NEPA REVIEW SCREENING FORM (NRSF) 3A Categorically Excluded Actions	Document ID #: DOE/CX-00195

I. Project Title:
Activity-Specific Categorical Exclusion for Decommissioning of Underground Injection Control Wells in the 100-B/C, 100-D/DR, 100-F, 100-H, and 100-N Areas of the Hanford Site

II. Describe the proposed action, including location, time period over which proposed action will occur, project dimension *(e.g., acres displaced/disturbed, excavation length/depth)*, and area/location/number of buildings. Attach narratives, maps and drawings of proposed action. Describe existing environmental conditions and potential for environmental impacts from the proposed action. If the proposed action is not a project, describe the action or plan.

The Department of Energy (DOE), Richland Operations Office (RL), Site Stewardship Division (SSD) proposes to decommission eleven (11) Underground Injection Control (UIC) wells located in the 100-B/C, 100-D/DR, 100-F, 100-H, and 100-N Areas of the Hanford Site (see Table 1). The UIC wells are man-made structures built for non-hazardous wastewater disposal below the ground surface using gravity. The UIC wells would be excavated and removed according to Washington Administrative Code (WAC) 173-218, "Underground Injection Control Program," and WAC 173-218-120, "Decommissioning of UIC Wells." The most common type of UIC used at the Hanford Site is the Class V well, which is usually a shallow disposal structure such as a drywell, drain field, or French drain (WAC 173-218-040).

The U.S. Environmental Protection Agency (EPA) UIC Program, authorized by the Safe Drinking Water Act, is administered under Title 40, Part 144, of the Code of Federal Regulations, "Underground Injection Control Program." The EPA UIC Program protects underground sources of drinking water from contamination by regulating the construction, operation, maintenance, and closure of UIC wells. The UIC wells must either be closed in a regulatory compliant manner or operate under a permit issued by the State of Washington Department of Ecology if they remain open. The UIC wells proposed for decommissioning are inactive and have no foreseeable future use.

All eleven UIC well locations have been surveyed, staked, and ground scanned (see Figures 1 through 6). At each location, an area within a 15-feet radius of the UIC well would be used for equipment access and temporary material staging. Most UIC wells are accessible from existing roadways; however, it would be necessary to traverse previously remediated and revegetated areas at several locations. UIC well decommissioning activities would involve use of the Guzzler®, which uses a vacuum to excavate soil.

UIC Well Decommissioning. The UIC wells would be decommissioned in a manner that prevents movement of fluid from the surface and into the groundwater (40 CFR 144.82 and WAC 173-218-120). Soil, gravel, sludge, liquids or other materials removed from or adjacent to UIC wells would be managed and disposed in accordance with applicable federal, state, and local requirements (40 CFR 144.82b).

If UIC wells were not visible on the ground surface, then vacuum excavation potholing would be conducted to locate buried wells. A UIC well would be considered removed if it cannot be located within a radius of 6-feet of its known Washington State Plane coordinates (see Table 1). The upper 4-feet of soil around each UIC well would be excavated. The upper 3-feet of the UIC well casing would be removed and the remaining casing would be filled with cement or other suitable sealing material (e.g., bentonite clay). The excavation for each UIC well would be approximately 6-feet long, 6-feet wide, and 4-feet deep.

Following radiological survey, removed materials would be recycled if uncontaminated or disposed in the Hanford Site "Environmental Restoration Disposal Facility" (ERDF). Excavations would be backfilled with material that is uncontaminated, chemically and biologically inert, drains equal to or more slowly than surrounding materials, or other structurally sound material common with current engineering practices.

Backfill material would be contoured to blend with the surrounding terrain and revegetated in accordance with DOE/RL-2011-116, "Hanford Site Revegetation Manual." UIC wells in contact with the groundwater (even if only during periods of seasonal high groundwater) would be decommissioned in accordance with WAC 173-160, "Minimum Standards for Construction and Maintenance of Wells." DOE-RL SSD would submit to the State of Washington Department of Ecology an update on the UIC wells decommissioned [WAC 173-218-120(4)(c)].

Ecological Resources Review (ECR-2019-611). DOE Ecological Monitoring & Environmental Surveillance (EM&ES) performed a field survey of the project area on March 26, 2019. The

ecological resources observed and restrictions based on the "Hanford Site Biological Resources Management Plan" (BRMP, DOE/RL-96-32, Revision 2) are described below. For all locations, EM&ES would instruct project staff to remain on existing roads to minimize disturbance of revegetated areas.

The 100-B/C Area UIC well is located in a graveled area west of the decommissioned 105-C reactor building (Figure 2). Vegetation includes scattered native and non-native species. No wildlife was observed. Several revegetated areas exist, which are considered BRMP Level 4 habitats designated for preservation and avoidance/minimization of impacts. Impacts to BRMP Level 4 habitats would require compensatory mitigation at a replacement ratio of 5:1.

The 100-D/DR Area UIC wells are located to the north of the decommissioned 105-D/DR reactor buildings adjacent to an abandoned access road (Pacific Avenue) and within a revegetated area (Figure 3). Vegetation includes native and non-native species. No wildlife was observed. Access to the project area would be via the abandoned Pacific Avenue, which has been partially re-established for access to the 105-D/DR reactors.

The 100-F Area UIC wells are located to the northeast and northwest of the decommissioned 105-F reactor building adjacent to Fuel Road (Figure 4). The area is primarily void of vegetation with some scattered invasive species and a revegetated area.

The 100-H Area UIC wells are located to the northwest of the decommissioned 105-H reactor building adjacent to the foundation of a demolished building (Figure 5). A small portion of the project area extends into a revegetated area. Vegetation includes scattered native and non-native species.

The 100-N Area UIC well is adjacent to an abandoned parking lot to the southeast of the decommissioned 105-N reactor building (Figure 6). This location contains a small revegetated area. Vegetation within the project area is mostly invasive species with scattered native and non-native species. Wildlife observed included several bird species, including Bald Eagles. A Bald Eagle nest is located to the southwest of the project area. The nest would be monitored throughout the nesting season to determine if it is active. A 660-feet protection buffer, with restricted access, would remain active until the nest is abandoned or the young fledge (acquire the feathers necessary for flight). If the nest were abandoned, then the buffer would be eliminated. Project staff would contact EM&ES for nest/buffer status updates.

Birds can nest within the project area on the ground, buildings, or equipment and the nesting season is from mid-March to mid-July. EM&ES would instruct project management to watch for nesting birds. If nesting birds are encountered or suspected, or bird defensive behaviors are observed, then project management would contact EM&ES to evaluate the situation. EM&ES would perform a nesting bird survey if ground-clearing activities were conducted during the nesting season.

The proposed project's impacts on ecological habitat would be minimal (36 square feet per well location) and do not justify revegetation; however, disturbed areas would be re-contoured to match the surrounding terrain.

Cultural Resources Review (HCRC-2019-100-003). DOE-RL Cultural and Historic Resources Program (CHRP) staff conducted a Cultural Resources Review (CRR) of the proposed project. DOE-RL sent an "Area of Potential Effects" (APE) notification to the Washington State Historic Preservation Office (SHPO) and regional Tribes on January 31, 2019. An amended APE notification was transmitted to the SHPO and regional Tribes on February 25, 2019 because one additional UIC well was included in the project scope. CHRP staff conducted a cultural resources survey on March 26, 2019. No cultural resources were observed within the project APE; however, the UIC well located in the 100-N Area is within the boundary of the Mooli-Mooli Traditional Cultural Property (TCP). To avoid effects to this culturally sensitive area, CHRP staff would perform cultural awareness training and archaeological monitoring of project activities within the 100-N Area. DOE-RL transmitted a CRR with a finding of "No Adverse Effects" to the SHPO and regional Tribes for a 30-day comment period on April 24, 2019. The SHPO concurred with the findings of the CRR on April 24, 2019. DOE-RL provided a notice of compliance with Section 106 of the "National Historic Preservation Act" for this project on June 11, 2019.

Conclusion. This Activity-Specific Categorical Exclusion (ASCX) citing 10 CFR 1021, Subpart D,

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Appendix B, CX B5.3, "Modification or Abandonment of Wells," provides NEPA coverage for the proposed project. Any changes would require approval by the DOE-RL NEPA Compliance Officer.

III. Existing Evaluations *(Provide with NRSF to DOE NCO)*:

Ecological Review Report No. and Title:

MSA-1901703, "Ecological Clearance for UIC Well Decommissioning at Eleven Locations in the 100B/C, 100D, 100F, 100H, and 100N Areas, Hanford Site, (ECR-2019-611), dated May 1, 2019.

Cultural Review Report No. and Title:

MSA-1902369, "Cultural Resource Clearance for Cultural Resources Review for UIC Well Decommissioning at Eleven Locations in the 100B/C, 100D, 100F, 100H, and 100N Areas of the Hanford Site, Benton County, Washington (HCRC-2019-100-003), dated June 18, 2019.

Maps:

Figure 1 - Aerial Photograph of 100 Area UIC Wells to Decommission
Figure 2 - UIC Well 1B-U-29 Aerial Photograph in 100-B/C Area
Figure 3 - UIC Wells 1D-U-8 and 1D-U-9 Aerial Photograph in 100-D/DR Area
Figure 4 - UIC Wells 1F-U-1, 1F-U-2, and 1F-U-30 Aerial Photograph in 100-F Area
Figure 5 - UIC Wells 1H-U-31, 1H-U-32, 1H-U-33, and 1H-U-35 Aerial Photograph in 100-H Area
Figure 6 - UIC Well 1N-U-21 Aerial Photograph in 100-N Area

Other Attachments:

Table 1 - UIC Well Descriptions and Locations

IV. List applicable CX(s) from Appendix B to Subpart D of 10 CFR 1021:

B5.3, "Modification or Abandonment of Wells"

V. Integral Elements and Extraordinary Circumstances *(See 10 CFR 1021, Subpart D, B. Conditions that are Integral Elements of the Class of Actions in Appendix B; and 10 CFR 1021.410(b)(2) under Application of Categorical Exclusions)*	**Yes**	**No**
Are there extraordinary circumstances that may affect the significance of the environmental effects of the proposed action? If yes, describe them.	○	◉
Is the proposed action connected to other actions with potentially significant impacts, or that could result in cumulatively significant impacts? If yes, describe them.	○	◉
Would the proposed action threaten a violation of applicable statutory, regulatory, or permit requirements related to the environment, safety, health, or similar requirements of DOE or Executive Orders?	○	◉
Would the proposed action require siting, construction, or major expansion of waste storage, disposal, recovery, or treatment facilities?	○	◉
Would the proposed action disturb hazardous substances, pollutants, contaminants, or natural gas products already in the environment such that there might be uncontrolled or unpermitted releases?	○	◉
Would the proposed action have the potential to cause significant impacts on environmentally sensitive resources? See examples in Appendix B(4) to Subpart D of 10 CFR 1021.	○	◉
Would the proposed action involve genetically engineered organisms, synthetic biology, governmentally designated noxious weeds, or invasive species, such that the action is not contained or confined in a manner designed, operated, and conducted in accordance with applicable requirements to prevent unauthorized release into the environment?	○	◉

If "No" to all questions above, complete Section VI, and provide NRSF and any attachments to DOE NCO for review.
If "Yes" to any of the questions above, contact DOE NCO for additional NEPA review.

VI. Responsible Organization's Signatures:

Initiator:

Print First and Last Name	Signature	Date
Jerry W. Cammann, MSA NEPA-SME	Jerry W. Cammann	7/17/2019

Cognizant Program/Project Representative:

Print First and Last Name	Signature	Date
Karen E. Lutz, DOE-RL/SSD	Karen E Lutz	7/17/2019

VII. DOE NEPA Compliance Officer Approval/Determination:

Based on my review of information conveyed to me concerning the proposed action, the proposed action fits within the specified CX(s): ☒ Yes ☐ No

Print First and Last Name	Signature	Date
Diori L. Kreske, DOE-RL/NCO	Diori Kreske	7/17/19

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NCO Comments:	

Table 1. UIC Well Descriptions and Locations

UIC Well CODE	WIDS Site Code or OSE Code	Description	Location WA State Plane (m)
1B-U-29	N/A	Drywell (30-inch diameter); received discharge from 1702-C Gate House drinking fountain and HVAC via buried 3-inch diameter pipe; steel lid and concrete UIC structure are visible at ground surface.	E 565317.1 N 143998.1
1N-U-21	100-N-103:1 FD4	Drywell (36-inch diameter); received steam condensate from 1701-N Badge House via 1.5-inch buried pipe; steel lid (possibly still buried); no UIC well structure apparent at ground surface.	E 571462.5 N 149353.9
1D-U-8	DDR-254	French Drain (30-inch diameter); received steam condensate trap discharge; steel lid and clay UIC well pipe are visible at ground surface.	E 573721.3 N 151704.1
1D-U-9	DDR-264	French Drain (30-inch diameter); received steam condensate trap discharge; steel lid and clay UIC well pipe are visible at ground surface.	E 573707.5 N 151703.7
1H-U-31	100-H-50 FD8	French Drain (36-inch diameter); received steam condensate from radiators in 184-H Boiler Building via 4-inch diameter vitrified clay inlet piping; no UIC well structure apparent at ground surface.	E 577535.9 N 152954.5
1H-U-32	100-H-50 FD9	French Drain (36-inch diameter); received steam condensate via 4-inch diameter vitrified clay condensate inlet piping from east side of 184-H Boiler Building; no UIC well structure apparent at ground surface.	E 577556.3 N 152918.3
1H-U-33	100-H-50 FD10	French Drain (36-inch diameter); received steam condensate via 4-inch diameter vitrified clay pipeline from west side of 184-H Boiler Building; no UIC well structure apparent at ground surface.	E 577523.6 N 152909.3
1H-U-35	100-H-50 FD12	French Drain (36-inch diameter); received steam trap discharge from 1901-H water tower via 1-inch diameter pipeline and water tower ejector discharge via 1.5-inch diameter pipe; no UIC well structure apparent at ground surface.	E 577527.7 N 152963.4
1F-U-1	N/A	French Drain (30-inch diameter); received steam condensate from high-pressure overhead steam supply line; UIC well structure visible at ground surface.	E 580511.0 N 147632.2
1F-U-2	N/A	French Drain (30-inch diameter); received steam condensate from high-pressure overhead steam supply line; UIC well structure visible at ground surface.	E 580497.4 N 47630.8
1F-U-30	N/A	Drywell (18-inch diameter); received steam condensate from steam trap on above grade steam lines; UIC well structure and metal lid are apparent at ground surface.	E 580373.7 N 147642.7

UIC – Underground Injection Control; **WIDS** – Waste Information Data System; **OSE** – Orphan Site Evaluation

Figure 1. Aerial Photograph of 100 Area UIC Wells to Decommission

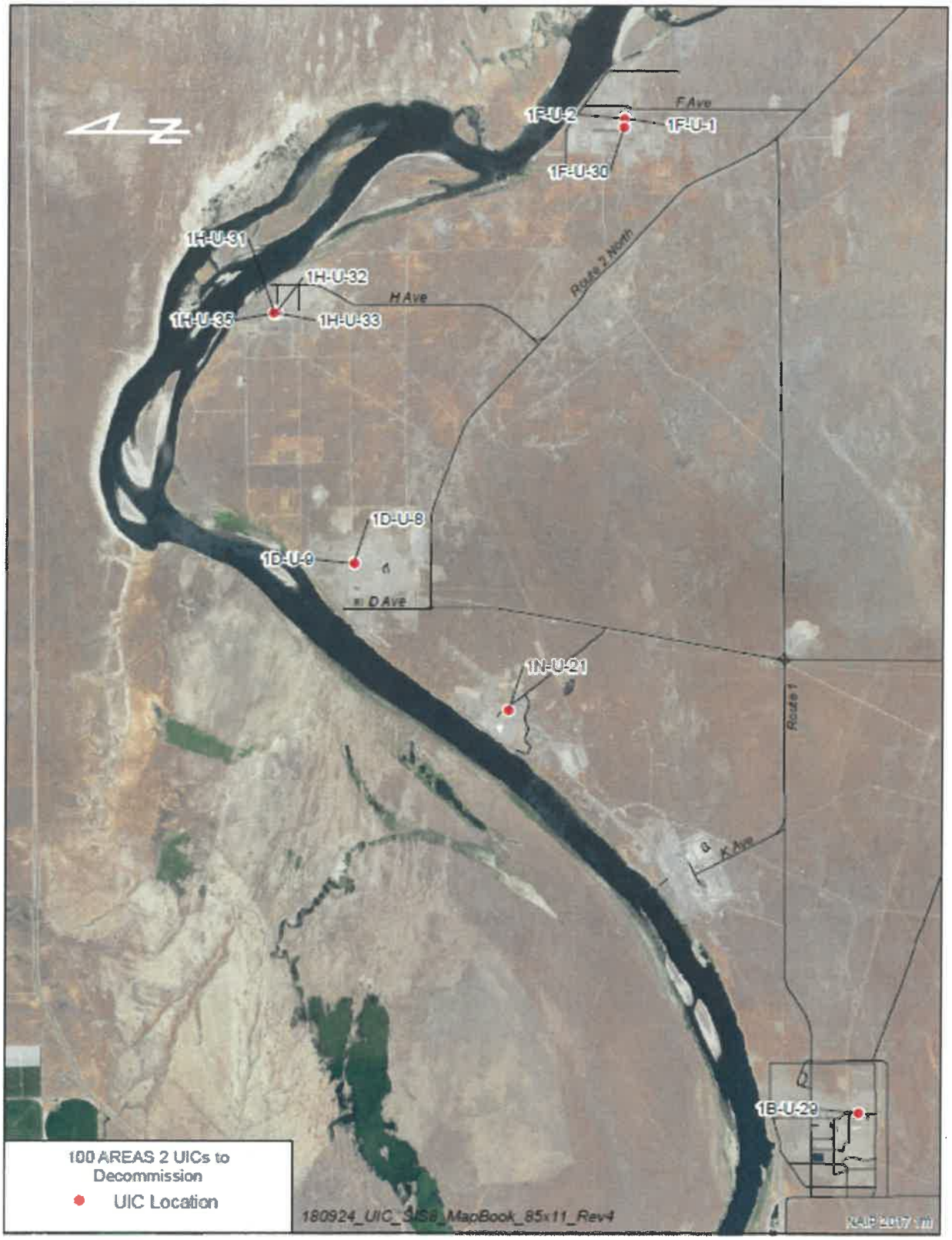

Figure 2. UIC Well 1B-U-29 Aerial Photograph in 100-B/C Area

Figure 3. UIC Wells 1D-U-8 and 1D-U-9 Aerial Photograph in 100-D/DR Area

Figure 4. UIC Wells 1F-U-1, 1F-U-2, and 1F-U-30 Aerial Photograph in 100-F Area

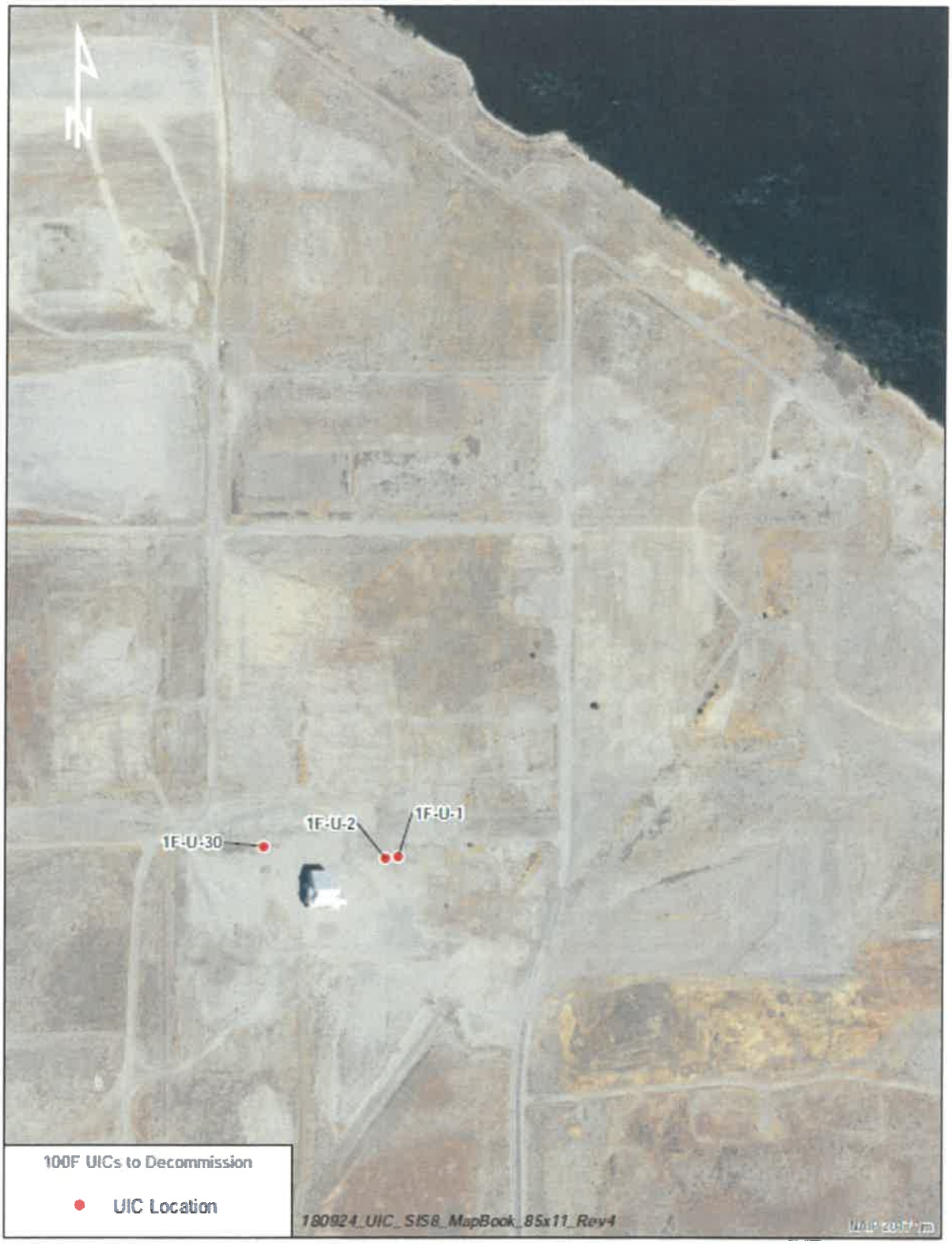

Figure 5. UIC Wells 1H-U-31, 1H-U-32, 1H-U-33, and 1H-U-35 Aerial Photograph in 100-H Area

Figure 6. UIC Well 1N-U-21 Aerial Photograph in 100-N Area