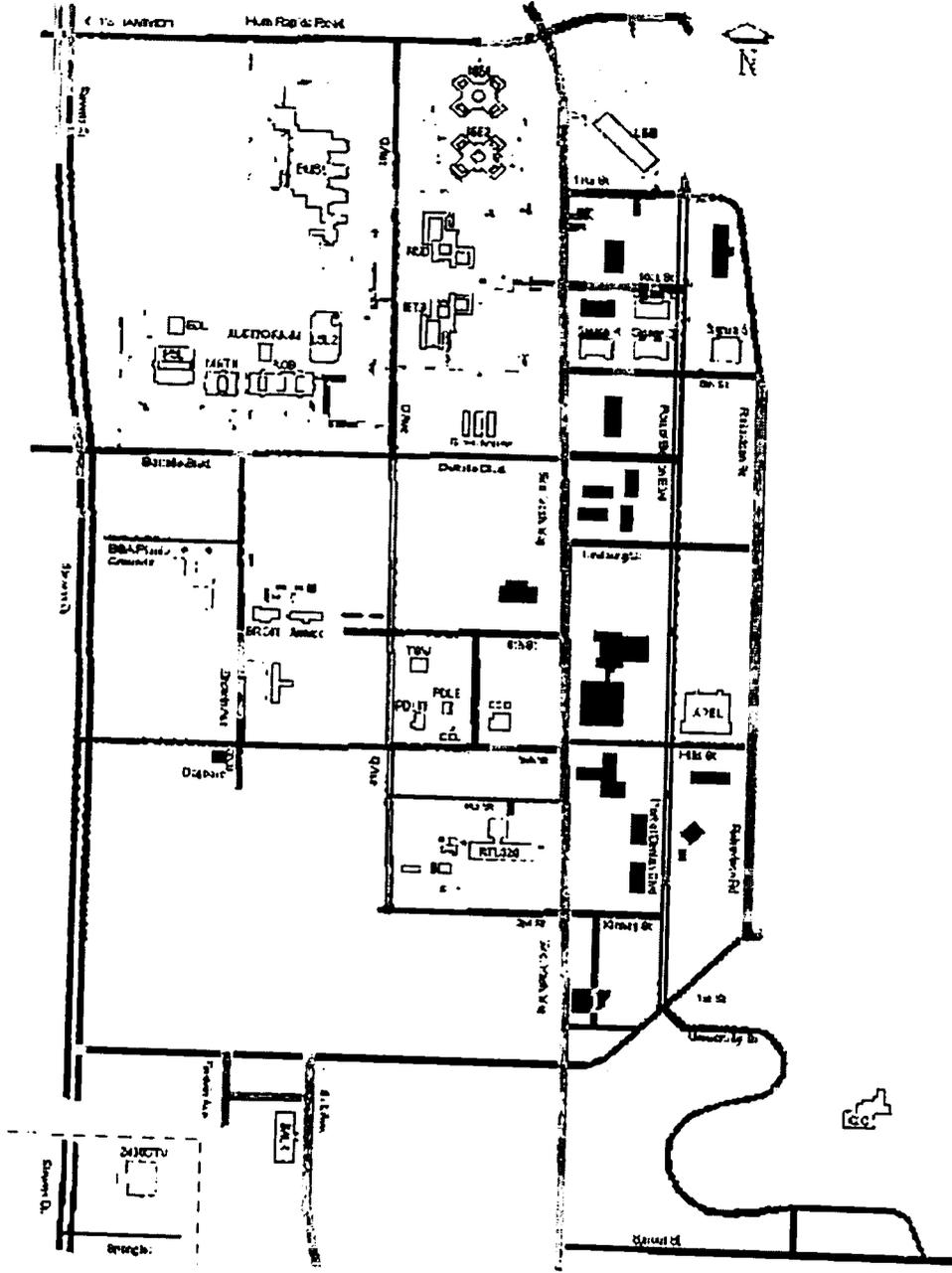


**Site Tour Agenda
November 15, 2007
Pacific Northwest National Laboratory
Richland, Washington**

Bus or Facility Tour	Times (Includes driving times and stop times where applicable)	Activity	Driving Directions	Location
N/A	12:30 - 12:50 12:50 - 1:00	Registration/Pre-Tour Briefing Loading Buses		Federal Bld. Lobby/Auditorium Mansfield Street (North Western Side of Fed. Bld)
Bus Tour	1:00-1:15	2400 Stvn. Ctr. Drive by	Take Jadwin to Stevens (240); Turn right on Spengler	Corner of Stevens (240) and Spengler St.
Bus Tour Facility Tour	1:15 - 1:54	Walking Tour of ROB/MATH/Battelle AUD/EDL and Facility Tour of PSL	Take Spengler back to Stevens (240); Turn right onto Battelle Blvd.	Battelle Blvd.
Bus Tour	1:54 - 2:08	Battelle Receiving & Shipping Warehouse, Annex - Drive by	Cross Battelle Blvd. onto Einstein	Einstein
Facility Tour	2:08- 2:23	PDL-W (Facility Tour)	From Einstein, turn left on 5 th St.	Corner of 5 th St. and Q St.
Bus Tour	2:23- 2:25	PDL-E, ESB Drive by	Directly Northeast of PDL-W	5 th St.
Bus Tour	2:25 - 2:45 (includes a 15 minute lavatory/ water break at CIC)	RTL, CIC, BSEL Drive by	Continue down 5th St.; Turn right onto GeoWay; turn right on 4th St. (RTL) (circling around entire facility); Exit 3 rd Street, making a right onto GeoWay; Turn left onto Sprout St.; Make the second available left and follow the drive around the parking lot; Head straight, following University Drive around to the CIC	3rd Street/University Drive
Bus Tour	2:45 -2:47	APEL Drive by	Continue to follow University Drive out to 1st St.; Make a right; Then turn left onto Richardson Rd.	Corner of Hills St. and Richardson Rd.
Bus Tour	2:47 - 2: 51	Sigmas V, II, III, and IV Drive by	To Sigmas, take Richardson Rd and turn left on 9 th St.. (Approach Port of Benton Blvd.) / Turn right on Port of Benton Blvd., left on 11th	Sigma V - Corner of Port of Benton Blvd. and 9 th St. Sigmas II, III, and IV - Off of 10 th , between Port of Benton Blvd. and GeoWay
Bus Tour	2:51 -2:54	LSB Drive by	From 11 th , turn right on GeoWay	Geo Wash Way
Facility Tours	2:54 - 3:05 3:05 - 3:35	331-G Facility Tour 331 Facility Tour	For 331-G take GeoWay, veer right onto GeoWay Extension - towards 300 Area, turn right onto Cypress St., make first right (unmarked), make first left (unmarked), make right at stop sign (pull into stop off point at the 331-H Facility marked on left); For 331, follow unmarked street North to front of 331 (loop around parking first and pull along curb into visitor parking slot to let passengers off)	Cypress St.
Bus Tour	3:35 - 3:38	320, 350 (Drive by)	Take Cypress St., Turn left into Nevada St. gate - pause along side of building	Nevada St.

Bus Tour	3:38-3:46	318, 326, 329 (Drive bys)	Continuing on Nevada, turn left onto Ash, turn left onto Arizona St. and pause next to building. From Arizona St., turn left onto Cypress St. At end of parking lot on the right, make last available right into street that envelops lot; follow around to the stop sign and sit/wait	Arizona St. and Parking Lot across from 320
Facility Tour	3:46 – 4:21	325 Facility Tour	From the stop sign, turn right - heading back towards Cypress St. At Cypress, turn left and make immediate left back onto street that envelops the parking lot. Stop at the end of stretch, at the base of the stairs, to let group off bus	
Bus Tour	4:21 – 4:28	PSF, ISB I/II, NSB, ETB, UHF Drive bys	From parking lot, head back towards Cypress St. At Geoway Extension, make a right – heading back to GeoWay. At end of extension, turn left onto GeoWay; turn right onto Horn Rapids Rd., turn left onto Q. Street (pausing across from each building). At the UHF, turn into parking lot and pause before heading back to EMSL	Horn Rapids Rd. and Q Street
Facility Tour	4:28 – 4:58	EMSL Facility Tour	Heading in the opposite direction on Q Street, turn left into the EMSL Entrance Way. Have driver pick up at the North end of the building	Q Street
End of Tour	5:00	Return to Fed. Bld.	Exit out of the north lot onto Horn Rapids Rd (Left Turn). From Horn Rapids Rd, turn left onto Stevens (240), Follow Stevens back to Jadwin Ave. and turn right onto Mansfield (Drop off on curb side across from court entrance gate.)	Mansfield

Richland North (RCHN)



**PACIFIC NORTHWEST NATIONAL LABORATORY FACILITIES
(OWNED AND LEASED)**

Facility	Designation	Location	Leased/ Owned
2400 Stevens	2400STV	RCHN	Leased
2410 Stevens Warehouse Facility	2410STV	RCHN	Leased
2440 Stevens Center Place	2440STVCN	RCHN	Leased
Hazardous Waste Storage Facility	305B	RCHN	Owned
Radiological Calibrations Lab	318	RCHN	Owned
Office Trailer 318	318TRL4	RCHN	Owned
Analytical And Nuclear Research Lab	320	RCHN	Owned
Mechanical Properties Laboratory	323	RCHN	Owned
Radiochemical Processing Laboratory	325	RCHN	Owned
Material Science Laboratory	326	RCHN	Owned
Chemical Science Laboratory	329	RCHN	Owned
Life Sciences Laboratory 1	331	RCHN	Owned
Interim Waste Storage Disposal	331C	RCHN	Owned
Biomagnetic Effects Laboratory	331D	RCHN	Owned
Integration Laboratory	331G	RCHN	Owned
Chemical Storage Container	331P	RCHN	Owned
Aerosol Wind Tunnel Research Fac	331H	RCHN	Owned
High Bay Testing Facility	336	RCHN	Owned
Prototype Engineering Laboratory	338	RCHN	Owned
Plant Operations & Maintenance Fac	350	RCHN	Owned
Paint Shop	350A	RCHN	Owned
Warehouse 350B	350B	RCHN	Owned
Storage Building 350C	350C	RCHN	Owned
Oil Storage Facility	350D	RCHN	Owned
Modular Equipment Shelter	361	RCHN	Owned
Warehouse Space	3718P	RCHN	Owned
Gamma Irradiation Facility	3730	RCHN	Owned
3760 Office Building	3760	RCHN	Owned
Monitoring Station	614	RCHN	Owned
Elevator Control Building	622A	RCHN	Owned
Pilot Balloon Release Building	622B	RCHN	Owned
Storage Building 622C	622C	RCHN	Owned
Meteorology Lab	622R	RCHN	Owned
Nike Bunker	6652L	RCHN	Owned
Whole Body Counter	747A	RCHS	Leased
Office Trailer 747A	747ATRL1	RCHS	Leased
Albuquerque NM	ALB	Alb. NM	Leased
RRC Laboratory Annex	ANNEX	RCHN	Leased
Applied Processing Engineering Lab	APEL	RCHN	Leased
Auditorium	AUD	RCHN	Leased

Facility	Designation	Location	Leased/ Owned
Battelle Receiving & Shipping Whse	BRSW	RCHN	Leased
Chemical Engineering Laboratory	CEL	RCHN	Leased
Consolidated Information Center	CIC	RCHN	Leased
Coastal Security Institute 1	CSI1	Sequim	Owned
Engineering Development Laboratory	EDL	RCHN	Leased
Environmental Molecular Science Lab	EMSL	RCHN	Owned
Engineering Support Building	ESB	RCHN	Leased
Environmental Technology Building	ETB	RCHN	Leased
Grounds Equipment Storage	GES	RCHN	Leased
Information Sciences Building I	ISB-I	RCHN	Leased
Information Sciences Building II	ISB-II	RCHN	Leased
Lift Station	LS	RCHN	Leased
Laboratory Support Building	LSB	RCHN	Leased
Mathematics Building	MATH	RCHN	Leased
Lower Office/Laboratory	MSL1	Sequim	Leased
Warehouse/Shop MSL2	MSL2	Sequim	Leased
Filter Building	MSL3	Sequim	Leased
Pumphouse	MSL4	Sequim	Leased
Uplands Office/Laboratory	MSL5	Sequim	Leased
Chemical Storage MSL5A	MSL5A	Sequim	Leased
Chemical Storage MSL5B	MSL5B	Sequim	Leased
Cold Storage	MSL5C	Sequim	Lease
Robb House	MSL6	Sequim	Leased
Marine Sciences Laboratory 7	MSL7	Sequim	Leased
Waste Water Treatment Structure	MSLW	Sequim	Leased
National Security Building	NSB	RCHN	Leased
Process Development Laboratory East	PDLE	RCHN	Leased
Process Development Laboratory West	PDLW	RCHN	Leased
Plant Growth Facility 1	PGF1	RCHN	Leased
Plant Growth Facility 2	PGF2	RCHN	Leased
Plant Growth Facility 3	PGF3	RCHN	Leased
Plant Growth Facility 4	PGF4	RCHN	Leased
Plant Growth Facility 5	PGF5	RCHN	Leased
Port Of Pasco	POP	Pasco	Leased
Battelle Portland Office-DOE Lease	PORT	Port. OR	Leased
Port of Skamania	POS	Skam. WA	Leased
Physical Science Laboratory	PSL	RCHN	Leased
Research Operations Building	ROB	RCHN	Leased
Richland River Station	RRS	RCHN	Leased
Chemical And Flammable Storage	RTL510	RCHN	Leased
Research Technology Laboratory	RTL520	RCHN	Leased
Fire Riser Structure	RTL 524	RCHN	Leased
Radioactive Storage	RTL530	RCHN	Leased
Paper Shredder Facility	RTL540	RCHN	Leased
Technical Services	RTL550	RCHN	Leased
Utility Building	RTL560	RCHN	Leased

Facility	Designation	Location	Leased/ Owned
Autoclave Center	RTL570	RCHN	Leased
Crafts Shop	RTL580	RCHN	Leased
Warehouse RTL590	RTL590	RCHN	Leased
Salk Building	SALK	RCHN	Leased
Office Building SIGMA2	SIGMA II	RCHN	Leased
Office Building SIGMA3	SIGMA III	RCHN	Leased
Office Building SIGMA4	SIGMA IV	RCHN	Leased
Office Building SIGMA5	SIGMA V	RCHN	Leased
Technical Support Warehouse	TSW	RCHN	Leased
Guest House at PNNL	UHF	RCHN	Leased
Joint Global Change Research Instit	U of MD JRI	Coll. Pk	Leased
Bioproducts Sciences and Engineering	BSEL	WSU Tri-Cities	Leased

PSL Building

Name: Physical Science Laboratory
Year Built: 1967
Gross Sq Ft: 90,547



Facility Description, Missions, and History

- The PSL is constructed of reinforced concrete framing with pre-cast, exposed aggregate, exterior panels.
- The facility was erected on concrete footings and basement foundation walls with full basement area with some unexcavated spaces and one floor above grade.
- PSL consists of 170 offices, 55 labs, and six maintenance shops (Carpenter, Pipefitters, Electrical, Machine, Optical, Instrument).
- PSL was one of the first buildings to be constructed after Battelle was awarded the Hanford contract. It provided Battelle with a laboratory facility. The building was constructed in two phases, PSL I and PSL II.

Facility Modifications and Upgrades

- Battelle will sustain the current capabilities of the facility and continue maintenance and upgrades as required to maintain the facility in good condition.

Facility Condition

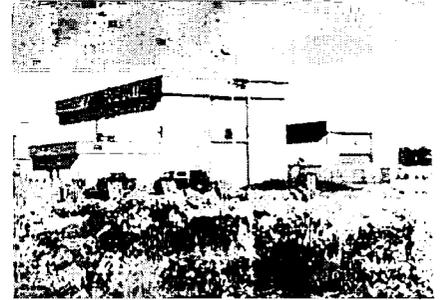
- In 1997, a condition assessment found the building required minor rehabilitation projects, including upgrades and modifications to provide for fall protection, complete replacement of fire doors, install additional fire alarm indicating devices, and electrical switchgear replacement and upgrading the exhaust system in the maintenance shop.
- The facility has been undergoing a period of office and laboratory moves and remodeling, during which many legacy materials have been removed.

PDL-WEST

Name: Process Development Laboratory West

Year Built: 1981

Gross Sq Ft: 7000



Facility Description, Missions, and History

- The Process Development Laboratory West is a Large High Bay Facility consisting primarily of office and laboratory areas. The building
- PDL-W has been used for research in energy and environmental mission areas
- Previous work has been sent to the Applied Process Engineering Laboratory to free up PDL-W for a non-radioactive, one-quarter engineering scale pretreatment pilot plant for the Waste Treatment Plant in support of the Hanford High Level Waste Tank Cleanup Mission

Facility Modification and Upgrades

- In support of the facility's new mission, a new floor was put into the facility to handle skids weighing up to 70,000 lbs. An epoxy coating was added in 2007.
- A secondary containment system was added around the inside perimeter of the facility. It is built such that if a leak is detected, barriers at the doorways will come up and seal.

Facility Condition

- No information

331

Name: Life Sciences Laboratory

Year Built: 1970

Gross Sq Ft: 117,600



Facility Description, Missions, and History

- The Main portion of the facility is a three-story, reinforced concrete structure. The building consists of laboratories on the first and third floors, with a mechanical service floor between them.
- An entrance/service area and a two-story administration office complex make up the northern portion of the building.
- The 331 Building replaced the original Hanford Works Biology Laboratory (108-F Building located within the 100-F Area). It originally contained a Co-60 irradiation room, electron microscope suite, labs devoted to dosimetry, isotope preparation, plant physiology, terrestrial ecology, aquatic biology and biochemistry. Animal studies were cut sharply in the early 1980s.

Facility Modification and Upgrades

- In 1982, a third floor was added to the administration portion of the building to provide additional offices. In 1996, a two story office addition was added on the east side of the building. Extensive remodeling has been ongoing. New labs have been added on the first floor and more are being added on the third floor.

Facility Condition

- The interior finishes in this building are of mixed materials and condition. The newest rehabilitated areas are fitted with suspended ceiling of vinyl-coated panels (fissured mineral fiber type). Over the next 5 years, approximately a quarter of these tiles will require replacement

331-G

Name: Integration Laboratory

Facility Description, Missions, and History

- This DOE-owned resides on 1.5 acres on the Hanford Site
- The facility is flexible and expandable, allowing equipment to be arranged into actual port configurations to simulate field conditions.
- The building includes both indoor and outdoor facilities

Facility Modification and Upgrades

- This facility is expected to be replaced and re-located in 2010 as part of the Physical Sciences Facility Construction Project

325 Building

Name: Radiochemistry Process Laboratory
Year Built: 1953
Yr Acquired: 1987
Gross Sq Ft: 144,600



Facility Description, Missions, and History

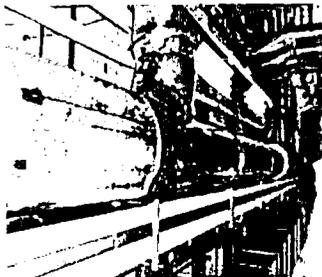
- The 325 Building was constructed in 1953 to safely house and manipulate multicurie-level, radioactive, chemical development work. Between 1959 and 1960, a large addition known as the High-Level Radiochemistry wing was constructed.
- The superstructure framework is welded steel, with exterior walls of fluted steel and insulated panels. The first and second floors are steel deck topped with concrete and finished with sheet vinyl. The building is constructed on three levels, with a central building and three wings. It contains a mixture of laboratory and office space as well as operating system workspaces.
- The primary mission of the 325 Building is as an analytical radiochemistry laboratory that provides verification and research support for complex environmental and industrial issues requiring chemical or radiochemical analysis. The mission of this facility has been expanded to include support for the Hanford Site clean-up mission as well as support for PNNL activities.

Facility Modifications and Upgrades

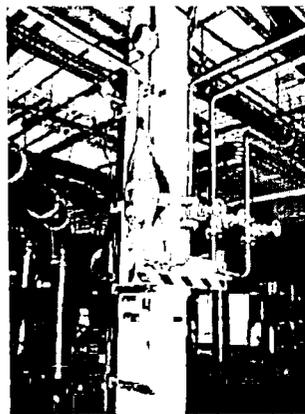
- Between 1959 and 1960, the High-Level Radiochemistry wing was constructed, including the addition of the A, B, and C cells.
- High-efficiency particulate air (HEPA) filters were installed in the early 1960s, and a second HEPA filtration bank was installed in 1970. A second stack and Waste Tank 1 was built as part of the 1959-60 addition, and the main stack was replaced in 1978. In 1990, a remodel was completed of the mezzanine area for additional offices and, in 1994 space on the second floor was converted into offices.

Facility Condition

- Several legacy wastes such as old unused gloveboxes and tank wastes remain in some of the laboratories and hot cells.



Exhaust duct that runs east to west in basement has internal contamination that creates an ALARA issue for the offices above it. Duct should be shielded or replaced to eliminate ALARA issue.



Throughout the building, lab vacuum system has failed at multiple locations. Action required is to replace piping and valves to restore systems to normal operation. Very extensive job, system contaminated.



It's recommended that older style hoods used in the building be replaced with newer, more efficient and more corrosion resistant materials. Est. of hoods to replace is 45, including hood, cabinet, and disposal.

EMSL

Name: Environmental Molecular
Sciences Laboratory

Year Begun: 1994

Yr Finished: 1997

Gross Sq Ft: 200,000



Facility Description, Missions, and History

- EMSL is operated by PNNL as a DOE national scientific user facility where scientists and engineers from the academic community, industry, and other government laboratories pursue and collaborate on science issues.
- PNNL was authorized by DOE in October 1993 to proceed with the EMSL. Construction began in July 1994. The facility was dedicated in deceased PNNL Director Bill Wiley's honor in October 1996, a few months after he unexpectedly passed away. Construction was completed in August 1997, and the EMSL opened for full operations as DOE's newest national scientific user facility on October 1, 1997.
- EMSL contains dry labs and wet labs, and office space with generous amounts of common space including mixing areas and conferencing rooms for collaboration. The office areas are two-story, and they and the common areas are isolated from the laboratory space. Its design features include a cafeteria and publicly accessible conference rooms. It also has a state of the art auditorium that is equipped to facilitate multi-media presentations for technical collaborations.

Facility Modifications and Upgrades

- The building has defined areas that need modification or replacement from frequent use. Long-term planning will focus on ways to improve accessibility by users to the building.

Facility Condition

- The facility is assessed as new/adequate.