RICHLAND OPERATIONS OFFICE

RECORDS PRODUCED BY PACIFIC NORTHWEST NATIONAL LABORATORY

SELECTED LABORATORY RESEARCH PROJECTS

25 pgs.

INTRODUCTION:

RICHLAND OPERATIONS OFFICE

RECORDS PRODUCED BY PACIFIC NORTHWEST NATIONAL LABORATORY

SELECTED LABORATORY RESEARCH PROJECTS

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Assistant Secretary for Environment, Safety and Health

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The Department of Energy and Its Heritage: The Department of Energy (DOE) is one of the most diverse agencies in the Federal government. It was created in 1977 from a score of organizational entities from a dozen departments and agencies. DOE encourages the development of energy technologies in several areas--solar, geothermal, fossil fuel, and nuclear. It develops technologies aimed at promoting conservation of energy resources. DOE is one of the largest Federal agency supporters of basic scientific research and manages a research complex that includes some of the nation's premier laboratories. DOE helps formulate national policies for energy use and development. Perhaps surprisingly to many, DOE also runs the nuclear weapons research, development, and production complex as well as associated dismantlement and clean up activities.

DOE's nuclear heritage comes from the World War II Manhattan Project which built the atomic bomb. The threads of DOE's involvement with nuclear issues and programs run through the following agencies: the Manhattan Engineer District (1942-1947), the Atomic Energy Commission (1947-1975), and the Energy Research and Development Administration (1975-1977). DOE not only took over functions, cultures, and traditions from these agencies, it also inherited records from them. Of these agencies, the longest lived and most controversial was the Atomic Energy Commission (AEC).

The Atomic Energy Commission: From its inception in 1947 until its abolition in 1975, the AEC carried out a Congressional mandate for a large federal role in atomic energy development.

The AEC maintained programs for nuclear weapons research, development, production, and testing; production of plutonium and weapons grade uranium; milling and refining of uranium ore; biomedical research into the effects of radiation and nuclear weapons; basic nuclear research in fields such as chemistry, physics, and metallurgy; development of nuclear reactors; promotion of a civilian nuclear power industry; and conduct of international Atoms-for-Peace activities. It was unique among federal agencies in combining responsibilities to both promote and regulate a technology.

In 1947 the AEC assumed control of research and production facilities created by the Manhattan Engineer District (MED) during World War II. The facilities were scattered from coast to coast, with the primary ones being located in Oak Ridge, Tennessee; Hanford, Washington; and Los Alamos, New Mexico. At Oak Ridge the Manhattan Project established facilities for the production of bomb grade uranium. It also had intended to build nuclear reactors for plutonium production there as well. When research showed that production reactors would generate far more heat and radioactivity than scientists had previously believed, the Manhattan Project located plutonium production facilities near Hanford, Washington. During the war the E. I. DuPont de Nemours Company built and operated Hanford plutonium production facilities for the Manhattan Engineer District.

To operate its facilities, the MED had used contractors while retaining government ownership of plants, laboratories, and buildings. The AEC continued this system of government-owned, contractor-operated (GOCO) facilities. At Hanford, DuPont pulled out as the operating contractor after the end of the war. In 1946 General Electric acquired the managing and operating contract and assumed responsibility for producing plutonium.

Pacific Northwest National Laboratory: Shortly after the MED began building plutonium production facilities at Hanford, it formed a research laboratory to support production activities. The laboratory, eventually called the Hanford Laboratories, launched programs to study radiation damage to reactor materials, to investigate fuel processing techniques, to develop processes for the removal of useful fission products from reactor wastes, and to study the biological and environmental effects of production reactor operation. Because the MED intended to place huge production reactors on the Columbia River, there was special interest in studying reactor environmental impact and effects on aquatic life, particularly since the Columbia provided drinking water and food for millions of people in the Pacific Northwest.

To investigate the biological and environmental effects of production reactors, for example, the Hanford Laboratories launched several programs. One examined the effect of the reactors on river fish and aquatic biology and another the effects on the environment of radioisotopes released routinely during reactor operation. This effort focused on the effects of iodine, tritium, radioactive particles, and plutonium on the environment and man. The Hanford Laboratories also initiated programs to study the absorption of radioisotopes through the human gastrointestinal tract and methods of treating radiation injury. Until the middle 1960s the Hanford Laboratories focused on nuclear technology and the environmental and health effects of radiation.

By this time, the AEC had met all Department of Defense requirements for nuclear weapons production and had created a huge arsenal of nuclear weapons. Accordingly, President Lyndon B. Johnson decided to reduce nuclear materials production and presented it as a disarmament measure in his 1964 State of the Union address. As a result, over the next seven years, the AEC shut down all but one of the Hanford production reactors. Because the Hanford area was a one industry town, the AEC also took steps to keep the area economically viable by aiming to bring new industry and contractors into the area. It grouped these efforts into its Hanford diversification program. In 1964 General Electric decided to withdraw from Hanford and the AEC committed to use multiple contractors to operate the site thereafter.

In the first major move of its Hanford diversification program, the AEC selected Battelle Memorial Institute of Columbus, Ohio to take over operation of the Hanford Laboratories, which were now renamed the Pacific Northwest Laboratory (PNL). At its inception PNL had a staff of about 1,800 and a budget of approximately $20 million.

Under Battelle management the laboratory grew. In 1965 it consisted of a single gray barracks in downtown Richland. Within ten years, it included new buildings and equipment valued at $50 million. For example, in 1967 PNL began operation of a 120 square mile Arid Lands Ecology Reserve for the AEC. It established a Marine Research Laboratory on Washington's Olympic Peninsula and a research center near the University of Washington's Seattle campus. It built a Richland Research Complex which included a Research Operations Building, a Physical Sciences Laboratory, a 300 seat auditorium, a Mathematics Building, an Engineering Development Laboratory, and a Life Sciences Laboratory. In 1967 an observatory with the largest optical telescope in the Northwest was established near Richland.

The AEC, meanwhile, had decided to build the Fast Flux Test Facility (FFTF) at Richland as part of its Hanford diversification efforts. The FFTF was an advanced nuclear reactor which would be used to test fuels and materials which could be used in advanced nuclear breeder reactors. PNL was given the job of designing the FFTF and selecting engineering and construction firms to build it.

At the same time PNL was diversifying its research programs. The laboratory expanded its efforts into additional biomedical, nonnuclear energy, environmental, national security, and human affairs research. In 1969 PNL was chosen by the National Aeronautics and Space Administration to analyze lunar samples collected by the Apollo program and in 1972 PNL received lunar samples from the Apollo 15 and 17 space missions for research. In 1972 the laboratory won a prestigious award for developing a porous substance that could develop a "living union" between bone and prosthetic devices by bone ingrowth.

By 1975 PNL's work force totaled about 1142 and its annual operating budget was a little over $25 million. By this time the AEC had been replaced by the Energy Research and Development Administration (ERDA). Within two years ERDA had been replaced by the Department of Energy (DOE). PNL became first an ERDA facility in 1975 and then a DOE facility in 1977.

PNL continued to expand and diversify under DOE. When Mount St. Helens erupted in 1980, PNL began collecting and analyzing ash samples to determine potential environmental and health consequences. The laboratory fabricated special bundles of reactor fuel rods to help to determine what happens to nuclear fuel rods during a reactor loss of coolant accident. PNL helped DOE to establish the first Atmospheric Radiation Measurement site to obtain data related to global environmental change. It prepared a unique booklet in the Marshallese language explaining potential radiation hazards to help the people of Enewetak Atoll to understand health risks of returning to their native islands, the site of many earlier open-air United States nuclear weapons tests. PNL used its own Grumman Gulfstream I aircraft to collect air samples of fallout from the 1986 Chernobyl nuclear reactor accident. The laboratory developed a process for encapsulating highly radioactive nuclear waste in vitrified glass and demonstrated the process on a pilot-plant scale employing spent fuel from a commercial power reactor. PNL also performed lead laboratory roles for DOE on the Aquifer Thermal Energy Storage Program, wind energy, nuclear waste materials characterization, and nuclear waste management.

By 1992 PNL employed more than 3,500 people, had an annual budget of over $500 million, and supported energy, environmental, health, educational, and national security missions. It focused on scientific research and the rapid development and deployment of technology, with an emphasis on resolving environmental issues, such as waste remediation, and global environmental change. When appropriate, PNL also performed work for other federal agencies, such as the Department of Defense, the Nuclear Regulatory Commission, and the Environmental Protection Agency. In 1995 it was designated Pacific Northwest National Laboratory (PNNL).

Inactive Records Produced By Pacific Northwest National Laboratory: PNNL has custody of inactive records created by its own organizations and also by General Electric. Like the Richland Operations Office, PNNL generally controls inactive records on the box level. PNNL, however, usually retains information about the collections of which records boxes are a part. The attached Records Input/Data Transfer forms are inventories of the folders which appear in records boxes. PNNL uses them as one means of controlling its inactive records. The forms also list the organization which retired the records and indicate the larger collections of which boxes are a part.

Originally some of PNNL's inactive records about site activities were classified. The Richland Operations Office has now declassified many of these older documents in response to litigation and other needs. It has placed many of these documents in its public reading room; thus, much of the contents of the boxes listed on the attached Records Input/Data Transfer forms may be available in the Richland public reading room. As soon as the documents are available, they will be linked to the Hanford Home Page at http://www.hanford.gov/doe/reading.htm.

Inactive Records Produced by Pacific Northwest National Laboratory--Selected Laboratory Research Projects: The attached Records Transfer/Data Input forms list collections which show the variety of research work in which the laboratory engages. They capture important aspects of the laboratory's research effort. The boxes and their highlights are as

follows:

Box Numbers	Highlight
1. 114738-39	The Breeder Reprocessing Engineering Test Project
2. 129456	Data on the Health Effects of the Chernobyl Accident
3. 134544-47 134550-51 134552-54	Hanford Waste Management Projects
4. 134835-36	Analyses of Kuwait Oil Fires

The box inventories may not reflect the present condition of these records.

Arranging for Access to Inactive Records Produced by Pacific Northwest National Laboratory--Selected Laboratory Research Projects: Access to unclassified portions of these materials can be arranged under provisions of the Freedom of Information Act (FOIA). An FOIA request may be submitted, or additional information about the records obtained, by contacting the Richland Operations Office FOIA officer at:

Freedom of Information Act Officer, A7-75
U.S. Department of Energy
P.O. Box 550
Richland, WA 99352
Phone: 509-376-6216.

Some of the records on the attached box inventories may have previously been made available at the DOE reading room in Richland. These records may be reviewed and duplicated at the reading room. There is a fee for duplication. The reading room can be reached at:

DOE Public Reading Room
100 Sprout Road
Richland, WA 99352
Phone: 509-376-8583
E-mail: Reading_Room@pnl.gov

RICHLAND OPERATIONS OFFICE

RECORDS PRODUCED BY PACIFIC NORTHWEST NATIONAL LABORATORY

SELECTED LABORATORY RESEARCH PROJECTS

BOX INVENTORIES

Mailing Organization	Department	Custodian	Date	May records be destroyed as scheduled without further concurrence?
	Waste Treatment Technology	J. M. Perez	2-13-91	☒ YES ☐ NO
	Unit Waste Immobilization	**Location** 324/235	**Phone** 376-5982	Coordinate Disposal Approval with Other BL Contractors? ☐ YES ☒ NO (If yes, specify contractors)

Box No.	DESCRIPTION OF RECORD Instruction: Type general description in capital letters and follow with detail description of contents. Also, please highlight or underline key words.	Classification (U,O,C,S)	Inclusive Dates From	Inclusive Dates To	Cubic Feet	Disposal Schedule	Retention (years)
114738/ 1092	Breeder Reprocessing Engineering Test (BRET) Safety Assessment Report MSH - 1983 Can Cooling & Comp Prediction Decay Heat Effects - 3/83 Decontamination Efforts (NDS) Correspondence - 1983-1984 Evacuated Canister Work - 4/83 Literature on FIN Effects on Canisters - 1979-1982 Meeting Info - 5/83 - 4/84 Preconceptual Design Package - 1983 Flow Sheets - 1983 TRU/HLW Alts. Information - 1984 Breeder Fuel Reprocessing Plant Waste Treatment Program - 3/84 Monthly - ISV TRU/HLW INC in Risk - 12/82 Comparison of 60,000 MWD/MTHM Ve 100,000 MWD/MTHM Burnup for BRET, MSH - 5/83 TRU/HLW Risk Anal. - 6/84 TRU/HLW Risk Information (General) 1978-1979 TRU/HLW Risk Notes - 1984 TRU/HLW Vibratory Finisher Risk - 10/80 TRU/HLW Technical 7 Economic Evaluations - 6/84 Misc (Diagrams, Draft papers, Photos) MRS (Materails Research Society) 1984 BRET Safety Analysis 1983-1984 BRET Safety Analysis Notes - 9/83 BRET Safety Preliminary Report & Calculations-9/83 BRET Safety Water/Molten Salt - 9/83 BRET Safety Water/Glass Steam Explosion - 1978&1981	O	1976	~~1984~~ ~~1993~~ 1984	1.0	C19,5 DOE 1324.2	~~6 yr~~ 14 yrs

RECORDS TRANSFER/DATA INPUT	Transfer Requested By (Signature)	Transfer Approved	Data Entry S-8 ☐ S-10 ☐ S-9 ☐ S-11 ☐	Received by RMA	Date Received
					4-12-91

Organization	Department	Custodian	Date	May records be destroyed as scheduled without further concurrence? ☐ YES ☐ NO
	Unit	Location	Phone	Coordinate Disposal Approval with Other RL Contractors? ☐ YES ☐ NO (If yes, specify contractors)

Box No.	DESCRIPTION OF RECORD Instruction: Type general description in capital letters and follow with detail description of contents. Also, please highlight or underline key words.	Classification (U,O,C,S)	Inclusive Dates From	Inclusive Dates To	Cubic Feet	Disposal Schedule	Retention (years)
	BREEDER REPROCESSING ENGINEERING TEST (BRET) (Cont) BRET Safety Sodium Molybdate Form - 2/78 BRET Safety - HEDL Information - 8/83 BRET Run Summary - Canister/Glass Study BRET Safety - Other Assessments - 1981, 1983 BRET He Generation - 1983 BRET Helium Generation Literature - 1976,1982,1983 Waste Management Systems Technical & Economic Evaluations Program - 6/84	O	1976	1984	1	DOE 1324.2 C 19.5	14 yrs
114739 1093	Feed System Off Gas System Flowsheets & Mass Balances BRET Melter Center of Gravity Calcs. BRET Concept Design - 1983-1984 BRET Turntable Cooling Calculation BRET-1 Can. Fab. - 1983 BRET Run - 1983-1984 BRET Reports BRET - ORNL Procurement Schedule, Instrument tabulation, Maintenance, General Info, Melter Design) BRET Communications - 1984 BRET Process Design Task 03 - 1984 Ceramic Melter, BRET CDR Text, KEH Interface, Communications)						

RECORDS TRANSFER/DATA INPUT	Transfer Requested By (Signature)	Transfer Approved	Data Entry ☐ 9-8 ☐ 9-10 ☐ 9-9 ☐ 9-11	Received by RNA	Date Received
					4-12-91

...cific Northwest Laboratory		376-2642				
7. Retiring Unit and Code	8. Manager/Phone J.A. Mahaffey 376-4584	9. Org. Code D7A50	10. MSIN P7-82	11. May records be destroyed as scheduled without further concurrence? [ ] Yes [x] No		

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
29456 / 2119	<u>Project Name</u>: Chernobyl Database <u>Project Number</u>: 11914 <u>Client</u>: U.S. Department of Energy <u>Manager</u>: J.A. Mahaffey <u>Principal Investigators</u>: R.A. Kennedy (1991-1992), F. Carr, Jr. (1988-1990) J. Littlefield (1987) <u>Scope</u>: Acquire, enhance, and maintain a well documented, comprehensive database of information related to the Chernobyl nuclear reactor accident. Project Management Plan NEPA Documentation Monthly Subprogram Report Input Annual Report Input OHER Director's Overview Input Other Reports Proposals (FWPs) Public News Media Clearances Pre-FY 1992 Speeches, Posters, & Articles IRPA8 Paper & Poster FY 1992 ANS Paper FY 1992 PNL-7992 *ChernoLit*™ User's Manual (with diskettes) *ChernoLit*™ Commercial Package *ChernoDat* User's Manual Administrative Correspondence 1987-1992 Technical Correspondence Information Request Forms Funding Breakdown Cost Accounting	U	1/87	9/92	1.00	N1-434-89-8.1B (C19038A)	20 years

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	Rebecca A. Kennedy 4/26/94		S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P. Morrison	7-14-94

54-3000-826 (02/93) GEF220

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Health Risk Assessment	R.A. Kennedy 376-2642	300 Area-3767-13	3/22/1994	2 of 2

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
	J.A. Mahaffey 376-4584	D7A50	P7-82	[ ] Yes [x] No

			15. Inclusive Dates				
129458 (continued)	(Project #11914 continued) Record Management Photograhy Physical Collection Inventory QA Audits *ChernoDat* Historical Development Records Chernobyl DB Project Master 44MB-disk /w listing Chernobyl DB Project Backup 44MB-disk /w listing *ChernoLit* Version 1.0 1/20/92 Master 44-MB disk /w listing *ChernoLit* Version 1.0 1/20/92 Backup 44-MB disk /w listing *ChernoLit* Version 1.0 12/20/91 Master 44-MB disk /w listing *ChernoLit* Version 1.0 11/6/91 Master 44-MB disk /w listing *ChernoLit* Version 1.0 10/31/91 Master 44-MB disk /w listing *ChernoDat* Master 44-MB disk /w listing *ChernoDat* Backup 44-MB disk /w listing						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
			S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	[signature]	9-14-94

54-3000-626 (02/93) GEF220

12. Box No. 13. Description of Record [illegible] (C/S/U) 16 [illegible] 17 [illegible] 18. [illegible]

02-21

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Engineering Technology Center	PA Scott/372-6223	3000/ETB/2218	03/22/95	1 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
N/A	PA Scott/372-6223	D7T21	K9-73	[ ] Yes (X) No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134644 1625	Project Name: Double Shell Tank Retrieval Technology Program, Project Number: 20068 (previously 14203, Rev. 2/BM Wise); Client: Westinghouse; Manager: PA Scott; Scope: Define, develop and demonstrate the technology needed to retrieve liquid and solid wastes stored in double-shell tanks on the Hanford Site. Critical environmental, health and safety issues make these records permanent. A1.2 Management Review A1.2.1 Management Review Process A1.3 Technical Program Plans/Management Plans (TTP/PMP) A1.3.1 Milestone Log A1.4 Change Control Records A1.5 Prep and Risk Assessment A1.6 Impact Level Justification A1.7 Work Authorization A1.8 Project Control Procedures A2.1 Organizational Chart A2.2 Delegation of Authority A3 Reports A3.1 Monthly Reports A3.3 Status Presentations WHC	U	10/92	03/95	1.00	N1-434-89-8.1s1 c-11-03-BW	Permanent
134645 1625	(Project #20068 continued) A4 Planning A4.1 ADS A4.2 Multi Year A4.3 Fiscal Year A4.4 Integrated Plan A4.4.1 FY94 TWRS Retrieval A4.5 Retrieval TD Plan A4.6 Technology Working Group	U	10/92	03/95	1.00	N1-434-89-8.1s1	Permanent

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	PA Scott	4/27/95	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]		5-1-95

84-3000-628 (02/93) GEF226

K33704

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Engineering Technology Center	PA Scott/372-8223	3000/ETB/2219	03/22/95	2 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
N/A	PA Scott/372-8223	D7T21	K9-73	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134546 1626	(Project #20066 continued) A4.6 Technology Working Group A4.8 Task Retrieval Sequence A4.9 DST Retrieval Background A4.10 Retrieval Planning Workshop A4.11 Proposals/Plans A5 Retrieval Technology / Open Issues C1 Staff Communications C1.1 Mobilization and Uniformity Testing Comm. C1.2 Slurry Transport Communications C2 TWRS Communication C2.1 Johnson/Apley C2.2 TDPO C4 Papers, Speeches, Articles (Clearances) C5 General Correspondence C5.1 WHC Correspondence C5.2 DOE Correspondence C5.3 Other External C5.4 Meeting Notes C6 Task Related Communications	U	10/92	03/95	1.00	N1-434-89-8.1a1	Permanent

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	PA Scott [signature]	[signature]	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	[signature]	7-11-95

54-3000-626 (02/93) GEF220

K37706

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Engineering Technology Center	PA Scott/372-6223	3000/ETB/2219	03/22/95	3 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
N/A	PA Scott/372-6223	D7T21	K9-73	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134547 1626	(Project #20068 continued) C7.1 Mixer Pumps - Hydraulic Safety C7.2 107-AN Mixing Test F1 Budgets and Forecasts F2 Cost Accounting F2.2 Product Challenge Strategy O1.1 Records Inventory Disposition Schedule (RIDS) O8.2 Administrative Procedures O9.4 Laboratory Record Book List P7 Resumes P8 Education, Training and Development Q Quality Assurance Q1 QA Plan Q2.4 QA Assessment FY 1994 Chron File T1.1 Mobilization and Uniformity Testing (MR Powell) T1.6 Alternative and Advance Retrieval Systems (Sluicing) (GL Kerner) T1.7.2 Pretreatment - LK Holton	U	10/92	03/95	1.00	N1-434-89-8.1a1	Permanent

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	PA Scott		S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]		3-24-95

84-3000-828 (02/93) GEF220

K32704

02 -35

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/376-3926	300/324/275	04/11/95	1 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/376-3926	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134650 1626	PROJECT NAME: ISV Planning & Coordination. #18734. Manager: JL Buelt. Client: U.S. Department of Energy. Scope: Coordinate and manage the In Situ Vitrification Integrated Program Project.	U	1991	1993	1.00	N1-434-89-8.18 c-19-03-BW	20 Years
	Policy & Management						
	Program Planning						
	Project Management Plan						
	IP Plan						
	Technical Activity Data						
	Sub TADS						
	Activities Sheet						
	Do It Right						
	OTD Management Policies & Requirements						
	Site Closure Plan						
	Performance Assessment						
	Technical Support Group						
	Other ID/IP Organization Charts						
	Reports						
	Monthly Reports						
	Weekly Reports						
	Meeting Notes						
	Trip Reports						
	ER Presentation 10/07/91						
	PPF Meetings						
	Spectrum '92						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	[signature] 4/10/95	[signature] 4/20/95	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	[signature]	7-11-95

54-3000-626 (02/93) GEF220

11411/96 Please close-out

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/376-3928	300/324/275	04/11/95	2 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/376-3926	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates		16. Cubic Feet	17. Disposal Authority	18. Retention Period
			From	To			
	Technical Information Exchange (TIE)						
	Waste Management '93 Symposia						
	EM-60 Technology Development						
	DOD						
	Air Force						
	Strategic Summit Initiatives						
	ISV Integrated Program						
	ISV Newsletters						
	ISV News Documents						
	Public News Media						
	News Releases, Articles						
	Papers, Speeches, and Articles						
	Clearances						
	ISV Data Base						
	External DOE Communications						
	External Non-DOE Communications						
	Internal Communications						
	Financial Information						
	Contracts-1830						
	Technical Test Plan						
	Contracts-other						
	Purchase Orders						
	Records Management						
	Records Inventory and Disposition Schedule (RIDS)						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
			S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]		7-1-95

54-3000-626 (05/93) GEF220

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/376-3926	300/324/275	04/11/95	3 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/376-3926	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
	Technical Information						
	OTD Program Review						
134551	Graphics				1		
1626	QA Plan						
	Technical						
	FY-91 TTPs						
	FY-92 TTPs						
	FY-93 TTPs						
	Solicited TTPs						
	Unsolicited TTPs						
	Technology Transfer						
	Arnold Air Force Base						
	Community Leaders Workshop						
	ID/IP Integration						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	JL Buelt 4/12/95		S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]		7-1-95

84-3000-628 (02/93) GEF220

6. Company and Code					9. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/376-3928	300/324/275	03/29/95	1 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/376-3928	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134552 1687	**<u>PROJECT NAME:</u> ISV Planning & Coordination. #18734. <u>Manager:</u> JL Buelt. <u>Client:</u> U.S. Department of Energy. <u>Scope:</u> Coordinate and manage the In Situ Vitrification Integrated Program Project.**	U	1991	1993	1.00	N1-434-89-8.18 C-19-03-BW	20 Years
	Contacts, Addresses, and Home Numbers						
	ER Alignment						
	Geosafe						
	Geosafe CRADA						
	Costs-Operational Estimates						
	Projects						
	116-B-6A						
	Limits						
	ORNL						
	INEL						
	Underground Storage Tanks						
	Field Data Collection at Arnold AFB						
	Buried Waste						
	Industry & University Collaboration						
	PRDA's						
134552 (continued)	**<u>PROJECT NAME:</u> In Situ Vitrification. #80441. <u>Manager:</u> JL Buelt. <u>Client:</u> U.S. Department of Energy, Richland Operations Office. <u>Scope:</u> Develop and demonstrate the Large-Scale In Situ Vitrification System for application to TRU contaminated soils at Hanford.**	U	10/83	03/85		N1-434-89-8.18 C 19-03-BW	20 Years
	ISV						
	Design Documents						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	[signature] 4/13/95	[signature] 4/20/95	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P Morrison	7-11-95

54-3000-828 (02/93) GEF220

M416916 Please close-out.

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-bldg-rm)	5. Date	6. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/378-3928	300/324/276	03/29/95	2 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/378-3928	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
	Technology Program Plan						
	Scheduling & Planning						
	RLOP's						
	Vendor Instrument/Equipment						
	Drawings & Sketches						
	ORP's						
	Large Scale Design -- Off Gas						
	Electrical Concept Evaluations						
	LSISV Elect., Specs., & Dwgs.						
	LSISV Miscellaneous						
	SW Gear & MCC LSISV						
	ISV Comm. System						
	JLB Design--GEOSAFE						
	ISV Working File - Hood Design						
	Process Control - Battery Controls						
	Niagra Transformer LSISV and GSC Design Info.						
	LSISV Instrumentation PSID & Flow Diag.						
	LSISV Test Data						
	GSC (CUI)						
	Large Scale Design - General						
	SOP - #88, Revs/1&2, ISV Large Scale Acceptance Test - SCI						
	SOP's						
	Run Preparations (Calculations)						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	[signature] 4/13/95	[signature]	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	[signature]	7-11-95

54-3000-828 (02/93) GEF220

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	Process Technology & Engineered Systems	JL Buelt/376-3928	300/324/275	03/29/95	3 of 3

7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
Advanced Electrical & Chemical Processing Group	JL Buelt/376-3928	D7T32	P7-41	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
	200W Power Line Installation						
	Large - Scale Radioactive Test						
134553	Run Plans (Procedures)				1		
1627	Site Characterization						
	ISV Plots						
	216-Z-12 Drilling Documentation						
	Soil Data						
	Modeling						
	Start Up						
	Cool Down Rates						
	Costs (Program)						
	Engineering-Scale Modifications						
	Electrodes Design & Evaluations						
	Photos						
	LSVT DF Calculations						
	Run Evaluations						
	QA Requirements						
	Internal Memos & Communications						
	Outside Communications (External)						
	Reports/Clearances						
134554	In-Tank Vitrification				0.55		
1627	In Situ Vitrification Readiness Review Plan						
	ORR-LSOAT						
	ISV Applications						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	J J Buelt 4/10/95	R M Dunn	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P J Knutson	7-11-95

64-3000-628 (02/93) GSF220

1. Company and Code	2. Department and Code	3. Custodian/Phone	4. Location of Records (Area-Bldg-Rm)	5. Date	6. Page
Pacific Northwest Laboratory	D7D51 Atmospheric Sciences Group	Rich Barchet 2-6158	3000/ISB-1/139	08/29/95	1 of 3
7. Retiring Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?	
	Rich Barchet 2-6158	D7D51	K9-37	( ) Yes	(X) No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134835 0851	Project Name: Conduct Aircraft Measurements to Investigate Properties of the Kuwait Oil-Fire Plume Project Number: 10816 , Project Mgr: Ken Business Client: DOE QA Plan: EES-066 Scope: The primary objective of this program, for which a field study will be conducted in the Middle-East, is: To apply the Kuwait oil-fire plume as a one-time opportunity for the quantitative evaluation of large scale atmospheric-chemistry models and associated models of radiant transport through aerosol plumes.	U	02/85	08/92	1.0	N1-434-89-8.1b (C19038D)	20 years
	QA Surveillance Report						
	Clearance of Publications and Presentations, PNL-8436						
	QA Plan for Conduct Aircraft Measurements to Investigate Properties of the Kuwait Oil-Fire Plume, EES-66						
	Kuwait Planning						
	Correspondence in Kuwait						
	'91 Calibrations						
	ILA No.1444583-A-H1 with BDC						
	ILA/Non-Cash Transfer						
	Surveillance Plan						
	General Laboratory Data Traceability Surveillance						
	Canisters Received from Middle East Sampling						
	ILA No. 144583-A-H1 (Supplement No. 1)						
	ILA/Non-Cash Transfer						
	Invoices						
	Research Protocol Method for Whole Air Sampling with Stainless Steel Canisters						
	Design Summary DOE Kuwait Oil Fire Response						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	K M Schaeffer for Rich Barchet	9/31/95 K M Schaeffer	S-9 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P J Jensen	9-28-95

84-3000-826 (02/93) GEF220

Pacific Northwest Laboratory	07D51 Sciences Group	2-6158	3000058-17139		08/28/95	2 of 3
7. Retiring Unit and Code	8. Manager/Phone Rich Barchet ~~S.J.Ghan 372-6169~~ 2-6158	9. Org. Code 07D51	10. MSIN K9-37	11. May records be destroyed as scheduled without further concurrence? [ ] Yes [X] No		

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134835 (Continued)	Group Foreign Travel Trip Report	U	02/85	08/92	1.0	N1-434-89-8.1b (C19038D)	20 years
	Pre-Departure Trip						
	Country Clearance/Visas						
	Immunizations						
	American Express/Bank Account						
	Travel						
	Insurance						
	Miscellaneous Correspondence						
	Procurement						
	Miscellaneous Memo/Pricing						
	ILA-BCD 144583						
	Cloud Condensation Nucleus Counter 144573						
	SEA-Upgrade Data Acquisition System 144502						
	Handlers 144581						
	SEA-Spares 144558						
	Aircraft Maintenance Contracts						
	Freight						
	Contract Info-Budgets/Costs/ECT.						
	Meeting Notes/Handouts						
	Property						
	Accounting						
	Procurement/Subcontracts Status Sheets						
	Kuwait Missions Data Cartridge Tapes (4)						
	Kuwait Flights Data Cartridge Tapes (13)						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Data Entry	22. Received by RHA	23. Date Received
	KM Schanke for Rich Barchet	8/31/95 KM Schanke	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P Morrison	9-28-95

54-3000-628 (02/93) GEF220

7. Routing Unit and Code	8. Manager/Phone	9. Org. Code	10. MSIN	11. May records be destroyed as scheduled without further concurrence?
	Rich Borchet ~~CJ Chan 372-6185~~ 2-6138	D7D51	K9-37	[ ] Yes [X] No

12. Box No.	13. Description of Record	14. Classification (C/S/U)	15. Inclusive Dates From	15. Inclusive Dates To	16. Cubic Feet	17. Disposal Authority	18. Retention Period
134836 / 0852	Kuwait #2 Technical Notebook	U	06/91	08/93	1.0	N1-434-88-8.1b (C19038D)	20 Years
	Kuwait - Miscellaneous Correspondence						
	Documentation for Flights 1 - 13						

RECORDS TRANSFER/ DATA INPUT	19. Transfer Requested By (Signature)	20. Records Management Approval	21. Date Entry	22. Received by RHA	23. Date Received
	KM Schauble for Rich Borchet	RM Schauble 9/21/95	S-8 [ ] S-10 [ ] S-9 [ ] S-11 [ ]	P Morrison	9-28-95

54-3000-828 (03/93) GEF220