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DETERMINATION OF NONSIGNIFICANCE

Description of proposal The permitting of Hazardous Waste Management activities at the Hanford Facility. Each treatment, storage, and disposal unit at the Hanford Facility has or will submit a separate SEPA checklist for determination.

Proponent U.S. Department of Energy (DOE)

Location of proposal, including street address, if any The Hanford Site is approximately 560 square miles of land owned by the U.S. Government and managed by DOE-Richland. See attached map.

Lead agency State of Washington Department of Ecology

The lead agency for this proposal has determined that it does not have a probable significant adverse impact on the environment. An environmental impact statement (EIS) is not required under RCW 43.21C.030(2)(c). This decision was made after review of a completed environmental checklist and other information on file with the lead agency. This information is available to the public on request.

☐ **There is no comment period for this DNS.**

☒ **This DNS is issued under 197-11-340(2): the lead agency will not act on this proposal for 15 days from the date below. Comments must be submitted by** February 21, 1992

Responsible official Roger Stanley

Position/title Nuclear and Mixed Waste Program Manager **Phone** (206)438-7020

Address State of Washington Department of Ecology, N&MWM Program, P.O. Box 47600, Olympia, Washington 98504-7600

Date 1/13/92 **Signature** Roger Stanley

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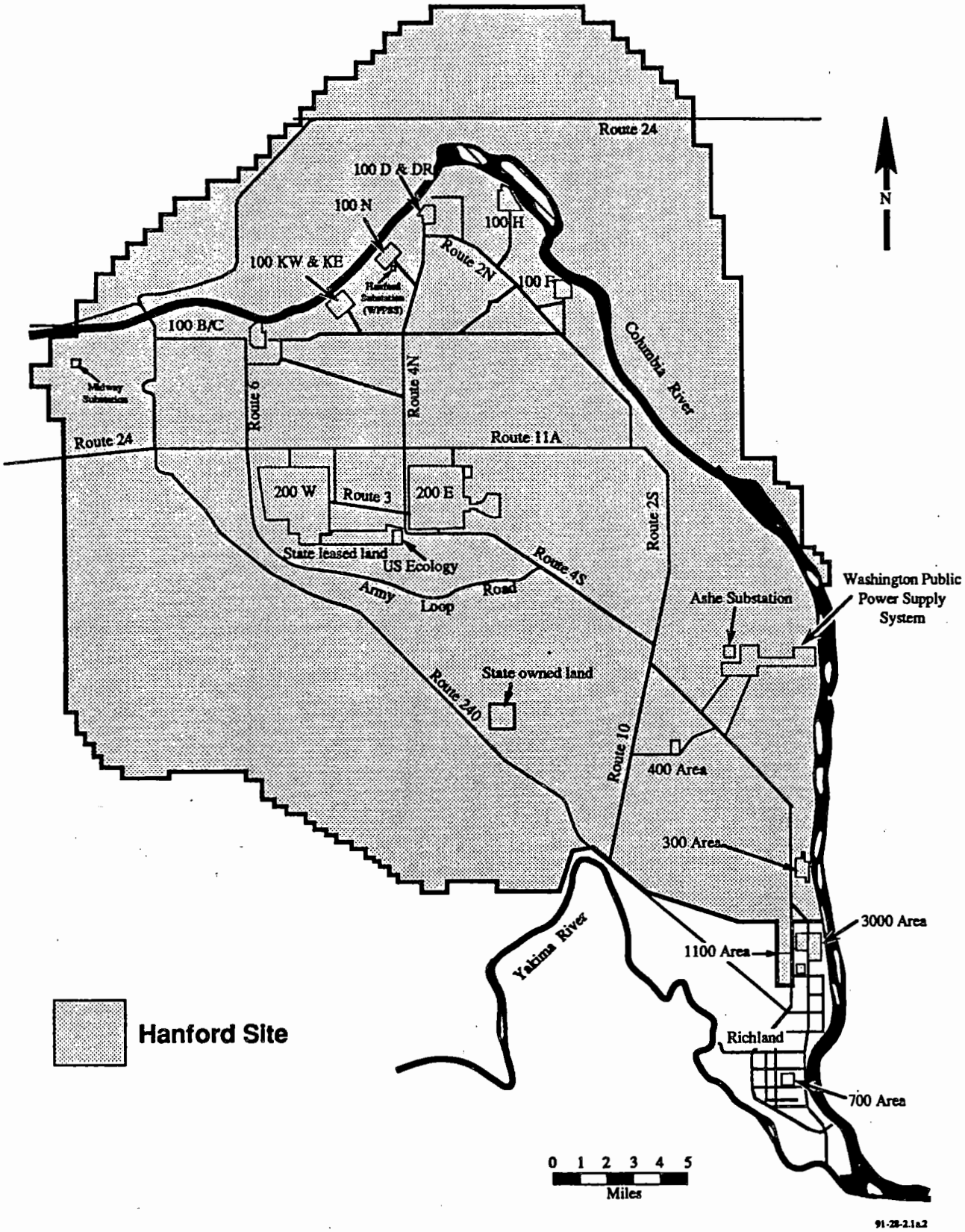

Figure 2-1a. Hanford Site Map.

A. BACKGROUND

1. Name of proposed project if applicable:

Permitting of the Hanford Facility. This *State Environmental Policy Act* (SEPA) *of 1971* Checklist is being submitted concurrently with the *Hanford Facility Dangerous Waste Permit Application* (Hanford Facility Permit Application) for the treatment, storage, and/or disposal of dangerous waste and mixed waste on the Hanford Facility. Information contained in this checklist pertains only to treatment, storage, and/or disposal (TSD) units located on the Hanford Facility for which a final status permit has been, or will be, sought under the *Resource Conservation and Recovery Act* (RCRA) *of 1976*/Washington State Department of Ecology (Ecology) *Dangerous Waste Regulations*, Washington Administrative Code (WAC) 173-303. In the context of this document, 'facility' refers to the contiguous portion of the Hanford Site that contains these TSD units and, for the purposes of the RCRA and *Dangerous Waste Regulations*, is owned and operated by the U.S. Department of Energy (excluding lands north and east of the Columbia River, river islands, state owned or leased lands, lands owned by the Bonneville Power Administration, lands leased to the Washington Public Power Supply System, and the Ashe Substation). 'Site' refers to the Hanford Site, the approximately 560 square mile (1,450 square kilometers) area in southeastern Washington State owned by the United States Government and commonly known as the Hanford Reservation.

The environmental checklist for the Hanford Facility will be supplemented by environmental checklists prepared to accompany the submittal of unit-specific Part B permit applications.

2. Name of applicants:

U.S. Department of Energy (DOE) Field Office, Richland (RL)

3. Address and phone number of applicant and contact person:

U.S. Department of Energy
Field Office, Richland
P.O. Box 550
Richland, Washington 99352

Contact Person:

E. A. Bracken, Director
Environmental Restoration Division
(509) 376-7277

4. Date checklist prepared:

September 18, 1991

5. **Agency requesting the checklist:**

Washington State
Department of Ecology
Mail Stop PV-11
Olympia, WA 98504-8711

6. **Proposed timing or schedule (including phasing, if applicable):**

Pursuant to the *Hanford Federal Facility Agreement and Consent Order* (Tri-Party Agreement) (Ecology et al. 1990), a single RCRA/dangerous waste permit will be issued to cover the entire Hanford Facility. The Tri-Party Agreement specifies that the U.S. Environmental Protection Agency (EPA) and Ecology will issue the Hanford Facility Dangerous Waste Permit (Hanford Facility Permit) for less than the entire Hanford Facility because all of the TSD units cannot be permitted simultaneously. Using a step-wise permitting process will ensure proper implementation of the Tri-Party Agreement. The permit eventually will grow into a single permit for the entire Hanford Facility. Any TSD units that are not included in the initial Hanford Facility Permit normally will be incorporated through a permit modification. Individual TSD units will be processed using the schedule outlined in the Tri-Party Agreement Action Plan, or amendments thereof.

7. **Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.**

Yes. The permitting process for the Hanford Facility is outlined in Section 6.3 of the Tri-Party Agreement Action Plan. This process applies to existing TSD units operating under interim status, TSD units provided for under interim status expansion, and new TSD units (units that do not have interim status and must have a RCRA/dangerous waste permit before construction). A Notice of Intent (as specified in WAC-173-281) will be submitted for 'interim status expansion' or 'new' TSD units.

8. **List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.**

- This environmental checklist is being submitted concurrently with the *Hanford Facility Dangerous Waste Permit Application*
- The *Hanford Facility Dangerous Waste Part A Permit Application* (DOE-RL 1988).

Environmental information on the Hanford Site, in general, can be found in the following references: (1) *Final Environmental Impact Statement - Disposal of Hanford Defense High-Level, Transuranic and Tank Wastes*, DOE/EIS-0113 (U.S. Department of Energy, 1987, Richland, Washington); (2) *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratories,

1990, Richland, Washington); (3) *Draft Environmental Impact Statement - Decommissioning of Eight Surplus Production Reactors at the Hanford Site, Richland, Washington*, DOE/EIS-0119D (U.S. Department of Energy, 1989, Washington, D.C.); (4) *Final Environmental Impact Statement - Waste Management Operations*, ERDA-1538 (U.S. Energy Research and Development Administration, 1975, Richland, Washington); and (5) *Archaeological Survey of the 200 East and 200 West Areas, Hanford Site Washington*, PNL-7264 (Pacific Northwest Laboratory, 1990, Richland, Washington).

9. Do you know whether applications are pending for government approvals of other proposals directly affecting property covered by your proposal? If yes, explain.

Yes. The Hanford Site currently has three such permits: Clean Water Act - National Pollutant Discharge Elimination System (NPDES), EPA, WA-000374-3; Clean Air Act - Prevention of Significant Deterioration (PSD), EPA PSD-X80-14; Clean Air Act - Radioactive Source Registration, Washington State Department of Health, FF-01.

10. List any government approvals or permits that will be needed for your proposal, if known.

A RCRA/dangerous waste permit for the treatment, storage and/or disposal of dangerous waste and mixed waste on the Hanford Facility will be required. A permit application has been submitted concurrently with this environmental checklist and will serve as the basis for the initial Hanford Facility Permit. Once issued, the Hanford Facility Permit will be modified, as necessary, to incorporate permits for individual TSD units. This process briefly is described in the answer to Checklist Question 6.

For the most part, other approvals or permits needed by the Hanford Facility are required by the *Clean Air Act of 1977*, the *Clean Water Act of 1977*, and the *Toxic Substances and Control Act of 1976*.

11. Give a brief, complete description of your proposal, including the proposed uses and the size of the project and site.

The Hanford Site covers approximately 560 square miles (1,450 square kilometers) of semiarid land that is owned by the U.S. Government and managed by the DOE-RL. The Hanford Site is located northwest of the city of Richland, Washington. The city of Richland adjoins the southeastern most portion of the Hanford Site boundary and is the nearest population center. In early 1943, the U.S. Army Corps of Engineers selected the Hanford Site as the location for reactor, chemical separation, and related activities for the production and purification of special nuclear materials and other nuclear activities. The mission of the Hanford Site recently has focused on environmental remediation and restoration.

The Hanford Facility, for purposes of the RCRA and the *Dangerous Waste Regulations*, is defined as the contiguous portion of the Hanford Site that includes approximately 25 TSD units for which a final status permit has been, or will be, sought. The Hanford Facility is assigned the single EPA/State Identification Number WA7890008987, and the RL is specified as the owner/operator. All waste management activities carried out under the assigned identification number are considered to be onsite.

The Hanford Facility does not include the Bonneville Power Administration Midway Site, the U.S. Department of Energy lands north and northeast of the Columbia River, nor lands owned or leased by the state of Washington. The Midway Site is owned by the Bonneville Power Administration, and the U.S. Department of Energy Field Office, Richland has no ownership or control over this site. The U.S. Department of Energy lands north and east of the Columbia River contain no TSD units and are not considered to be contiguous to the Hanford Facility because these lands are separated by the state-owned Columbia River bed.

In addition, the Washington Public Power Supply System will be applying for a RCRA permit for the U.S. Department of Energy lands leased to the Washington Public Power Supply System. These lands will be covered by a separate permit and, therefore, will not be included in the Hanford Facility Permit.

The Hanford Facility generates dangerous and mixed waste, and treats, stores, and/or disposes of dangerous and mixed waste that is generated onsite. Mixed waste that is generated offsite also is managed within certain TSD units on the Hanford Facility. The radioactive component of mixed waste is interpreted by the U.S. Department of Energy to be regulated under the *Atomic Energy Act of 1954*; the nonradioactive dangerous component of mixed waste is interpreted to be regulated under the RCRA and WAC 173-303.

The TSD units to be permitted on the Hanford Facility are centralized in four numerically designated areas, the 200, 300, 400, and 600 Areas. These TSD units include container storage units, surface impoundments, waste piles, tank systems, and miscellaneous units, unique units not fitting into an established category for a TSD unit. These units treat, store, and/or dispose of dangerous and/or mixed waste designated as: (1) characteristic dangerous waste; (2) toxic, carcinogenic, and persistent (by WAC 173-303 criteria); and (3) listed (because the waste contains small amounts of spent solvents and discarded pure chemical products). Specific dangerous waste codes, process design capacities, and estimated quantities of waste handled on an annual basis by specific TSD units are specified in the *Hanford Facility Dangerous Waste Part A Permit Application.*

12. **Give the location of the proposal. Give sufficient information for a person to understand the precise location of the proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available.**

The location of the Hanford Facility is described in the answer to Checklist Question 11. The location of individual TSD units on the Hanford Facility is provided in the *Hanford Facility Dangerous Waste Part A Permit Application*.

A map of the Hanford Facility and legal description is included in Section 2.2 of the *Hanford Facility Dangerous Waste Permit Application*. Legal descriptions for individual TSD units will be provided in the unit-specific Part B permit applications.

B. ENVIRONMENTAL ELEMENTS

1. Earth

a. General description of the site (indicate one): Flat, rolling, hilly, steep, mountainous, other.

The terrain of the central and eastern portions of the Hanford Facility is relatively flat. The northern and western parts of the Hanford Facility have moderate to steep topographic ridges composed of basalt and sediments. The TSD units are located on the relatively flat, central portion of the Hanford Facility. A more detailed description of the Hanford Facility can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratory, 1990, Richland, Washington). More detailed descriptions of individual TSD units can be found in unit-specific Part B permit applications.

b. What is the steepest slope on the site (approximate percent slope)?

The TSD units are located on the relatively flat, central portion of the Hanford Facility. The approximate slope of the land at each TSD unit is generally less than two percent. More detailed descriptions of individual TSD units can be found in unit-specific Part B permit applications.

c. What general types of soils are found on the site (for example, clay, sand, gravel, peat, muck)? If you know the classification of agricultural soils, specify them and note any prime farmland.

The soil at the Hanford Facility ranges from fine silty and sandy soil to sandy gravel with good drainage characteristics. No farming is permitted on the Hanford Facility or the Hanford Site.

d. Are there surface indications or history of unstable soils in the immediate vicinity? If so, describe.

No. There are no indications of unstable soils at the Hanford Facility.

e. Describe the purpose, type, and approximate quantities of any filling or grading proposed. Indicate the source of the fill.

Excavation will be required for the operation of some TSD units such as the Low-Level Burial Grounds and the Grout Treatment Facility. Excavation also will be required for the modification and construction of some TSD units. Excavated material will be stockpiled for use as backfill. Excavated material also will be used, as required, for finish grading to blend the materials into the existing topography and to provide drainage away from buildings and structures.

f. Could erosion occur as a result of clearing, construction, or use? If so, generally describe.

Erosion due to wind and/or precipitation could occur in areas on and directly surrounding TSD units at which excavation is used during operations. Erosion due to wind and/or precipitation also could occur in association with the modification and construction of TSD units. Topographical expression of erosional features is uncommon at the Hanford Site.

g. Approximately what percent of the site will be covered with impervious surfaces after project construction (for example, asphalt or buildings)?

Less than one percent of the Hanford Facility is affected by impervious surfaces. A more detailed description of impervious surfaces associated with individual TSD units can be found in unit-specific Part B permit applications.

h. Proposed measures to reduce or control erosion, or other impacts to the earth, if any?

To control the amount of dust generated by excavation, modification, or construction activities, water trucks might be used to periodically spray areas undergoing such activities. Paved access roadways and graveled parking areas will be provided to minimize erosion due to vehicular traffic. Natural vegetation covers much of the Hanford Site minimizing both wind and water erosion.

2. Air

a. What types of emissions to the air would result from the proposal (i.e., dust, automobile, odors, industrial wood smoke) during construction and when the project is completed? If any, generally describe and give approximate quantities if known.

Small amounts of air emissions (exhaust) might be generated by excavation and construction equipment and vehicles used by personnel to gain access to the Hanford Facility. Some dust will be generated during construction activities.

Air emissions which may result from operational activities associated with individual TSD units will be permitted as required under federal and state clean air regulations. Emissions of regulated air pollutants from existing Hanford Site operations are reported in the *Hanford Site Environmental Report*, which is updated annually by Pacific Northwest Laboratory.

b. Are there any off-site sources of emissions or odors that may affect your proposal? If so, generally describe.

None.

c. Proposed measures to reduce or control emissions or other impacts to the air, if any?

To control the amount of dust generated by excavation or construction activities, water trucks will be available onsite to periodically spray affected areas. For individual TSD units, plant ventilation systems will use airlocks, pressure and temperature differentials, continuous air monitoring and surveillance equipment, and air scrubbers and HEPA filters to ensure that air emissions remain within applicable regulatory limits and guidelines at all times. Individual sources of regulated air pollutants will be permitted under applicable Clean Air Act regulations.

3. Water

a. Surface:

1) Is there any surface water body on or in the immediate vicinity of the site (including year-round and seasonal streams, saltwater, lakes, ponds, wetlands)? If yes, describe type and provide names. If appropriate, state what stream or river it flows into.

Yes. The primary surface-water features associated with the Hanford Facility are the Columbia and Yakima Rivers. Several surface ponds and ditches are present, and are generally associated with fuel and waste processing activities. Some of

these ponds have been in place for as long as two decades, although many have been eliminated. Two intermittent streams transverse the Hanford Site. These are Cold Creek and Dry Creek. Water drains through these creeks during the wetter winter and spring months. No perennial streams originate within the Hanford Site. Small spring streams, Rattlesnake Springs and Snively Springs, flow for short distances in the western portion of the Hanford Site.

2) Will the project require any work over, in, or adjacent to [within 200 feet (61 meters) of] the described waters? If yes, please describe and attach available plans.

Yes. Individual TSD Units with such work will address impacts on the described waters through environmental checklists submitted with the unit-specific Part B permit applications.

3) Estimate the amount of fill and dredge material that would be placed in or removed from surface water or wetlands and indicate the area of the site that would be affected. Indicate the source of fill material.

None.

4) Will the proposal require surface water withdrawals or diversions? Give general description, purpose, and approximate quantities if known.

Yes. Nearly all the water used on the Hanford Facility is withdrawn from the Columbia River (approximately 1.3 million gallons per day). Individual TSD Units that use Columbia River water will address this use in environmental checklists submitted with unit-specific Part B permit applications.

5) Does the proposal lie within a 100-year floodplain? If so, note location on the site plan.

Yes. Portions of the 100 and 300 Areas are within the 100-year floodplain. However, none of the current TSD units within the Hanford Facility are within the 100-year floodplain.

6) Does the proposal involve any discharges of waste materials to surface waters? If so, describe the type of waste and anticipated volume of discharge.

Some of the TSD units might discharge nondangerous liquid effluent to ponds, cribs, or to the Columbia River. The specific details of these liquid effluent discharges will be documented in environmental checklists submitted with unit-specific Part B permit applications.

b. Ground:

1) Will ground water be withdrawn, or will water be discharged to ground water? Give general description, purpose, and approximate quantities, if known.

Yes. Several drinking water supply wells are located on the Hanford Facility. Water supply wells are the Yakima Barricade well about 3.2 miles (5.2 kilometers) west of the 200 West Area, two wells in the 400 Area (one supply and one back-up), and the Rattlesnake Springs well located 4 miles (6.4 kilometers) southwest of the 200 West Area. Relatively small volumes of water are withdrawn from these wells, as most drinking water and water used for other purposes is taken from the Columbia River. A small volume of water is withdrawn from wells distributed throughout the Hanford Facility for groundwater monitoring and sampling.

No water will be discharged directly to the groundwater.

2) Describe waste materials that will be discharged into the ground from septic waste tanks or other sources, if any (for example: domestic sewage; industrial, containing the following chemicals...; agricultural; etc.). Describe the general size of the system, the number of such systems, the number of houses to be served (if applicable), or the number of animals or humans the system(s) are expected to serve.

Septic tanks and drain fields exist and might be expanded to receive sanitary waste from restrooms, changerooms, showers, and lunchrooms of the various TSD units. Some of the TSD units might discharge nondangerous liquid effluent or purgewater to ponds or cribs that might be sources for groundwater recharge. The specific details of these liquid effluent discharges will be documented in environmental checklists submitted with unit-specific Part B permit applications.

c. Water run-off (including storm water):

1) Describe the source of run-off (including storm water) and method of collection and disposal, if any (include quantities, if known). Where will this water flow? Will this water flow into other waters? If so, describe.

Extremely small quantities of storm water run-off will be generated. Descriptions of collection and disposal methods for individual TSD units are detailed, where applicable, in the unit-specific Part B permit applications.

2) Could waste materials enter ground or surface waters? If so, generally describe.

Yes. Nonradioactive, nondangerous waste might be released to the ground via septic systems and various drains associated with TSD units within the Hanford Facility. Some of the TSD units might discharge nondangerous liquid effluent to ponds or cribs that might be sources for groundwater recharge. The specific details of these liquid effluent discharges will be documented in environmental checklists submitted with unit-specific Part B permit applications. Discharges to ground or surface waters will be permitted as appropriate under the Clean Water Act.

d. Proposed measures to reduce or control surface, ground, and run-off water impacts, if any:

Many TSD units use double containment piping and leak detection, grading and ground cover, and/or other measures to prevent degradation of groundwater quality. Measures to be taken for individual TSD units are detailed, where applicable, in the unit-specific Part B permit applications

4. Plants

a. Check the types of vegetation found on the site:

_x_ deciduous tree: alder, maple, aspen, other
_x_ evergreen tree: fir, ceder, pine, other
_x_ shrubs
_x_ grass
___ pasture
___ crop or grain
_x_ wet soil plants: cattail, buttercup, bulrush, skunk cabbage, other
_x_ water plants: water lily, eelgrass, milfoil, other
_x_ other types of vegetation

The vegetation on the Hanford Facility consists of sagebrush, forbs, and other common central Washington desert plant species. A more detailed description of the Hanford Site vegetation can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratory, 1990, Richland, Washington).

b. What kind and amount of vegetation will be removed or altered?

Vegetation around many TSD units is removed routinely, so that there is a low potential for accidental open burning. Vegetation will also be removed from unit construction localities and areas to be paved.

Most of the Hanford Facility beyond the bounds of the 200, 300, 400, and 1100 Areas is maintained as a natural habitat.

c. List threatened or endangered species known to be on or near the site.

The Columbia milk-vetch, and yellowcress are threatened and endangered plants occurring on the Hanford Site. Additional information on species can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratory, 1990, Richland, Washington).

d. Proposed landscaping, use of native plants, or other measures to preserve or enhance vegetation on the site, if any:

Compaction of the soil is used to stabilize the soil during and after construction activities. Native vegetation often is planted to eliminate erosion potential of soils due to wind and water. Measures to be taken for individual TSD units are detailed, where applicable, in the unit-specific Part B permit applications. Most of the Hanford Facility beyond the bounds of the 200, 300, 400, and 1100 Areas is maintained as a natural habitat.

5. Animals

a. Indicate (by underlining) any birds and animals which have been observed on or near the site or are known to be on or near the site:

birds: hawk, heron, eagle, songbirds, other
mammals: deer, bear, elk, beaver, other
fish: bass, salmon, trout, herring, shellfish, other

A variety of insects, birds, and mammals are common to the Hanford Site and Hanford Facility, including pigeons, passerine birds, rodents, and lagomorphs. Larger mammals commonly seen in the vicinity include deer and coyote. Additional information on birds and animals on the Hanford Site can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratory, 1990, Richland, Washington).

b. List any threatened or endangered species known to be on or near the site.

The Aleutian Canada goose, bald eagle, white pelican, sandhill crane, ferruginous hawk, and the peregrine falcon are sometimes seen on the Hanford Site.

The TSD unit locations are not known to be used by any threatened or endangered species. Additional information concerning endangered and threatened species on the Hanford Site can be found in *Hanford Site National Environmental Policy Act (NEPA) Characterization*, PNL-6415 (Revision 3, Pacific Northwest Laboratory, 1990, Richland, Washington).

c. Is the site part of a migration route? If so, explain.

Yes. The adjacent Columbia River is part of the broad Pacific Flyway for waterfowl migration and other birds also migrate along the river.

d. Proposed measures to preserve or enhance wildlife, if any:

Fences around TSD units exclude larger animals. Landfill waste is covered with soil to isolate this waste from local fauna.

6. **Energy and Natural Resources**

a. What kinds of energy (electric, natural gas, oil, wood stove, solar) will be used to meet the completed project's energy needs? Describe whether it will be used for heating, manufacturing, etc.

Diesel fuel, coal, gasoline, oil, and electrical power will be used to power equipment, to power building ventilation and lighting systems, and to provide process heating.

b. Would your project affect the potential use of solar energy by adjacent properties? If so, generally describe.

No.

c. What kinds of energy conservation features are included in the plans of this proposal? List other proposed measures to reduce or control energy impacts, if any:

Energy conservation guidelines outlined in the U.S. Department of Energy Order 6430.1A, "General Design Criteria", will be incorporated in the design of new structures. Under these guidelines, each area of a building will be subject to the air in-leakage depressurization test. The test will be done in accordance with American Society of Testing Materials E 779-87, "Standard Test Method for Determining Air Leakage Rate by Fan Pressurization". Only the depressurization test will need to be performed, and will demonstrate whether the building envelope meets the design specification for air tightness. A more detailed description of the energy conservation features of individual TSD units can be found in the environmental checklists accompanying unit-specific Part B permit applications.

7. Environmental Health

a. Are there any environmental health hazards, including exposure to toxic chemicals, risk of fire and explosion, spill, or hazardous waste, that could occur as a result of this proposal? If so, describe.

Yes. Radioactive materials and toxic and explosive chemicals are routinely handled at the Hanford Facility.

1) Describe special emergency services that might be required.

Hanford Site security, fire response, ambulance services, and an emergency communications and response system are on call 24 hours a day, 7 days a week, in the event of an onsite emergency.

2) Proposed measures to reduce or control environmental health hazards, if any:

The TSD units on the Hanford Facility will provide primary and secondary confinement barriers to prevent the release of potentially hazardous materials. Primary confinement will prevent direct physical contact between the hazardous materials and personnel and will be provided by process enclosures and ventilation systems. Secondary confinement will prevent releases of hazardous materials to the environment and will be provided by buildings housing the process enclosures and by building ventilation systems. Some of the buildings will be designed to withstand design-basis accidents required by the U.S. Department of Energy Order 6430.1A and criteria defined in Hanford Plant Standard Design Criteria (SDC) 4.1. Descriptions of measures to reduce or control environmental health hazards for individual TSD units are detailed, where applicable, in the unit- specific Part B permit applications and in environmental checklists accompanying these permit applications.

b. Noise

1) What types of noise exist in the area which may affect your project (for example: traffic, equipment, operation, other)?

None.

2) What types and levels of noise would be created by or associated with the project on a short-term or a long-term basis (for example: traffic, construction, operation, other)? Indicate what hours noise would come from the site.

The Hanford Facility is sufficiently removed from residential and offsite industrial areas to preclude excessive noise impacts. The

primary source of noise from the Hanford Facility will be from the operation of exhaust systems and from heavy equipment associated with excavation and construction activities.

3) Proposed measures to reduce or control noise impacts, if any:

Excavation, construction, and operational equipment will meet manufacturer's requirements for noise suppression.

8. Land and Shoreline Use

a. What is the current use of the site and adjacent properties?

The Hanford Site is dedicated to U.S. Department of Energy-controlled operations, with limited exceptions. Located within the boundaries of the Hanford Site and Hanford Facility are the Washington Public Power Supply System reactor and generating complex and the U.S. Ecology Company, Incorporated waste disposal facility located southwest of the 200 East Area. Seimens Nuclear Power is located just north of Richland, Washington, adjacent to the Hanford Site boundary. The eastern boundary of the nearest military installation, the Yakima Firing Center, is 25 miles (40 kilometers) west-northwest of the Hanford Site.

The portion of the Hanford Site south and west of the Columbia River is where reactor, fuel reprocessing, and TSD units are located. The portion of the Hanford Site that is located on the north and east sides of the Columbia River is designated as a buffer zone and currently is used for wildlife refuge or wildlife recreation land. The southwest portion of the Hanford Site is the Arid Lands Ecology Reserve.

Outside the Hanford Site are privately owned farms and the urban and suburban areas of Richland and West Richland.

b. Has the site been used for agriculture? If so, describe.

No portion of the Hanford Site, including the localities of the TSD units, have been used for agricultural purposes since 1943.

c. Describe any structures on the site.

The Hanford Site contains a number of structures, generally restricted to the 100, 200, 300, 400, 1100, and 3000 Areas. A map of these areas is contained in the Hanford Facility Permit Application. More detailed descriptions of the structures associated with individual TSD units can be found in the unit-specific Part B permit applications and in environmental checklists accompanying these permit applications.

d. Will any structures be demolished? If so, what?

Structures might be demolished in association with closure of TSD units on the Hanford Facility. Descriptions of these demolition activities will be included in the closure and postclosure plan portion of the unit-specific Part B permit applications.

e. What is the current zoning classification of the site?

The Hanford Site is zoned by Benton County as an Unclassified Use (U) district.

f. What is the current comprehensive plan designation of the site?

The 1985 Benton County Comprehensive Land Use Plan designates the Hanford Site as the "Hanford Reservation". Under this designation, land on the Hanford Site might be used for "activities nuclear in nature". Nonnuclear activities are authorized "if and when [U.S. Department of Energy] approval for such activities is obtained".

g. If applicable, what is the current shoreline master program designation of the site?

Does not apply.

h. Has any part of the site been classified as an "environmentally sensitive" area? If so, specify.

No. However, the Hanford Reach of the Columbia River borders the Hanford Facility. The *Hanford Reach Study Act* (Public Law 100-605) directs the Secretary of the Interior to prepare a study on the Hanford Reach of the Columbia River including consideration of its addition to the National Wild and Scenic Rivers System. During the eight-year study period, ending in 1996, activities undertaken within a quarter mile of the Columbia River mean high-level mark, from river miles 396 to 345, must be conducted in consultation and coordination with the National Park Service, acting for the Secretary of the Interior. Activities undertaken within the Hanford Reach are conducted in compliance with the *Hanford Reach Study Act*. Discussions of activities affecting the Hanford Reach are included in TSD unit-specific permit applications.

i. Approximately how many people would reside or work in the completed project?

Approximately 15,000 people work on the Hanford Site. Work localities for most personnel are in the 100, 200, 300, 400, 1100, and 3000 Areas. Hanford Facility TSD units are located in the 200, 300, 400, and 600 Areas.

j. Approximately how many people would the completed project displace?

None.

k. Proposed measures to avoid or reduce displacement impacts, if any:

Does not apply.

l. Proposed measures to ensure the proposal is compatible with existing and projected land uses and plans, if any:

Does not apply. (Refer to Checklist Question B.8.f.)

9. Housing

a. Approximately how many units would be provided, if any? Indicate whether high-, middle-, or low-income housing.

None.

b. Approximately how many units, if any, would be eliminated? Indicate whether high-, middle-, or low-income housing.

None.

c. Proposed measures to reduce or control housing impacts, if any:

Does not apply.

10. Aesthetics

a. What is the tallest height of any proposed structure(s), not including antennas; what is the principal exterior building material(s) proposed?

The height of structures on the Hanford Facility is generally less than 100 feet (33 meters) The height of various structures associated with TSD units can be found in the unit-specific Part B permit applications and environmental checklists accompanying these permit applications.

b. What views in the immediate vicinity would be altered or obstructed?

None.

c. Proposed measures to reduce or control aesthetic impacts, if any:

None.

11. **Light and Glare**

a. What type of light or glare will the proposal produce? What time of day would it mainly occur?

None.

b. Could light or glare from the finished project be a safety hazard or interfere with views?

No.

c. What existing off-site sources of light or glare may affect your proposal?

None.

d. Proposed measures to reduce or control light and glare impacts, if any:

Does not apply.

12. **Recreation**

a. What designated and informal recreational opportunities are in the immediate vicinity?

None.

b. Would the proposed project displace any existing recreational uses? If so, describe.

Does not apply.

c. Proposed measures to reduce or control impacts on recreation, including recreation opportunities to be provided by the project or applicant, if any?

Does not apply.

13. **Historic and Cultural Preservation**

a. Are there any places or objects listed on, or proposed for, national, state, or local preservation registers known to be on or next to the site? If so, generally describe.

No places or objects listed on, or proposed for, national, state, or local preservation registers are known to be on or next to any TSD units. Additional information on the Hanford Facility

environment can be found in the environmental documents referred to in the answer to Checklist Question A.8.

b. Generally describe any landmarks or evidence of historic, archaeological, scientific, or cultural importance known to be on or next to the site.

There are no known archaeological, historical, or native American religious localities at or next to any TSD units. Additional information on the Hanford Site environment can be found in the environmental documents referred to in the answer to Checklist Question A.8.

NOTE: Pacific Northwest Laboratory recently filed a Request For Determination of Eligibility for the White Bluffs Road with the State Historic Preservation Office. If the road is found eligible, it might be necessary to determine if any TSD units will have an effect on the historic property.

c. Proposed measures to reduce or control impacts, if any:

Where appropriate, a cultural resource review will provide the vehicle for necessary approvals required under the *National Historic Preservation Act of 1966*.

14. Transportation

a. Identify public streets and highways serving the site, and describe proposed access to the existing street system. Show on site plans, if any.

See maps in the accompanying Hanford Facility Permit Application.

b. Is site currently served by public transit? If not, what is the approximate distance to the nearest transit stop?

Portions of the Hanford Facility are served by public transportation. The 300 and 400 Areas of the Hanford Site are served by public transportation. Individual TSD units are not served by public transportation.

c. How many parking spaces would the completed project have? How many would the project eliminate?

A more detailed description of the parking needs for individual TSD units can be found in environmental checklists accompanying unit-specific Part B permit applications.

d. Will the proposal require any new roads or streets, or improvements to existing roads or streets, not including driveways? If so, generally describe (indicate whether public or private).

Paved roads for access to TSD units might be required. A more detailed description of transportation needs can be found in the environmental checklists accompanying unit-specific Part B permit applications. A portion of the roads will not be publicly accessible.

e. Will the project use (or occur in the immediate vicinity of) water, rail, or air transportation? If so, generally describe.

No.

f. How many vehicular trips per day would be generated by the completed project? If known, indicate when peak volumes would occur.

Peak traffic volumes will occur at the beginning and end of regular 8-hour working shifts. Many employees use the Hanford Site shuttle bus system for transportation from northern Richland to the operational areas of the Hanford Site, including TSD units of the Hanford Facility.

g. Proposed measures to reduce or control transportation impacts, if any:

Proper codes, standards, regulations and accepted safety practices will be followed to mitigate human exposure while transporting waste.

15. Public Services

a. Would the project result in an increased need for public services (for example: fire protection, police protection, health care, schools, other)? If so, generally describe.

No.

b. Proposed measures to reduce or control direct impacts on public services, if any:

Does not apply.

16. Utilities

a. List utilities currently available at the site (electricity, natural gas, water, refuse service, telephone, sanitary sewer, septic system, other):

The Hanford Site and Hanford Facility are supported by a variety of utilities including electrical, natural gas, water, refuse service, telephone, sanitary sewer, and septic system. Descriptions of utilities currently available for individual TSD units can be found in unit-specific Part B permit applications and environmental checklists accompanying these permit applications.

b. Describe the utilities that are proposed for the project, the utility providing the service, and the general construction activities on the site or in the immediate vicinity which might be needed.

The Hanford Site and Hanford Facility are supported by a variety of utilities including electrical, natural gas, water, refuse service, telephone, sanitary sewer, and septic system. Construction activities will, in general, 'tie-in' to existing utilities. Descriptions of utilities currently available for individual TSD units can be found in unit-specific Part B permit applications and environmental checklists accompanying these permit applications.

SIGNATURE

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

E A Bracken

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Environmental Restoration Division
U.S. Department of Energy
Field Office, Richland

10-3-91
Date