



U.S. Department of Energy
Office of River Protection

P.O. Box 450, MSIN H6-60
Richland, Washington 99352

AUG 10 2005

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05-TPD-075

Mr. Michael A. Wilson, Program Manager
Nuclear Waste Program
State of Washington
Department of Ecology
3100 Port of Benton Blvd.
Richland, Washington 99352

RECEIVED
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EDMC

Dear Mr. Wilson:

MODIFICATION OF THE HANFORD SITE WIDE PERMIT TO PROVIDE TEMPORARY AUTHORIZATION (TA) FOR CONSTRUCTION OF THE LINER SYSTEM AND THE LEACHATE COLLECTION AND TRANSPORT FACILITIES AT THE INTEGRATED DISPOSAL FACILITY (IDF)

Reference: ORP letter from R. J. Schepens and K. A. Klein, RL to M. A. Wilson, Ecology
"Modification of the Hanford Facility Dangerous Waste, Part B Permit Application for the Integrated Disposal Facility (IDF), DOE/RL-2003-12, Revision 1, Incorporating a Secondary Leak Detection System (SLDS), 04-TPD-056, dated June 3, 2004.

6/8/03

The Dangerous Waste Portion of the Hanford Facility Resource Conservation and Recovery Act (RCRA) Permit for the Treatment, Storage, and Disposal (TSD) of Dangerous Waste (Permit), WA7890008967, is being modified to include the IDF as a new unit. Within the permit application that was attached to the Reference, the U.S. Department of Energy (DOE), Office of River Protection (ORP) and its contractors described the liner and the leachate collection system that will be installed in the IDF. The State of Washington Department of Ecology (Ecology) issued a draft permit for the IDF on May 5, 2005.

In accordance with Washington Administrative Code (WAC) 173-303-830(3)(e)(iii)(B)(I), DOE-ORP requests a TA to construct the Liner and Leachate Collection and Transport System for Cell 1. To maintain constructability and cost effectiveness, liner construction will occur simultaneously at Cell 2 (for disposal of low-level waste). Therefore, this request for TA is limited only to Cell 1 activities.

Approval of the attached TA will enable ORP to maintain its schedule for cleanup and closure of the Hanford Site as required by the *Hanford Federal Facility Agreement and Consent Order*. This schedule depends upon timely disposal of immobilized low activity mixed waste that will result from Hanford tank waste cleanup and closure activities.

The TA will be limited to construction of the Liner System and Leachate Collection and Transport System.

Mr. Michael A. Wilson
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WAC 173-303-830(3)(e)(ii)(C) requires that ORP "send a notice about the temporary authorization request to all persons on the facility mailing list maintained by the director and to appropriate units of state and local governments as specified in WAC 173-303-840(3)(e)(i)(D). This section also requires that the notification be made within seven days of submission of the authorization request. In accordance with the requirements, ORP will submit the notice of this within seven days from the date of this letter.

If you have any questions, please contact me, or your staff may contact Thomas (Zack) Smith, Assistant Manager for Tank Farms, (509) 438-0467.

Sincerely,


Roy J. Schepens
Manager

TPD:PEL

Attachment

cc w/attach:

M. N. Jaraysi, CH2M HILL
S. Harris, CTUIR
S. L. Dahl-Crumpler, Ecology
J. J. Lyon, Ecology
E. R. Skinnerland, Ecology
S. L. (Bud) Derrick, Ecology
M. J. Brown, Ecology
N. Ceto, EPA
Todd Martin, HAB
G. Bonhee, NPT
K. Niles, ODOE
J. B. Hebdon, RL
R. Jim, YN
Administrative Record
Environmental Portal, LMSI

**Attachment
05-TPD-075**

**Request for a Temporary Authorization (TA) to Proceed with Construction at the
Integrated Disposal Facility (IDF)**

(Consisting of 3 pages,
including coversheet)

**REQUEST FOR A TEMPORARY AUTHORIZATION (TA) TO PROCEED WITH
CONSTRUCTION AT THE INTEGRATED DISPOSAL FACILITY (IDF)**

The specific information necessary for the State of Washington Department of Ecology to determine whether a TA may be granted in accordance with Washington Administrative Code (WAC) 173-303-830(4)(c)(ii)(A)(I) is as follows:

1. A description of the activities to be conducted under the TA.

Activities that the U.S. Department of Energy (DOE), Office of River Protection (ORP) and its contractors will conduct under the TA will include:

- Complete construction of the IDF Liner System;
- Construct the Primary leachate collection and removal system; and
- Construct Leachate Handling System (LHS).

2. An explanation of why the TA is necessary.

ORP requests the State of Washington Department of Ecology (Ecology) issue the TA pursuant to the criterion in WAC 173-303-830(4)(e)(iii)(B)(I). That criterion states a permittee may request a TA if it is necessary to achieve the objective of facilitating timely implementation of closure or corrective action activities. Approval of a TA request will enable ORP to maintain its schedule for cleanup and closure of the Hanford Tank Farms, as required by the Hanford Federal Facility Agreement and Consent Order. This schedule is dependent on onsite disposal of mixed low-level waste that will result from cleanup and closure activities.

3. Sufficient information to ensure compliance with the standards in WAC 173-303-280 through 173-303-395, and 173-303-600 through 173-303-680.

Design and construction activities ORP proposed under this TA request will require ORP to comply with WAC 173-303-335, WAC 173-303-640, and WAC 173-303-665, as well as design and construction drawing change control. ORP shall comply with applicable requirements by performing construction and inspection in accordance with design drawings, specifications and the Construction Inspection Plan. ORP and its contractors must implement the Construction Quality Assurance Plan (see appendices 4A, 4B, 4C and 4D DOE/RL-2003-12). The following requirements apply:

DESIGN & CONSTRUCTION DRAWING CHANGE CONTROL

ENGINEERING CHANGE NOTICE (ECN)

During construction of the IDF, changes to the approved designs, plans and specifications the contractors make shall be formally documented with an ECN. All ECNs shall be maintained in the TSD unit-specific Operating Record and shall be made available to Ecology upon request, or during the course of an inspection. The Permittees shall provide to Ecology copies of proposed ECNs affecting any critical system. Identification of critical systems is included in permit condition III.11.C.1. Within five (5) working days, Ecology will review the proposed ECN modifying a critical system, and inform the Permittees whether the proposed ECN, when issued, will require a Class 1, 2, or 3 Permit Modification.

NON CONFORMANCE REPORTING

During construction of the IDF, the contractor shall document any completed work formally that does not meet or exceed the standards of the approved design, plans and specifications using a Nonconformance Report (NCR).

ORP or its contractors shall submit a copy of any NCR to the Ecology representative, as applicable, within five (5) working days of the date that the Permittees become aware of the nonconformance from the approved designs, plans, and specifications in the construction of critical systems, as they are defined in Condition III.11.C.1. If Ecology determines that a nonconformance the Permittee identifies requires a modification of the IDF permit, Ecology will provide written notification to the Permittees within five (5) working days from receipt of the NCR. In the notification, Ecology will inform the Permittees if they will require prior approval before any work proceeds that affects the nonconforming item.

Incorporation of nonconformance from the approved designs, plans, and specifications into the construction of non-critical systems shall be formally documented, with a NCR. All NCRs shall be maintained in the IDF Unit Operating Record and shall be made available to Ecology upon request or during the course of an inspection. If Ecology determines that the nonconformance in a critical system requires a permit modification, Ecology will provide written notification to the Permittees within five (5) working days. In the notification, Ecology will inform the Permittees if they will require prior approval before ORP or contractor work proceeds that affects the nonconforming item.

Liner System: Completion of the liner system will generally include construction of the geosynthetic liners, the operations layer, sumps and piping and placement of drainage gravel.

Leachate Collection and Removal System (LCRS) Sump and Leak Detection System (LDS) Sump: Construction of the LCRS sump will generally include installation of riser pipes, pumps, pressure transducers, and drain rock for removal of leachate from the landfill liner. Construction of the LDS sump will generally include installation of a riser pipe, pump, pressure transducer, and drain rock for removal of leachate from the landfill liner.

LHS: Completion of the LHS will generally include construction of the truck load out facility, leachate transfer building, leachate storage tank, crest pad building, and associated piping and controls.

Construction of the Liner system, LCRS and LDS Sumps, and the LHS will be in accordance with WAC 173-303-640 and WAC 173-303-665 approved design and the construction quality assurance program (WAC 173-303-335), as appropriate. Any changes to design and or specifications will follow the process outlined in the Design & Construction Drawing Change Control section.