START

0033644
GF1

19

STATE OF WASHINGTON

DEPARTMENT OF ECOLOGY

Mail Stop PV-11 • Olympia, Washington 98504-8711 • (206) 459-6000

August 15, 1990

Dear Interested Citizen:

Enclosed for your review and comment, please find a copy of a Determination of Nonsignificance (DNS) for the 616 Non-Radioactive Dangerous Waste Storage Facility at the Hanford Facility. In accordance with SEPA, Ecology is accepting comments on this document until August 31, 1990.

Please address any comments on this issue to:

Mr. Timothy L. Nord
Hanford Project Manager
Department of Ecology
Mail Stop PV-11
Olympia, Washington 98504-8711

Thank you for your interest in this matter.

Sincerely,

Mary Powers for

Roger Stanley
Program Manager
Nuclear and Mixed Waste Management

Enclosure

WASHINGTON STATE DEPARTMENT OF ECOLOGY

DETERMINATION OF NONSIGNIFICANCE

Description of proposal The Hanford Site 616 Non-Radioactive Dangerous Waste Storage Facility (NRDWSF).

Proponent U.S. Department of Energy

Location of proposal, including street address, if any The Hanford Site. The NRDWSF is located in T12N R26E Section 5 of the Willamette Principal Meridan 200 feet north of Route 3 across from the 609-A Fire Station.

Lead agency State of Washington Department of Ecology

9413205.1293

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 August 31, 1990

Responsible official Roger Stanley

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

Address State of Washington Department of Ecology Mailstop PV-11 Olympia, WA 98504

Date 8/12/90 Signature Roger Stanley

ECY 060-47

SEPA ENVIRONMENTAL CHECKLIST

A. BACKGROUND

1. Name of proposed project:

The 616 Nonradioactive Dangerous Waste Storage Facility (NRDWSF). This SEPA Checklist is being submitted concurrently with the Resource Conservation and Recovery Act (RCRA) of 1976 Part B Permit Application for the subject facility. Information contained in this checklist pertains only to the NRDWSF. In the context of the document, 'site' refers to only the area covered by the physical structure of the building, whereas 'Site' refers to the Hanford Site.

2. Name of applicant:

U.S. Department of Energy-Richland Operations (DOE-RL); and Westinghouse Hanford Company (Westinghouse Hanford)

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

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

Westinghouse Hanford Company
P.O. Box 1970
Richland, Washington 99352

Contact Persons:

R. D. Izatt, Director
Environmental Restoration Division
(509) 376-5441

R. E. Lerch, Manager
Environmental Division
(509) 376-5556

4. Date checklist prepared:

July 31, 1989

5. Agency requesting checklist:

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

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

Construction of the NRDWSF was completed in 1986. The facility began receiving dangerous wastes under RCRA interim status in September 1986. The RCRA Part B Permit Application, submitted with this Checklist, will result in the issuance of a final status facility permit for the receipt and storage of dangerous waste.

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

Several potential minor modifications to the facility, such as an addition of a covered loading dock and a nonregulated drum storage area, are being studied. Additionally, the facility was designed so as to permit future expansion of the waste storage area by building an addition to satisfy new storage or functional requirements as they arise.

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

This SEPA Checklist is being submitted to the Washington State Department of Ecology (Ecology) concurrently with the NRDWSF Part B Permit Application.

In November 1985, prior to construction of the present NRDWSF, the U.S. Department of Energy submitted to Ecology a RCRA Part B Permit Application for the "Nonradioactive Dangerous Waste Landfill and Storage Facility."

A RCRA Part A Permit Application was submitted to Ecology on November 1, 1985. Revisions to the Part A Permit Application were submitted to Ecology on August 15, 1987, and November 16, 1987.

An Environmental Evaluation similar to this SEPA Checklist, discussing potential environmental impacts of NRDWSF operations, may be written for DOE-RL and Westinghouse Hanford internal documentation purposes.

Additional environmental information regarding the 200 Area Plateau and 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), and (2) Final Environmental Impact Statement - Waste Management Operations, Hanford Reservation, ERDA-1538 (Energy Research and Development Administration, 1975, Washington, DC).

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

No other applications that would affect property associated with the NRDWSF are pending government approval.

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

    Ecology and the Environmental Protection Agency (EPA) are the only agencies authorized to approve or permit the facility under requirements authorized by RCRA and Chapter 173-303 of the Washington Administrative Code (WAC). No other permits are known to be required at this time.

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

    The NRDWSF provides a centralized facility to receive, store, and prepare shipments of Hanford-generated dangerous waste to disposal facilities. The facility, excluding parking areas and loading/unloading areas, occupies an area of approximately 7,700 square feet. Waste is received at the facility in authorized U. S. Department of Transportation containers and are segregated per hazard class and placed into storage. Approximately 18 times per year, depending on the rate of waste accumulation, the containers are manifested and inspected for offsite shipment and disposal.

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 NRDWSF is located approximately 200 feet north of Route 3, across from the 609-A Fire Station, on the 200 Area Plateau between the 200 East and 200 West Areas of the Hanford Site. Maps and plans of the area are contained in Appendix 2A of the RCRA Part B permit application submitted with this Checklist. The NRDWSF can be located on the Coyote Rapids, Washington, 15 minute quadrangle map, Section 5, T12N, R26E of the Willamette Principle Meridian.

B. ENVIRONMENTAL ELEMENTS

1. **Earth**

a. General description of the site:

Flat.

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

The approximate slope of the land at the NRDWSF is less than two percent.

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 facility site consists primarily of gravelly sand. No farming is permitted at the facility site.

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

No.

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

Does not apply.

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

Due to the flat topography, dry climate, and soil type present at the site, large scale erosion is not expected. However, a fire break extending 200 feet away from all sides of the building has been cleared of vegetation and may be subject to minor wind erosion.

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

The NRDWSF is approximately 110 feet long by 70 feet wide. Two separate concrete loading pads alongside the building each cover an area of approximately 830 square feet. Associated roadways and parking areas are covered with gravel; however, a 600-square-foot concrete area is provided next to the building for handicapped parking.

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

Unpaved roadways and parking areas are covered with gravel to minimize wind erosion potential due to vehicular travel. Additionally, measures to minimize wind erosion in the fire break extending out from the building are being considered.

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.

Minor amounts of exhaust will be generated by vehicles used by building personnel to gain access to the site.

Some volatilization of dangerous materials can be expected to occur during normal operations as the result of repacking/overpacking of damaged/defective waste containers or as a result of spillage. However, airborne releases to the outside environment are not expected to occur during normal operations because of the containment of material and the methods of operating.

An airborne release could occur as a result of upset conditions internally or externally. Such a release would not exceed immediately dangerous to life and health (IDLH) concentrations outside the immediate area of the spill/release because of the small quantity of material that is available for release.

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

No.

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

Accumulations of toxic, explosive, or flammable fumes are prevented by frequent air changes throughout the building. In case of volatilization of a spill/release, building heating, ventilation, and cooling system provisions - separate systems serve the business area and the storage cells - ensure that such an event would have only minor effects on facility personnel. Emissions to the environment are uncontrolled but would not exceed immediately dangerous to life and health (IDLH) concentrations outside the immediate area of the spill/release.

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.

No.

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

Does not apply.

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.

No.

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

No.

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.

No.

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.

No.

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.

A septic tank and tile field have been provided to receive sanitary waste from the restrooms, showers, lunchroom, and one sink located in the packaging and sampling room. The septic system is designed to accommodate a building personnel occupancy of four.

All waste handling areas and storage cells in the facility are provided with sealed concrete trenches to collect free liquid and to prevent the release of dangerous waste to the environment. Liquid accumulated in these trenches is retrieved and appropriately dispositioned. The outdoor loading and unloading pads are provided with sealed concrete trenches with pluggable/administratively controlled drains to collect free liquid. Liquid (i.e., precipitation) collected in the outdoor trenches is pH tested, and liquid that does not contain unacceptable quantities of a dangerous waste is drained to the soil column via french drains. Contaminated liquid is retrieved for proper disposal.

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

1) Describe the source of run-off (including storm water) and methods 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.

Precipitation run-off in the material loading and unloading areas is collected in concrete trenches with pluggable/administratively controlled drains. Accumulated liquid is sampled and evaluated for corrosivity prior to disposition, and liquid that does not contain unacceptable quantities of a dangerous waste is drained to an isolated french drain system.

Water applied for fire suppression purposes will be contained in the facility until the capacities of the building's liquid containment provisions are filled. In the event that water escapes from the facility and transports chemical waste to the ground, the water and soil will be treated as a waste and disposed of appropriately.

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

Nonradioactive, nondangerous waste will be released to the soil column via the septic system and a system of french drains leading from the trenches in the loading/unloading areas. Such waste could eventually enter the groundwater approximately 260 feet below the facility; however, no travel time calculations have been performed.

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

None.

4. Plants

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

___ deciduous trees
___ evergreen trees
___ shrubs
___ grass
___ pasture
___ crop or grain
___ wet soil plants
___ water plants
___ other types of vegetation

None.

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

None.

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

None. However, additional information concerning endangered and threatened plants on the Hanford Site can be found in the Final Environmental Impact Statements referred to in the answer to Checklist question A.8.

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

Does not apply.

5. Animals

a. Circle 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 common to the Hanford Site, including pigeons, passerine birds, and lagomorphs, have been observed in the vicinity of the NRDWSF. Additional information on birds and animals on the Hanford Site can be found in the Final Environmental Impact Statements referred to in the answer to Checklist question A.8.

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

None. However, additional information concerning endangered and threatened species on the Hanford Site can be found in the Final Environmental Impact Statements referred to in the answer to Checklist question A.8.

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

No.

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

Does not apply.

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.

Electrical power is supplied to the NRDWSF to feed various electrical panels in the building. The electricity powers building heating, ventilating and air conditioning systems, lighting, and equipment. Gasoline, diesel fuel, and motor oil also will be used to power equipment.

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:

None.

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.

The NRDWSF is used to handle, store, and ship Hanford Site waste designated as extremely hazardous and dangerous. The scope of the operation is to provide short-term storage of material destined for offsite disposal and does not include opening of containers under normal conditions of operations, or verification sampling of containers by facility personnel. No explosives and no more than 10 pounds of Class 4 oxidizers, as defined in National Fire Protection Association codes (NFPA 1985), are handled in the facility at any given time. Stringent administrative controls and engineered barriers are employed to minimize the probability of even a minor incident/accident, and a chemical spill/release, fire, or explosion could occur only as a result of a simultaneous break-down in multiple barriers or a catastrophic natural forces event.

1) Describe special emergency services that might be required.

Hanford Site security, fire response, and ambulance services are on call at all times in the event of an onsite emergency.

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

Waste is grouped for storage in separate cells according to hazard classification and is isolated by concrete curbing and trenches to prevent commingling or complexing of dissimilar materials that may be accidentally released. Solid walls further isolate some of the cells. The floors and curbs of all the storage cells are concrete, free of seams, and sealed to make the concrete impervious to spills. Any released liquid is collected in sealed trenches and sumps. Effluent is retrieved for proper disposal.

The facility is located within the Hanford Controlled Area, preventing unauthorized entry. As described in the NRDWSF Part B Permit Application, all building personnel undergo special training to prepare them for work in a dangerous waste management facility. Personnel are required to wear suitable protective clothing. Safety showers and/or eyewash stations are provided in or adjacent to the chemical storage cells and in the packaging and sampling room, and the facility is appropriately equipped with fire control equipment.

b. Noise

1) What type of noise exists 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.

All noise levels are kept below 85 decibels. The primary sources of noise at the facility are the building exhaust system, which operates 24 hours per day, and the vehicles used to gain access to the site.

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

None.

8. Land and Shoreline Use

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

The NRDWSF is designed to provide for the segregation, protection, and containment of dangerous waste to prevent the waste from becoming a threat to human health and the environment. The facility is a part of the U. S. Government-owned Hanford Site, which is used for the production of special nuclear materials and the management of waste associated with the production of those materials.

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

No portion of the Hanford Site, including the site of the NRDWSF, has been used for agricultural purposes since 1943.

c. Describe any structures on the site.

The NRDWSF is a single-floor structure, on a concrete slab, assembled with precast concrete wall and ceiling panels. Occupying an area of approximately 7,700 square feet, the building is divided into five separate areas based on use: administrative areas (business occupancies), and four hazardous occupancy areas (dangerous waste storage cells, packaging and sampling room, packaging material and handling equipment area, and loading and unloading areas). The administrative areas include an office, restrooms, and change rooms, and these are separated from the hazardous occupancy areas by a two-hour fire rated wall. Within the dangerous waste storage area, six separate cells are provided. The use of each cell is restricted to segregate incompatible waste and to provide appropriate protection for flammable liquid.

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

No.

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 Site may be used for "activities nuclear in nature." Non-nuclear activities are authorized "if and when DOE 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.

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

No people will reside in the NRDWSF. The facility was designed for an occupancy of four full-time employees.

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. (See answer 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 NRDWSF has a total height of approximately 20 feet. The building exterior is concrete, with a cambered, composite roof.

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 the site. Additional information on the Hanford Site environment can be found in the Final Environmental Impact Statements 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 sites at or next to the facility. Additional information on the Hanford Site environment can be found in the Final Environmental Impact Statements referred to in the answer to Checklist question A.8.

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

Does not apply.

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.

Does not apply.

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

The site is not publicly accessible, and, therefore, is not served by public transportation.

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

The facility has paved parking for three vehicles (i.e., the handicapped parking area described in the answer to Checklist question B.1.g.). An adjacent graveled area provides parking space for up to an additional seven vehicles.

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).

No.

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.

Regular building personnel (four employees) travel to and from the facility during the five day, 7:30 am to 4:00 pm, work week. Incidental visitors to the facility during these hours generate approximately ten trips to and from the facility each week. In addition, the facility receives waste at a rate of one to two shipments per week and sends out offsite shipments about 18 times per year.

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

Does not apply.

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):

Utilities currently available at the facility include electricity, refuse service, telephone, potable water supply, and a septic tank and tile field tied to a sanitary drain system.

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.

No additional utilities are proposed.

C. SIGNATURES

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

E. A. Bracken for
R. D. Izatt, Director
Environmental Restoration Division
U.S. Department of Energy
Richland Operations Office

7-28-89
Date

R E Lerch
R. E. Lerch, Manager
Environmental Division
Westinghouse Hanford Company

7-11-89
Date