



U.S. Department of Energy
Office of River Protection

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0077943

JUN 12 2008

08-ESQ-110

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(Hanford Mailstop: B1-42)

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JUN 16 2008
EDMC

Addressees:

HANFORD SITE AIR OPERATING PERMIT (AOP) NUMBER 00-05-006, RENEWAL 1,
NOTIFICATION OF ADMINISTRATIVE PERMIT AMENDMENT

Reference: Hanford Site Air Operating Permit, Renewal 1, Attachment 2: FF01 Hanford Site
Radioactive Emissions License, Washington State Department of Ecology, dated
December 5, 2007.

The purpose of this letter is to transmit a Hanford Site AOP administrative amendment
(Attachment 1) to clarify the use of hand tools in accordance with As Low As Reasonably
Achievable Control Technology (ALARACT) 5 found at
http://www.ecy.wa.gov/programs/nwp/pdf/aop/Revision%20C/AOP_00-05-006Renewal_1_Rev_C_Attachment2_112007.pdf (Page 762 of 794). The proposed text within
ALARACT 5 (Attachment 2) has been discussed with Mr. J. W. Schmidt, Washington State
Department of Health, on April 25, 2008, and on May 7, 2008. Mr. Schmidt verbally agreed
with the clarifications.

The proposed change to ALARACT 5 of the Hanford Site AOP, "Tank Farm ALARACT
Demonstration Soil Excavation (using hand tools)," has been revised to include the use of hand
tools, as defined, limited to shovels, picks, rakes, etc., and/or an electric demolition hammer with
spade attachment. In addition, the prior reference to HNF-3391, "Justification for Dual Survey
Exemption in Tank Farm Facilities," has been superseded by TWR-4675, "TFC Radiological
Source Term Report Including Technical Basis for Dual Survey Exemption, Revision 4."

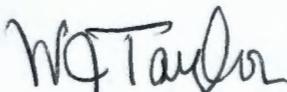
Addressees
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If you have any questions, please contact me, or your staff may contact Dennis W. Bowser, Environmental Division, (509) 373-2566.

Sincerely,


for Shirley J. Olinger, Manager
Office of River Protection

ESQ:DWB

Attachments: (2)

cc w/attachs:

D. W. Hendrickson, Ecology
O. S. Wang, Ecology
N. A. Homan, FHI
J. Schmidt, WDOH Richland Office
Administrative Record
BNI Correspondence
CH2M HILL Correspondence
Environmental Portal, LMSI

H-0-9

cc w/o attachs:

B. G. Erlandson, BNI
R. D. Haggard, BNI
J. C. Fulton, CH2M HILL
C. J. Kemp, CH2M HILL
P. C. Miller, CH2M HILL
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J. Cox, CTUIR
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B. Becker-Khaleel, Ecology
K. A. Conaway, Ecology
S. L. Dahl, Ecology

S. L. Derrick, Ecology
J. L. Hensley, Ecology
J. J. Lyon, Ecology
D. Bartus, EPA (Region 10, Seattle)
D. Zhen, EPA (Region 10, Seattle)
J. A. Bates, FHI
K. A. Peterson, FHI
G. Bohnee, NPT
K. Niles, Oregon Energy
M. F. Jarvis, RL
R. Jim, YN

Attachment 1
08-ESQ-110

Hanford Site Air Operating Permit Administrative Amendment

HANFORD SITE AIR OPERATING PERMIT

NOTIFICATION OF ADMINISTRATIVE PERMIT AMENDMENT Permit Number 00-05-006 Renewal 1

This notification is provided to the Washington State Department of Ecology, Washington State Department of Health, and the U.S. Environmental Protection Agency as notice of an administrative permit amendment described as follows.

This change is allowed pursuant to WAC 173-401-720(1) and WAC 173-401-720(2):

1. Corrects typographical errors,
2. Identifies a change in the name, address, or phone number of any person identified in the permit, or provides a similar minor administrative change at the source,
3. Requires more frequent monitoring or reporting by the permittee,
4. Allows for a change in ownership or operational control of a source where the permitting authority determines that no other change is necessary, provided that a written agreement containing the specific information of the transfer between the current and new permittee has been submitted to the permitting authority,
5. Incorporates into the Chapter 401 permit the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program; provided that the program meets procedural requirements listed in WAC 173-401, and
6. Changes addressed in the administrative permit amendment can be implemented immediately upon submittal.

Provide the following information pursuant to WAC-173-401-720:

Description of the change:

Within ALARACT 5 of the Air Operating Permit, Renewal 1, Revision C, this request presents additional definition of hand tools and updates a reference for dual-survey requirements, along with correcting a sentence truncation.

- (1) Definition of hand tools has been changed to "hand tools, limited to shovels, picks, rakes, etc., and/or an electric demolition hammer with spade attachment." This has been changed in the Description of Activity/Requirements.
- (2) Under Radiological Controls, Item C, the reference from dual survey exemption is no longer within HNF-3391, *Justification for Dual Survey Exemption in Tank Farm Facilities*, and has been changed to TWR-4675, *TFC Radiological Source Term Report Including Technical Basis for Dual Survey Exemption*.
- (3) Under Radiological Controls, Item d, inserted the word "is" to make the sentence complete.
- (4) Under various citations of cm 2 placed the "2" in superscript format.

Submittal Date of Change:

Submittal of letter date.

Describe the emissions from orders approving notice of construction applications processed

under an EPA-approved program; provided that the program meets procedural requirements listed in WAC 173-401:

There will be no increase of criteria, toxicological, or radiological emissions from this amendment from AIR 06-1056

List the terms, conditions, and provisions from orders approving notice of construction applications processed under an EPA-approved program; provided that the program meets procedural requirements listed in WAC 173-401:

ALARACT 5 within Attachment 2, Revision C, of the Hanford Site Air Operating Permit Renewal 1.

For Hanford Site Use Only:

AOP Change Control Number:

Date:

Attachment 2
08-ESQ-110

Revised Wording for ALARACT 5

ALARACT 5

TANK FARM ALARACT DEMONSTRATION SOIL EXCAVATION (using hand tools)

1. Description of Activity/Requirements

Soil is routinely excavated in the tank farm facilities to support riser preparation, repair and maintenance activities, soil sampling, cleanup of contamination, removal of vegetation and biological hazards, and operational activities (laying conduit or cables for power). An initial survey is performed of the area to be excavated. Surveys are performed throughout the excavation to assure that worker safety and environmental protection is maintained. Once the excavation begins, water is used, as necessary, to prevent the spread of dust. To the extent practicable using hand held instrument field survey techniques, the clean soil is separated from the soil identified as contaminated. The contaminated soil has a fixative applied or is covered by plastic at the end of the shift, and as necessary, to stabilize the contaminated soil. The activities covered by this ALARACT demonstration do not include D&D. All radioactively contaminated soil excavation is conducted using hand tools such as shovels, picks, rakes, etc., and/or an electric demolition hammer with spade attachment. No additional motor operated equipment is allowed.

2. Radiological Controls

- a. Follow ALARACT demonstration for "Packaging and Transportation of Waste." (ALARACT 4)
- b. Health physics technician coverage will be performed as specified in the radiological waste permit.
- c. A beta/gamma survey of the ground surface is required prior to excavation in contamination areas (CAs), high-contamination areas (HCAs), soil contamination areas (SCAs), and underground radioactive material areas (URMAs). An alpha survey may be required prior to excavation per the *TWR-4675, TFC Radiological Source Term Report Including Technical Basis for Dual Survey Exemption, Revision 4*.
- d. For excavation in CAs, HCAs, SCAs, and URMAs, if beta-gamma activity is greater than 1000 dpm/probe area (5000 dpm/100cm²) is identified, alpha surveys will also be performed.
- e. Suppressants such as water, fixatives, covers, or windscreens will be used as necessary, including at the end of each shift or when sustained or predicted winds are >20 mph.
- f. Excavation of radioactive material shall not commence if sustained winds are predicted to exceed 20 mph during the work shift.
- g. Excavation of radioactive material shall cease if sustained winds exceed 20 mph. A local wind-speed measurement device may be utilized in lieu of Hanford Meteorological Station readings, provided the reading is taken in an unobstructed location that is representative of the work area. Use of a local device and the measured wind-speed readings taken from it must be documented in the Work Record.
- h. If the net contamination for the general area is greater than 200 dpm/probe area alpha or greater than 500,000 dpm/probe area beta/gamma, stop work, notify Environmental and

Radiological Control, and implement the controls listed below. Once notifications have been made and the following controls implemented, excavation may continue:

Soil shall be wetted prior to excavation if not already damp.

General area workplace air monitoring shall be performed during excavation activities.

Contaminated soil containing >500,000 dpm per probe area beta-gamma or >200 dpm/probe area alpha will be containerized or covered with clean fill if it is to be left for greater than 48 hours.

- i. If soil contamination exceeds 20 mrad/hr (open window reading), work will be stopped. Environmental and Radiological Control notified, and adequacy of controls will be reassessed. Washington State Department of Health (WDOH) will be notified. Work may continue when approved by Environmental and Radiological Control with WDOH concurrence.
- j. If hot specks are detected during the radiological surveys, the specks will be removed and contained before the activity is allowed to continue unless located in the bottom of the trench after excavation has been completed. Specks found in the bottom of the completed trench may be covered with clean fill. A hot speck will be defined as a very small amount (i.e., less than or equal to 100 cm²) of contamination reading greater than or equal to 1,000,000 dpm/probe size beta-gamma and/or greater than or equal to 490 dpm/probe size alpha.

3. **Monitoring**

- a. At a minimum, pre and post-job surveys shall be made
- b. Radiological monitoring shall be in accordance with the latest revision of HNF-5183, Tank Farms Radiological Control Manual

4. **Records/Documentation**

- a. Work package
- b. Radiological work permit
- c. Radiological survey report(s)

5. **Emission Pathway**

- a. Existing passive (fugitive/diffuse)

6. **Facility Description**

- a. All tank farm facilities