

Appendix H
Environmental Checklist



INTEROFFICE MEMORANDUM

Date: October 31, 2001

To: S. G. Wilkinson MS 3950 526-4150

From: B. M. Angle *BMA* MS 3428 526-1841

Subject: APPROVAL OF THE ENVIRONMENTAL CHECKLIST "CERCLA SITE CFA-08 SEWAGE PLANT DRAIN FIELD, OPERABLE UNIT 4-13" (CFA-01-006)

As Idaho National Engineering and Environmental Laboratory's (INEEL's) Contractor NEPA Compliance Officer, I have approved the attached Environmental Checklist (EC) for the proposed action. In addition, the DOE Environmental Restoration Program Office and DOE NEPA Compliance Office have approved the action in accordance with the June 1994 Secretarial Policy on the National Environmental Policy Act.

The attached EC and Approval Form is a record that should go in your project files. You may proceed with the project subject to compliance with the conditions stated in Section E of the EC. These include 1) a plan to prevent and control the spread of noxious weeds, 2) a bird nest survey of the drain field area, if needed, and 3) completion of the *INEEL Gravel/Borrow Request Form*. (Note: The conditions on the approval sheet are no longer required.) If the project description or scope changes, please notify B. E. Walker at 526-8195. For subsequent transmittals, reference the EC title and number (identified above).

BEW

Attachments

cc: J. S. Irving, MS 3428
M. R. Jackson, MS 2105
R. M. Macfarlane, MS 4131
M. J. McGuire, MS 3950
D. W. Wagoner, MS 3950
B. E. Walker, MS 3428
B. M. Angle (BMA-086-01) File

Uniform File Code: 6101 (CFA-01-006)
Disposition Authority: ENV2-F-3-A
Retention Schedule: Permanent. Cutoff when project is complete. Transfer to NARA 20 years after cutoff.

Environmental Checklist Approval Form

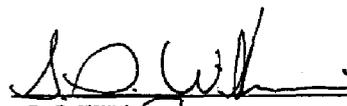
Project No.: CFA-01-006

Project Title: CERCLA Site CFA-08 Sewage Plant Drain Field, Operable Unit 4-13

The undersigned agree that the information in the above-referenced document is true, accurate, and complete to the best of their knowledge. Complete any conditions listed below before initiating the proposed activity.

1. An Air Permitting Applicability Determination must be approved before beginning any fieldwork. Contact Harrison Orr at 526-0759 for guidance. Please notify Brynna Walker at 526-8195 when this condition has been completed.

2. A biological field survey must be conducted before beginning any fieldwork. Contact Sue Majors (Stoller Corporation, 525-9358) for guidance. Notify Brynna Walker at 526-8195 when this condition has been completed.

Program/Project Manager:  9/24/01
 S. G. Wilkinson Date

Facility Manager:  9-24-01
 G. W. Braun Date

DOE-ID NEPA Compliance Office: E-mail approval by J. P. Depperschmidt attached 10/30/01
 Date

Contractor NEPA Compliance Officer:  10/31/01
 B. M. Angle Date

From: Jack D Depperschmidt@Exchange on 10/30/2001 10:02 AM

To: Brynna E Walker/WALKBE/CC01/INEEL/US@INEL
cc: John S Irving/JSI4/CC01/INEEL/US@INEL, Roger L Twitchell@Exchange, Carol A Hathaway@Exchange,
Kathleen E Hain@Exchange
Subject: FW: CFA-01-006 for Final Approval

Based on my review of the attached environmental checklist, CFA-01-006, I have determined, as Deputy NEPA Compliance Officer, that the environmental impacts of the proposed action should be covered by the CERCLA process as referenced in the text and the attached environmental checklist. Therefore, no further NEPA review is required.

-----Original Message-----

From: Walker, Brynna E
Sent: Tuesday, October 30, 2001 9:41 AM
To: Depperschmidt, Jack D
Subject: CFA-01-006 for Final Approval

Jack, here is the final checklist for your approval. Carol Hathaway's comments were addressed. In addition, the conditions have changed. It was determined that an APAD was not needed, and other conditions were added.

Thanks,
Brynna



CFA-01-006.doc

ENVIRONMENTAL CHECKLIST
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EC Document No.: CFA-01-006

DIRECTIONS: The Responsible Manager should complete Sections A through D. The Contractor's Policy and Permitting Organization completes Sections E & F. Refer to MCP-3480 "Environmental Instructions for Facilities, Processes, Materials, and Equipment," Appendix A for instructions to complete this form.

SECTION A. Descriptive Information:

Charge Number: 3XCC21209			
Project Title: CERCLA Site CFA-08 Sewage Plant Drain Field, Operable Unit 4-13			
DOE-HQ Program: EM-40		Project No.:	
Performing Organization: BBWI WAG-4		Date: 8/30/01	
Contact	Name	Telephone No.	E-mail
DOE Project Technical Manager:	Carol A. Hathaway	526-4049	HATHAWCA
Facility Operations Manager:	Gary W. Braun	526-2830	BRN
Program/Project Manager:	Stephen G. Wilkinson	526-4150	WILKSG
Project/Technical Contact:	Deborah W. Wagoner	526-9989	WIGG
Alternative Project/Technical Contact:	Douglas H. Preussner	526-9813	DPRES
Environmental Field Support Contact:	Michael J. McGuire	526-4332	MCGUMJ

SECTION B. Project Description: Attach an accurate and concise description of the project or activity. Including type of activity (e.g., new construction, process modification, maintenance, research and development, or work for others), location (e.g., area, building, laboratory), purpose and need, project start and end dates, approximate cost.

SECTION C. Environmental Aspects / Potential Sources of Impact: Would the action involve, generate, or result in changes to any of the following? (If Yes, on attachment provide specific potential impact information such as types and amounts of chemicals, waste, effluent, or emissions; size of modification, soil disturbance; or type of tank, equipment, process, or pollution prevention measures).

Source	Yes	No	Source	Yes	No
1. Air Pollutants	X		11. Industrial Waste Generation	X	
2. Asbestos Emissions		X	12. Interaction with Wildlife/Habitat	X	
3. Biological Hazards		X	13. Managing Surplus Property and Materials	X	
4. Chemical Use and Storage	X		14. PCB Contamination		X
5. Contaminated Sites Disturbance	X		15. Radioactive Materials Use and Storage		X
6. Cultural/Historical Resource Disturbance	X		16. Radioactive Waste Generation	X	
7. Discharge to Wastewater Systems or Groundwater		X	17. Storage of Hazardous Materials or Waste in Tanks		X
8. Drinking Water Contamination		X	18. Surface Water and Storm Water Contamination	X	
9. Hazardous/Mixed Waste Generation	X		19. Use, Reuse and Recycling of Resources		X
10. Hazardous/Rad. Material and Waste Handling and Trans.	X		20. Work Within a Floodplain	X	

SECTION D. Work Activities: Select specific work activities using Appendix B in MCP-3480 and check appropriate section numbers on the Work Activity Work Sheet (see next page). Check and do one of the following:

<input checked="" type="checkbox"/>	If required to submit EC by MCP-3480, Appendix B, do not complete Sections E & F or Signature Block. Submit EC to Air / Water / NEPA / Environmental Programs Policy and Permitting Department, John S. Irving (MS 3428) or E-mail (IS14) for review and approval.
<input type="checkbox"/>	If not required to submit EC by MCP-3480, Appendix B, complete Sections E & F (check either "Existing EC" or "Does not require an approved EC"), sign & date (in Signature Block), and place copy of EC in project files.

SECTION E. Instructions and Conditions: (If Yes, see attachment for instructions.)

1. Instructions from MCP-3480?	Yes	No
2. Conditions Required Before Starting Project?	X	

SECTION F. NEPA Level of Documentation and Reference(s).

CX:	EA:	EIS:	CERCLA:	<input checked="" type="checkbox"/>	Previously approved NEPA document, including existing environmental checklist (provide # below):	Does not require EC approved by Environmental Affairs (e.g., routine maintenance, operational activities):
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Reference(s): In accordance with the June 1994 Secretarial Policy on the National Environmental Policy Act, the Department of Energy will rely on the CERCLA process for review of actions to be taken under CERCLA.

Note: For projects checked above as "CX" (Categorical Exclusion) the proposed action must not: 1) threaten a violation of applicable statutory, regulatory, or permit requirements for environmental, safety, and health, including requirements of DOE orders; 2) require siting and construction or major expansion of waste storage, disposal, recovery, or treatment facilities; 3) disturb hazardous substances, pollutants, contaminants, or CERCLA-excluded petroleum and natural gas products that pre-exist in the environment such that there would be uncontrolled or unpermitted releases; 4) adversely affect environmentally sensitive resources. In addition, no extraordinary circumstances related to the proposal exist which would affect the significance of the action, and the action is not "connected" nor "related" (40 CFR 1508.25(a)(1) and (2), respectively) to other actions with potentially or cumulatively significant impacts.

Note: The above paragraph does not apply to EA, EIS, or CERCLA related activities.

SIGNATURE BLOCK.

Brynna E. Walker Printed/Typed Name	<i>Brynna E. Walker</i> Signature	October 30, 2001 Date	526-8195 Telephone No.
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EC Document No.: VFA-01-006

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Highlighted Work Activities may require submittal of an Environmental Checklist to Environmental Affairs

- 4.2 Performing activities that may break up, disturb or block access to regulated asbestos-containing material
- 4.3 Removing asbestos-containing material
- 4.4 Purchasing Chemical Products/Hazardous Agents
- 4.5 Using & Storing Chemical Products/Chemicals/Hazardous Agents
- Contaminated Areas - (Radiological, Chemical)**
- 4.6 Working in a CERCLA area of contamination
- Container Storage Facilities**
- 4.7 Constructing/modifying facilities that store oil in containers
- 4.8 Operating facilities that store oil in containers
- Drinking Water**
- 4.9 Constructing or modifying drinking water systems
- 4.10 Operating and maintaining drinking water systems
- 4.11 Sampling drinking water systems
- 4.12 Maintaining and repairing drinking water systems
- 4.13 Exceeding permitted or regulatory limits-drinking water
- Facility, Equipment, &/or Process**
- 4.14 Performing Study Studies for New Buildings or Structures
- 4.15 Constructing/modifying facilities, equipment or processes (including changes to operating conditions)
- 4.16 Making modifications to facilities, buildings or equipment as part of routine maintenance
- 4.17 Operating facilities, equipment, or processes
- 4.18 Responding to regulatory inspections
- 4.19 Maintaining/repairing facilities, equipment, or processes
- 4.20 Monitoring storm water according to the Storm Water Pollution Prevention Plan for Industrial Activities
- 4.21 Manufacturing wood furniture & wood furniture components
- 4.22 Removing brake pads
- 4.23 Maintaining equipment containing or contaminated with PCBs
- 4.24 Decontaminating equipment containing or contaminated with PCBs
- 4.25 Preparing buildings or facilities for transfer to surplus or placed into surplus (inactive) status
- 4.26 Reactivating buildings or facilities from surplus (active) status
- 4.27 Demolishing, decontaminating, dismantling, or closing facilities, equipment, and processes
- Facility, Equipment, and/or Processes that Emit Air Pollutants**
- 4.28 Relocating portable air emission sources, or bringing portable or stationary air emission sources onto INEEL
- 4.29 Constructing or modifying stationary or portable air emission sources
- 4.30 Starting up, shutting down, or performing scheduled maintenance on stationary air emissions sources
- 4.31 Operating stationary facilities and equipment that emit air pollutants
- 4.32 Operating stationary facilities and equipment that emit radionuclides
- 4.33 Exceeding permitted or regulatory limits from stationary air emissions sources
- 4.34 Performing activities with the potential for fugitive dust or fugitive emissions
- 4.35 Conducting open burning
- Diesel Fuel and Gasoline Pumps**
- 4.36 Purchasing diesel fuel
- 4.37 Maintaining & repairing motor vehicle gas station pumps
- Halon and Appliances Containing Halon**
- 4.38 Maintaining, testing, and disposing of halon-containing equipment
- Lead**
- 4.39 Removing lead from service or from a structure, or classifying newly discovered lead
- 4.40 Using and storing product lead
- 4.41 Shipping product lead off-site for direct reuse (that is, no reclamation) at another facility
- Refrigerants and Appliances Containing Refrigerants**
- 4.42 Purchasing refrigerants, appliances containing refrigerants, system components that operate using refrigerants, or refrigerant recovery or recycling equipment
- 4.43 Maintaining, servicing or repairing stationary heating, ventilation, air conditioning and refrigeration (HVACR) equipment
- 4.44 Maintaining, servicing or repairing motor vehicle air conditioners (MVAC)
- 4.45 Distributing, excessing or disposing of appliances containing refrigerants
- Pesticides and Fertilizers**
- 4.46 Procuring, applying and storing pesticides
- 4.47 Apply fertilizers
- Procuring**
- 4.48 Procuring goods and services
- Property**
- 4.49 Leasing, renting, or purchasing real property
- Research and Development**
- 4.50 Conducting new or modifying existing research and development (R&D) activities, including indoor bench-scale and small-scale R&D activities, and small-scale pilot projects
- Routine Activities**
- 4.51 Performing routine administrative activities
- 4.1.6 Performing routine maintenance activities
- Spills/Tanks**
- 4.52 Constructing or modifying septic tanks or systems
- 4.53 Discharging to septic tanks or systems
- 4.54 Maintaining and repairing septic tanks or systems
- 4.55 Pumping septic tanks
- 4.56 Abandoning or closing septic tanks
- Soils - Disturbing Soil or Altering Stream Channels**
- 4.57 Disturbing soils or altering stream channels
- Spills and Releases**
- 4.58 Reporting and cleaning up spills and releases
- 4.59 Oil spills that cannot be cleaned within 24 hours
- 4.59 Cleaning up spills and releases of PCBs
- Storm water - Activities to Monitor Storm Waters at the INEEL Site**
- 4.20 Monitoring storm water according to the Storm Water Pollution Prevention Plan for Industrial Activities
- Tanks - Aboveground Storage Tanks (AST) and Underground Storage Tanks (UST)**
- 4.60 Constructing or modifying ASTs and non-regulated USTs
- 4.61 Operating ASTs and non-regulated USTs
- 4.62 Repairing ASTs and non-regulated USTs
- Tanks - Aboveground and Underground Tanks (Cont.)**
- 4.63 Changing use or reactivating ASTs and non-regulated USTs
- 4.64 Discontinuing use of, or closing, relocating, or removing ASTs and non-regulated USTs
- 4.65 Constructing or modifying regulated UST systems
- 4.66 Operating and maintaining regulated USTs
- 4.67 Releases, leaks, spills or unusual operating conditions from regulated USTs
- 4.68 Changing use or reactivating regulated USTs
- 4.70 Temporarily discontinuing use of, or temporarily closing regulated USTs
- 4.71 Discontinuing use of, or closing, relocating or removing regulated USTs permanently
- 4.72 Operating volatile organic storage tanks
- Waste Facilities**
- 4.73 Constructing or modifying facilities, equipment or processes at permitted or interim status RCRA facilities
- 4.74 Operating solid waste management units
- 4.75 Discontinuing use of, or closing, facilities, equipment or processes, at RCRA permitted or interim status units
- 4.76 Procuring external laboratory services for waste characterization
- 4.77 Procuring off-site waste management & recycling services
- 4.78 Planning to generate wastes
- 4.79 Generating waste
- 4.80 Dispositioning excess materials
- Wastewater, INEEL Site**
- 4.81 Constructing/modifying sewage & other wastewater systems
- 4.82 Discharging new wastewaters or changing discharges to the City of Idaho Falls sewer system
- 4.83 Discharging wastewater to the City of Idaho Falls sewer system
- 4.84 Monitoring wastewater discharges to the City of Idaho Falls sewer system
- 4.85 Exceeding wastewater discharge limits to the City of Idaho Falls sewer system
- Wastewater, INEEL Site**
- 4.81 Constructing/modifying sewage & other wastewater systems
- 4.86 Discharging new wastewaters at the INEEL Site
- 4.87 Discharging wastewaters to wastewater land application facilities
- 4.88 Discharging wastewaters to wastewater land application facilities
- 4.89 Operating wastewater land application facilities
- Water Use and Consumption**
- 4.90 Reporting water consumption
- Wells - Water Wells, Injection Wells, Well Protection**
- 4.91 Constructing or modifying water wells
- 4.92 Protecting Water Wells
- 4.93 Closing and abandoning wells
- 4.94 Constructing or modifying injection wells
- 4.95 Operating and sampling permitted injection wells
- 4.96 Operating shallow injection wells not requiring a permit
- 4.97 Closing or abandoning injection wells

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Environmental Checklist Attachments

Section B. Project Description (continued): Attach an accurate and concise description of the project or action. Including type of action (e.g., new construction, process modification, maintenance, new activity, research and development, or work for others), purpose and need, pollution prevention and waste minimization measures, projected start and end dates, and approximate cost.

The proposed project will construct an earthen materials engineered cover over the former Central Facilities Area (CFA) Sewage Treatment Plant Drain Field at the Idaho National Engineering and Environmental Laboratory (INEEL). This is the Selected Remedy for Comprehensive Environmental Response, Compensation and Liability Act (CERCLA) Site CFA-08, Operable Unit (OU) 4-13. The engineered cover will isolate the low-level radioactive contaminants from human and animal intrusion and provide shielding for about 190 years. After completing the engineered cover, institutional controls will be implemented to restrict access to the site.

The drain field is about 200 feet by 1,000 feet in size. It contains five distribution areas, each with 20 concrete drain pipes about 3.5 feet below ground surface. The drain field is located about 1,200 feet north/northeast of building CF-617 (former Hot Laundry).

The project consists of six major elements:

- Mowing existing vegetation (about 10 acres)
- Clearing and grubbing (about 3.5 acres)
- Excavating, hauling and placing earthen materials (about 65,420 cubic yards)
- Grading, leveling, compacting and other earthwork
- Revegetating (about 10 acres)
- Installing a 6-foot-high galvanized steel chain-link fence (about 2,970 linear feet).

Earthen materials required for the construction of the cap will be taken from approved INEEL Borrow Sources (potential sources include the CFA Gravel Pit, Lincoln Boulevard, and Spreading Area A). Spreading Area A and the Lincoln Boulevard Borrow Source are located within the storm water corridor. The CFA Gravel Pit is not located within the storm water corridor. Activities conducted at these borrow sources will be conducted in accordance with the substantive requirements of Addendum I, Borrow Sources, of the *INEEL Storm Water Pollution Prevention Plan for Industrial Activities*, DOE/ID-10431. Earthwork activities (inclusive of reclamation/re-vegetation) to be conducted as part of this CERCLA Remedial Action will be completed in accordance with the substantive requirements of Section 404 of the Clean Water Act.

Any soil disturbance within Spreading Area A shall be done in accordance with environmental assessment DOE/EA-1083, *New Silt/Clay Source Development and Use at the INEEL*, dated May 1997. The contractor will supply additional cap construction materials (pea gravel and cobble). The placement and construction of the engineered cap will be completed as outlined in the INEEL A-E Construction Specifications (Project File #021048) and in accordance with all applicable engineering standards.

The completion of this project will also involve the abandonment of three on-site groundwater-monitoring wells.

The project will begin in May 2002 and continue through November 2002. The estimated cost to complete the project is \$5 million.

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Section C. Environmental Aspects (continued): (If you answered Yes to any Section C items, label with Section C Item Number and explain below.)

1. Air Pollutants – The proposed project will generate fugitive dust emissions that will be addressed using both physical and administrative tools. Water and/or soil fixatives will be used to stabilize disturbed areas, stockpiled materials, etc. Work in disturbed areas will be re-evaluated if sustained winds of 25 mph are present at the task site. Work will be stopped if excessive blowing dust is observed, regardless of the wind speed, and the dust hazard will then be mitigated by physical means.

The completion of this project will release radiological contaminants into the air. Radionuclide emission calculations and air modeling have been completed and indicate an estimated dose of $6.5E-07$ mrem/yr at the site boundary. This estimated dose is significantly less than the maximum exposure dose of 10 mrem/yr. The substantive requirements of the Clean Air Act, including the State of Idaho requirements, determined to be applicable or relevant and appropriate have been included in the work plan and will be followed during this project. Estimated emissions will be submitted to EA for inclusion in the Air Emissions Inventory Annual Report upon completion of the project. Contact Harrison Orr at 526-0759 for additional assistance.

4. Chemical Use and Storage – Fertilizer may be used during this project. In addition, decontamination solutions may be used in accordance with the Health and Safety Plan to decontaminate equipment. Non-hazardous chemical substitutes will be used in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/specifications of the requester. Upon project completion, any unused materials will be made available as excess equipment or material.

5. Contaminated Sites Disturbance – The project activities will disturb the existing vegetation and topsoil on the drain field, which is a CERCLA site. The disturbed vegetation and topsoil will be spread over the extent of the drain field. No contaminated vegetation or topsoil will be transported off the INEEL. Applicable dust suppression materials/equipment will be used to control fugitive dust emissions during construction activities (see item #1 above).

6. Cultural/Historical Resource Disturbance – The drain field area was surveyed, but no significant materials were identified. A clearance for the borrow sources was also recommended, as long as they are used in accordance with the environmental assessment identified in Section B, above, and requests for use are coordinated through Mike Jackson at 526-8872 (see attached notes from Brenda R. Pace).

9. Hazardous/Mixed Waste Generation – Up to 250 gallons of decontamination solutions may be used during the completion of this project to perform radiological decontamination of equipment. Non-hazardous chemical substitutes will be used in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/specifications of the requester. Upon project completion, any unused materials will be made available as excess material. All used material will be evaluated using Form 430.19 (WDDF) and dispositioned as appropriate. Following a hazardous waste determination, used materials determined to be non-hazardous and non-radioactive will be disposed of at the CFA Landfill or excessed. Hazardous/mixed waste will be sent to an approved treatment, storage and disposal (TSD) facility.

10. Hazardous/Radioactive Material and Waste Handling and Transportation – The vegetation and topsoil present at the surface of the drain field contain minor concentrations of Cesium-137. Vegetation will be mowed and spread on top of the drain field prior to constructing the engineered cover. Some grading of the existing topsoil may be necessary to level the surface of the drain field. Hazardous and mixed waste will be transported to commercial TSD facilities.

11. Industrial Waste Generation – The proposed project will generate about 252 cubic yards of industrial waste, including materials used to clean hydraulic spills, personal protection equipment (PPE), vegetation and soils from clearing and grubbing the toe areas of the cap, fencing materials, and other miscellaneous waste. All wastes generated by this project will undergo a hazardous waste determination. Non-hazardous and non-radioactive waste will be disposed of in

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the CFA Landfill Complex. Waste streams will be evaluated to implement actions for minimizing waste entering the landfill and maximizing recycling and reuse.

12. Interaction with Wildlife/Habitat – The proposed project will disturb soils outside of the existing drain field. An ecological evaluation was conducted for the drain field area and the borrow sources. (see attached letter and memorandum from Sue Majors, Stoller Corporation, for specific descriptions and recommendations).

Five state-listed species of noxious weeds are present at Spreading Area A. A plan to prevent and control the spread of these species must be developed and approved before disturbance begins in the area (see Section E, Conditions #1).

Birds that are protected under the Federal Migratory Bird Protection Act may use the drain field area for breeding purposes. The area must be surveyed for bird nests before conducting any fieldwork between March 15 and June 15 (see Section E, Conditions #2, below).

Sage grouse, a species of special concern, use Spreading Area A during the spring for breeding and nesting purposes. Activities conducted between March 15 and June 15 at Spreading Area A should only be performed between 10:00 am and 5:00 pm.

13. Managing Surplus Property and Materials – During the completion of this project approximately 3,000 linear feet of galvanized chain-link fence will be removed, stored and potentially re-installed. At the time of re-installation, a determination will be made in the field as whether to reuse this fencing material or excess it. Additionally, two telephone poles that have been treated with a creosote preservative will be cut off at ground level and sent to excess. All used material will be evaluated using Form 430.19 (WDDF) and dispositioned as appropriate.

16. Radioactive Waste Generation – This project may generate up to about 5 cubic yards of low-level radioactive waste, including PPE (<1 cubic yard), plastic sheeting (<2 cubic yards), contaminated equipment (no estimate), possibly 3,000 linear feet of chain link fencing, vegetation from the toe of the cap (up to 200 cubic yards), and miscellaneous (<2 cubic yards) waste. All radioactive waste will be disposed of at the Radioactive Waste Management Complex. Appropriate waste minimization methods will be used.

18. Surface Water and Storm Water Contamination – The drain field is not located within the INEEL Storm Water Corridor; however, two of the borrow sources are within the corridor. Activities at Spreading Area A and the Lincoln Borrow Source must be conducted in accordance with substantive requirements of Addendum I, Borrow Sources, of the INEEL Storm Water Pollution Prevention Plan for Industrial Activities, DOE/ID-10431. Addendum I, Borrow Sources, does not address Spreading Area A; however, revision is not required because the activity is associated with CERCLA. In accordance with the FFA/CO (Chapter VII, Section C, Paragraph 7.7), no federal, state or local permits are required to be obtained for this remedial action, since it will be conducted entirely within the boundaries of the INEEL and in accordance with Section 121 of CERCLA, 42 U.S.C. 9621 (FFA/CO, 1991).

20. Work Within a Floodplain – The CFA drain field cap lies below the floodplain elevation of a published report. The report entitled "Flood Routing Analysis for a Failure of Mackay Dam," EGG-EP-7184, by Koslow and Van Haaften, 1986, evaluated several maximum credible flood scenarios resulting from seismic, structural and hydrologic failures of Mackay Dam on the Big Lost River. This study is on the Architectural and Engineering Standards list for the INEEL. The results of piping failure during a 100-year flood are presented in Table 5 of the report, and are referenced in the discussion below.

For purposes of National Environmental Policy Act compliance, the Department of Energy, Idaho Operations Office (DOE-ID) has directed that all proposed actions be reviewed to identify their location relative to the elevation of the flood indicated by the Koslow and Van Haaften (1986) report. This direction is considered to be interim and remains in effect until differences between methods of estimating Big Lost River flood elevations can be resolved to the satisfaction of the DOE-ID Natural Phenomenon Hazards Committee. Other studies by the United States Geological Survey (USGS) in

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1998 and the Bureau of Reclamation (BOR) in 1999 evaluated 100-year flood potential without Mackay Dam failure. The CFA drain field cap is not within the hypothetical 100-year floodplains described in the 1998 USGS or 1999 BOR reports.

The drain field elevation ranges from 4,921 feet to 4,923 feet, with a cap elevation of about 4928 feet. These elevations are below the 4941 ft peak water surface elevation indicated for Mackay Dam piping failure during a maximum credible flood as reported in Koslow and Van Haaften (1986). Thus, the potential for floodplain impacts with respect to the proposed drain field cap within the floodplain of the Big Lost River are considered in this environmental checklist. This determination considers both the effect of the drain field cap structure on the floodplain as well as the effects of a potential flood on the drain field cap.

Approximately 65,420 cubic yards of earthen material are to be used in the construction of the drain field cap. This earthen volume is approximately equal to a volume of 40.5 acre-feet of water. The total reservoir release of the postulated 100-year flood event coupled with Mackay Dam failure is 41,850 acre-feet. The drain field cap earthen material volume is less than 0.1 per cent of the total volume of the flood release; therefore the cap is an insignificant impact on the Koslow/Van Haaften floodplain. The presence of this earthen material volume within the floodplain is not expected to cause significant, if any, impacts or changes to the overall dimensions, elevations, flow volumes, or velocities of the Big Lost River floodplain postulated by Koslow and Van Haaften (1986).

The potential impacts of the maximum credible flood on the drain field cap consist of possible inundation and erosion and consequent impacts on the integrity of the structure. Erosion potential was addressed by using a 100-year, 6-hour storm event in the design of the structure. Inundation by a 100-year flood is considered unlikely because the joint probability of a simultaneous 100-year flood and failure of Mackay Dam is less than that of a 100-year flood alone. Moreover, the drain field cap lies outside the hypothetical 100-year floodplain of two other credible Big Lost River flood studies.

In summary, the CFA drain field cap lies below the flood elevation postulated by a study that includes a 100-year flood and Mackay Dam failure. However, the joint probability of a 100-year runoff event coupled with dam failure is less than is generally considered for actions under 10 CFR 1022. Upon completion, the drain field cap will provide additional protection against erosion of the drain field waste by floodwater.

Section E. Conditions and Instructions: (Include conditions required before starting project and select applicable Work Activity Instructions from MCP-3480)

Conditions:

1. Five state-listed species of noxious weeds are present at Spreading Area A. A plan to prevent and control the spread of these species must be developed and approved before disturbance begins in the area. Contact Sue Majors (Stoller Corporation, 525-9358) for assistance in developing this plan.
2. The drain field area must be surveyed for bird nests before conducting any fieldwork between March 15 and June 15. Contact Sue Majors (Stoller Corporation, 525-9358) for guidance.
3. Form 450.19, *INEEL Gravel/Borrow Request Form*, must be completed and faxed to Mike Jackson (fax number 526-0940) for approval before any material is removed from INEEL gravel/borrow sources.

Contact Brynna Walker at 526-8195 as these conditions are completed.

Instructions:

The Management Control Procedure – 3480 “Environmental Instructions for Facilities, Processes, Materials, and Equipment” provides the environmental instructions for this proposed activity based on the work activities identified in Section D (page 2). Refer to the following sections in MCP-3480 for the appropriate environmental instructions:

- 4.5 Using, Storing and Dispositioning Chemical Products/Chemicals/Hazardous Agents

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- 4.6 Working in a CERCLA Area of Contamination
- 4.15 Constructing or Modifying Facilities, Equipment, or Processes (including changes to operating conditions)
- 4.17 Operating Facilities, Equipment, or Processes
- 4.20 Monitoring Storm Water according to the Storm Water Pollution Prevention Plan for Industrial Activities
- 4.34 Performing Activities with the Potential for Fugitive Dust or Fugitive Emissions
- 4.47 Applying Fertilizers
- 4.48 Procuring Goods and Services
- 4.57 Disturbing Soils or Altering Stream Channels
- 4.78 Planning to Generate Waste
- 4.79 Generating Waste
- 4.80 Dispositioning Excess Materials ,
- 4.81 Constructing or Modifying Sewage & Other Wastewater Systems
- 4.93 Closing and Abandoning Wells
Note: Project Manager must submit to EA and the Hydrogeological Data Repository (526-7877) well abandonment location, designation and abandonment materials to update the Comprehensive Well Survey Database information within 8 working days of well abandonment.

Section F. NEPA Level of Documentation and Reference(s):

Summary of the Proposed Action: The proposed project will construct an earthen materials engineered cover over the former CFA Sewage Treatment Plant Drain Field. This is the Selected Remedy for CERCLA Site CFA-08, OU 4-13. The engineered cover will isolate the low-level radioactive contaminants from human and animal intrusion and provide shielding for about 190 years. After completing the engineered cover, institutional controls will be implemented to restrict access to the site. The project will begin in May 2002 and continue through November 2002. The estimated cost to complete the project is \$5 million.

Use of the CERCLA Process: In accordance with the June 1994 Secretarial Policy on the National Environmental Policy Act, the Department of Energy will rely on the CERCLA Process for review of actions to be taken under CERCLA. The proposed activity supports a CERCLA action and does not support the siting, construction, or operation of a treatment, storage, or disposal facility for waste management or other purposes unrelated to CERCLA. The CERCLA documents for this activity have incorporated NEPA values to the extent practicable, and the CERCLA documents will be made available to the public in accordance with the requirements of CERCLA.

CERCLA Strategy: In accordance with CERCLA Section 113(k)(2)(B)(i-v) and Section 117 and the INEEL Community Relations Plan, opportunities for the public to obtain information and participate in the remedial investigation and decision process for Waste Area Group (WAG) 4 were provided from August 5, 1999 to October 4, 1999. The documents providing information and opportunities to provide input included a Proposed Plan; briefings and presentations to interested groups; interview; and public meetings.

*BBW
10/21/01*

ENVIRONMENTAL CHECKLIST

Approved Copy

EC Document No.: CFA-01-006

Several briefings on the WAG 4 investigation were given by DOE-ID to the INEEL Citizens Advisory Board and its Environmental Restoration Program Subcommittee. All comments received on the Proposed Plan were considered during the development of the OU 4-13 Record of Decision (ROD). The decision for the WAG 4 action was based on the information in the Administrative Record for WAG 4. In compliance with CERCLA, the OU 4-13 ROD that documents the decisions made at WAG 4 has been made available for public review in the DOE WAG 4 Administrative Record.

BEW
10/31/01



Brenda R Pace

09/06/2001 07:49:31 AM

To: Brynna E Walker/WALKBE/CC01/INEEL/US@INEL
cc:
Subject: Re: CFA-01-006, CERCLA OU 4-08 CFA Drain Field Cap 

Hi Brynna, thanks for the note! The CFA Drain Field has been surveyed (including a buffer of approximately 50-100 m around it). No significant cultural materials were identified, so this CERCLA action should have no effect on cultural resources. As always, the stop work authority should be invoked and the INEEL Cultural Resource Management Office contacted if artifacts are unexpectedly discovered as the work progresses. Call if you have any questions! –Brenda



Brenda R Pace

10/30/2001 01:35:39 PM

To: Brynna E Walker/WALKBE/CC01/INEEL/US@INEL
cc:
Subject: Re: CFA-01-006, Drain Field Cap 

Hi Brynna, as long as the borrow sources are utilized in accordance with the EA referenced in the checklist and requests for use are coordinated through Mike Jackson, archaeological clearance is recommended for their use during the CFA drain field project. Don't hesitate to call if you have any questions. --Brenda-
Brynna E Walker

Brynna E Walker  10/30/2001 01:16 PM

To: Brenda R Pace/BXR/CC01/INEEL/US@INEL
cc:
Subject: CFA-01-006, Drain Field Cap

Brenda, you gave a cultural resource clearance for the drain field area, but what about the borrow sources that may be used? Here's the EC. Can you look at it as soon as possible?

Thanks,
Brynna



CFA-01-006.do

Stoller **Corporation**

October 1, 2001

Mr. Roger L. Twitchell
NEPA Compliance Officer
U. S. Department of Energy
Idaho Operations Office
850 Energy Drive, MS 1216
Idaho Falls, ID 83401-1563

Subject: Ecological Evaluation for the CERCLA Operable Unit 4-08 CFA Drain Field
Cap (CFA-01-006)

Dear Mr. Twitchell:

This letter provides recommendations in support of NEPA for activities related to the construction of an earthen materials engineered cover over the Sewage Treatment Plant Drain Field at Central Facilities Area (CFA).

The site is dominated by green rabbit brush, crested wheatgrass, and a variety of native and exotic forbs. Cover on the site was estimated at 20 percent.

The area proposed for these activities is likely used by a diverse complement of small mammals, reptiles, and breeding bird species common to the sagebrush steppe. Some former Candidate species for listing as Threatened or Endangered (e.g., ferruginous hawk, loggerhead shrike and sagebrush lizard) are known to use these general areas. Pronghorn and mule deer throughout the year may also use the area.

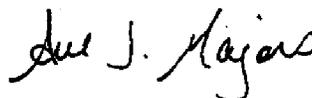
Although it is unlikely the proposed activities will have any measurable impact on species of federal or state concern, there birds that are protected under the Federal Migratory Bird Protection Act may use the area for breeding purposes. It is recommended that before disturbance of the area a survey for potential bird nests be conducted. Stoller can provide assistance with the determination of breeding bird use of the site.

There are no federally listed or proposed threatened or endangered species, species of special concern, or records thereof, or designated critical habitat in proximity to the project area, the area of construction of storm water pollution prevention measures, the areas where storm water flows from the project area to the point of discharge, or in proximity to the area where storm water discharges into receiving waters. It is our

opinion a biological consultation with the U.S. Fish and Wildlife Service is not necessary for these activities.

If you have any questions regarding this evaluation, please contact me at phone number below or at smajors@stoller.com.

Sincerely,



Sue J. Majors
Wildlife Biologist
Stoller Corp.
1780 First Street,
Idaho Falls, ID 83401
(208) 525-9358
FAX: (208) 525 -3364

cc: J. D. Depperschmidt, DOE, MS 1216
J.S. Irving, BBWI, MS 3428
B. E. Walker, BBWI, MS 3428
D. W. Wagoner, BBWI, MS 3950
Stoller Files

Stoller ***Corporation***

Memorandum

Date: October 23, 2001
To: John Irving
From: Sue Majors
Subject: Continuance of CFA -01-006 Drain Field Cap source material location, CFA Gravel Pit, Lincoln Boulevard Gravel Pit, and Spreading Area A

John,

As part of the ecological evaluation for Environmental Checklist CFA-01-006 a survey of the borrow sources also needs to be conducted in order to identify any potential problems for the project. A revised checklist indicated that potential sources include CFA Gravel Pit, Lincoln Boulevard, and Spreading Area A.

The CFA and Lincoln Boulevard Gravel Pits were surveyed on October 22, 2001. These areas have been previously disturbed. Vegetation surrounding these areas consisted of sagebrush, green rabbitbrush, and native and exotic grasses and forbs. During this survey it was determined that no noxious weeds were present in the area that may enter the project area from either of these sources.

The areas are likely used by a diverse complement of small mammals, reptiles, and breeding bird species common to the sagebrush steppe. Some former Candidate species for listing as Threatened or Endangered (e.g., ferruginous hawk, loggerhead shrike and sagebrush lizard) are known to use these general areas. Pronghorn and mule deer also frequent the area throughout the year.

It is unlikely the proposed activities will have any measurable impact on species of federal or state concern. There are no federally listed or proposed threatened or endangered species, species of special concern, or records thereof, or designated critical habitat in the proximity to the area, the area of construction of storm water pollution prevention measures, the areas where storm water flows from the project area to the point of discharge, or in proximity to the area where storm water discharges into receiving

waters. It is our opinion that a biological consultation with the U.S. Fish and Wildlife Service is not necessary for these activities.

Spreading Area A was surveyed on October 17, 2001. The proposed site is an area that has been previously disturbed. The area consists of vegetation typical to areas that are frequently inundated with water. Native and non-native grasses and forbs such as squirrel tail, foxtail barley, sedge, thickspike wheatgrass, crested wheatgrass, bracted verbena, goats beard, poverty weed, and prostrate knotweed dominate the site. Five state listed noxious weeds; leafy spurge, Canada thistle, musk thistle, black henbane, and field bindweed are present in the stream channel and throughout the area. A plan to prevent and control the spread of these species should be developed and approved before disturbance begins in the area.

Although it is unlikely the proposed activities will have any measurable impact on species of federal or state concern, birds that are protected under the Federal Migratory Bird Protection Act may use the area for breeding purposes. Bald eagles have been identified in the Environmental Assessment (DOE/EA-1083, 1997) as using the site "infrequently during the winter and early spring floods." When there is no water in the area, activities should not have any detrimental affect on this species. Sage grouse, a species of special concern, also utilize the area during the spring for breeding and nesting purposes. Activities conducted between March 15 and June 15, are to be restricted to occurring after 10:00 am and before 5:00 pm.