

SECTION A. Project Title: INL – Site Wide Well Management and Long-Term Stewardship Activities

SECTION B. Project Description

Well management activities include decommissioning (abandonment) of inactive wells and injection wells at the Idaho National Laboratory (INL) Site. Wells and injection wells will be decommissioned in compliance with applicable requirements. The wells to be decommissioned are located both within, and outside of the boundaries of the various INL facilities. The proposed action will address all classes of wells including Class IV and V injection wells.

The wells will be decommissioned in a manner to protect water resources, in accordance with the regulatory requirements associated with the well. This may be accomplished by filling in the wells with an appropriate material such as bentonite, grout, or cement. As needed, the well casings, vapor port tubes, cables, or other miscellaneous components may be cut near or below ground surface to eliminate potential obstructions. Soil disturbance associated with a typical well decommissioning is anticipated to be less than 20 sq. ft at the surface. If removal of a shallow injection well is necessary, it is anticipated that mechanical methods such as a backhoe may be used. However, typical decommissioning would use a backhoe or jack hammer to breakup existing concrete pads and have minimal excavation around the casing.

Well management activities also include well maintenance. Specifically, groundwater well maintenance and support activities for CERCLA groundwater monitoring performed at the INL. This program detects and controls deterioration of well systems, repairs damaged well components, cleans well screens and boreholes, standardizes well completion components, collect borehole geophysical logs, and assist in other well related activities (sampling), as requested. Primary activity involves the repair of damaged pumps to allow for groundwater sampling. NOTE: This EC does not cover modification (deepening, widening, or modifying well seal) to existing wells or installation of new monitoring wells. This EC only covers maintenance and equipment support activities for groundwater monitoring. Sampling will not be performed under this EC. The scope in this EC does not impact permitted or interim status activities or equipment.

Long-term stewardship actions specifically address weed management, which includes weed growth evaluation and herbicide application. Herbicide application will be performed by a subcontractor, who must be licensed by the State of Idaho. The subcontractor is responsible for proper management of chemicals, materials, and waste generated during the course of completing the scope of work.

The proposed action is planned to begin in May 2013 and continue through September 30, 2015.

SECTION C. Environmental Aspects / Potential Sources of Impact

1. Air Pollutants – Fugitive emissions will be generated from breaking up the concrete pads around the wells and soil disturbance. All fugitive emissions should be controlled using appropriate fugitive dust control procedures. Project personnel anticipate some wells to be located in radiologically-contaminated areas.

Radiological emissions to the environment, including those from point and diffuse sources, must be determined for demonstrating compliance with the NESHAP Standard and submitted for reporting in the INL NESHAP Annual Report. If any fugitive radiological emissions are released, the performing organization Project Manager or Source Owner/Manager shall ensure that the calendar year emissions are determined and reported (via signed memorandum) to Environmental Programs by March 15 for the preceding year.

Fugitive emissions from weed spraying actions will be controlled. In accordance with applicable procedures, herbicides may be applied only when sustained wind conditions are at or below 10 mph, or within wind conditions identified on the product label.

4. Chemical Use and Storage – Chemicals, such as petroleum products, grout, and other concrete products will be used in support of the well management actions. Project personnel will use non-hazardous chemical substitutes in the place of hazardous chemicals as long as the non-hazardous substitutes meet the requirements/ specifications of the requester. Spill prevention/minimization measures will be employed during storage and use of chemicals/fuels. Affirmative Procurement will be used as guidance in procuring applicable chemicals and materials.

Chemicals used to control weeds will be supplied by the subcontractor. In compliance with the Statement of Work, the subcontractor will follow the industry-approved weed control practices required of an Idaho Licensed pesticide applicator and will comply with the manufacturer's instruction on the label for the herbicide product and all information in the MSDS such as precautions for safe handling and use, and control measures. In addition, the subcontractor will not store or keep weed control materials or equipment at an INL facility when the subcontractor is not performing work.

In compliance with applicable procedures, pesticides, herbicides, or fertilizers will not be applied within 5 ft of monitoring wells or deep injection wells.

5. Contaminated Site Disturbance – Project personnel anticipate some wells to be located in radiologically-contaminated areas. Soil disturbance will be minimized at these locations. In those areas where subsurface contamination may be present, soil disturbance will be minimized, if possible, by leaving the concrete pad in place and cutting the casing at the top of the concrete pad and backfilling the casing.

Well management actions that disturb CERCLA soils will be assessed to determine if a CERCLA notice of soil disturbance (NSD) is required per applicable procedures.

6. Cultural/Historical Resource Disturbance – Prior to performing well management activities in areas outside of the boundaries of several facilities at the INL, project personnel must obtain an archaeological clearance.

All vehicle travel will be restricted to existing roads and trails to prevent impact to cultural resources in unsurveyed areas. The Stop Work will be evoked immediately should unusual materials (i.e., bones, flakes of obsidian, "arrowheads" or other artifacts, rusty cans, etc.) be encountered.

7. Discharge to Wastewater Systems or Groundwater – Work will involve the decommissioning of inactive wells, including monitoring wells, injection wells, gas sampling ports, lysimeters, instrumented boreholes, and other wells regulated by the Idaho Department of Water Resources. Each well and associated groundwater will be protected from sources of contamination during decommissioning. Decommissioning of all well abandonments will follow the applicable regulatory requirements and company procedures. Decommissioning of potable water wells will be in accordance with applicable requirements.

8. Drinking Water Contamination – Decommissioning of potable water wells will be performed in accordance with applicable requirements. Regulatory reviews and approvals will be obtained prior to decommissioning, as necessary, including the submittal of the appropriate closure documentation.

9. Hazardous /Mixed Waste Generation and Management – Project personnel do not anticipate generating hazardous or mixed wastes when performing well management actions. However, should hazardous or mixed waste be generated, the waste streams will be segregated, packaged, and stored in a temporary accumulation area or a permitted storage area until it is transported to an off-site permitted disposal facility.

Long-term stewardship actions may generate waste in the form of excess herbicide, herbicide containers, and other materials contaminated by herbicides. Waste disposal will be the responsibility of the subcontractor. To dispose of this waste at the INL, approval must be requested in writing.

10. Hazardous /Rad. Material or Waste Handling and Trans. - A Hazardous Waste Determination will be performed on all generated waste to apply the appropriate management practices. Waste streams will be evaluated to determine if any of these materials can be recycled or reused and will be evaluated to implement actions for minimizing waste generation.

11. Industrial Waste Generation and Management - The estimated quantity of industrial waste generation is 50 gallons and will include materials used to clean hydraulic spills, personal protection equipment, and other miscellaneous waste. All industrial waste will be disposed of in the INL Landfill Complex.

12. Interaction with Wildlife/Habitat - All the well locations have been previously disturbed during the initial well drilling activities. Soil disturbance is anticipated to be minimal. Vegetation at the work locations will be mowed, as necessary prior to well management. Revegetation will be implemented, if necessary, in accordance with applicable procedures. The well locations outside of facility boundaries are near or on established roads. No new roads will be created and all vehicles will remain on existing road ways and parking areas.

A nesting bird survey is required for any vegetation removal between May 1 and September 1. In addition, Sage Grouse require seasonal/time of day restrictions from March 15 to May 15.

All areas at TAN within the facility fence boundary will require an ecological survey and clearance prior to disturbing soil other than the operations area.

16. Radioactive Waste Generation and Management – Project personnel anticipate generating limited quantities of radioactive waste. Radioactive waste generated from the well management activities will be disposed of at the Idaho CERCLA Disposal Facility or at an approved off-Site facility through Waste Generator Services.

19. Work within areas Subject to Flooding – Since the proposed actions are planned to occur in several unidentified locations throughout the INL site, the potential exists for well decommissioning to occur within the 100-year floodplains of the Big Lost River, Birch Creek, or the overland flow 100-year floodplains of INTEC and RWMC.

The well management actions and long-term stewardship actions described in this EC are not expected to have a significant impact on the 100-year floodplains described above and the work is not expected to disrupt floodplain dimensions, elevations, flow volumes, or velocities of the Big Lost River, Birch Creek or the INTEC or RWMC watersheds. If the hypothetical flood(s) was (were) to occur, access to the work areas may be temporarily interrupted. Work can resume after floodwaters subside as access allows.

**DOE-ID NEPA CX DETERMINATION
IDAHO NATIONAL LABORATORY**

SECTION D. Determine the Level of Environmental Review (or Documentation) and Reference(s): Identify the applicable categorical exclusion from 10 CFR 1021, Appendix B, give the appropriate justification, and the approval date.

Note: For Categorical Exclusions (CXs) 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.

References: B1.3 Routine Maintenance, B2.5, Safety and environmental improvements of a facility, replacement/upgrade of facility components and B3.1, Site characterization/environmental monitoring

Justification: B1.3 addresses weed management and long term stewardship actions.

B2.5 addresses decommissioning of the Class IV and V Injection Wells. Closing (decommissioning) the wells will provide protection to the environment.

B3.1 addresses decommissioning of the monitoring wells. "Onsite and offsite site characterization and environmental monitoring, including siting, construction (or modification), operation, and dismantlement or closing (decommissioning) of characterization and monitoring devices and ..."

Is the project funded by the American Recovery and Reinvestment Act of 2009 (Recovery Act) Yes No

Approved by Jack Depperschmidt, DOE-ID NEPA Compliance Officer on March 15, 2013.