



LB# 4266

AIR 15-113
ALARACT 06.2

STATE OF WASHINGTON
DEPARTMENT OF HEALTH
OFFICE OF RADIATION PROTECTION
309 Bradley Blvd., Suite 201 • Richland, Washington 99352
TDD Relay Service: 1-800-833-6388

January 22, 2015

CERTIFIED MAIL

7011 2000 0002 2834 8686

Mr. Kevin W. Smith, Manager
United States Department of Energy
Office of River Protection
P.O. Box 450, MSIN: H6-60
Richland, Washington 99352

Dear Mr. Smith:

Pursuant to Chapter 246-247 of the Washington Administrative Code (WAC), your revised application will be approved according to the enclosed As Low as Reasonably Achievable Control Technology (ALARACT) Demonstration revision for:

**ALARACT 06.2: Tank Farm ALARACT Demonstration for Pit Access
(Revision 06.2 replaces 06.1)**

The Washington State Department of Health (DOH) considers the conditions, controls, monitoring requirements, and limitations of this ALARACT Demonstration integral to approval of your application.

This approval shall take effect, and a final approval letter issued, twenty-eight (28) days after you receive it unless you apply for an adjudicative proceeding, as described below.

If you accept the conditions and limitations of this approval and do not wish to apply for an adjudicative proceeding, but wish to proceed under this approval before the 28 days have elapsed, please notify us in writing and the DOH will issue the final approval letter. Your notice should be mailed or faxed to:

DOH – Office of Radiation Protection
Radioactive Air Emissions Section
309 Bradley Blvd., Suite 201
Richland, Washington 99352
FAX: (509) 946-0876



If there are concerns with the conditions and limitations of the approval, please notify the DOH. If attempts to resolve the concerns fail, the DOH will deny your application and you may contest the conditions and limitations of this approval, within 28 days of receipt, by filing the enclosed Request for Adjudicative Proceeding or a document providing substantially the same information with the DOH, Adjudicative Service Unit (ASU), in a manner that shows proof of service on the ASU. The ASU's address is:

DOH - Adjudicative Service Unit
310 Israel Road SE
P.O. Box 47879
Olympia, Washington 98504-7879

You must include a copy of this approval with your application. FILING SHALL NOT BE DEEMED COMPLETE UNTIL THE ADJUDICATIVE SERVICE UNIT ACTUALLY RECEIVES YOUR APPLICATION.

If you have any questions regarding this draft approval, please contact Crystal Mathey at (509) 946-5216.

Sincerely,



for John Martell, Manager
Radioactive Air Emissions Section

Enclosures: (1) ALARACT Revision 06.2
(2) Request for Adjudicative Proceeding

cc: Ruth Allen, WRPS
Matthew Barnett, PNNL
Lucinda Borneman, WRPS
Lee Bostic, BNI
Dennis Bowser, USDOE-ORP
Cliff Clark, USDOE-RL
Jack Donnelly, WRPS
Rick Engelmann, CHPRC
Dennis Faulk, EPA
Gary Fritz, MSA
Phil Gent, Ecology
Robert Haggard, BNI
Dale Jackson, USDOE-RL
Jessica Joyner, WRPS
Reed Kaldor, MSA
Paul Karschnia, CHPRC
Ed MacAlister, USDOE-RL
Crystal Mathey, WDOH
Valarie Peery, Ecology
Maria Skorska, Ecology
Bryan Trimberger, USDOE-ORP
Randy Utley, WDOH
Jeff Voogd, WRPS
Joan Woolard, MSA
Davis Zhen, EPA
Environmental Portal
RAES Tracking: Line# 1028; ALARACT 6

ALARACT 06.2

TANK FARM ALARACT DEMONSTRATION FOR PIT ACCESS

1. Description of Activity

This ALARACT demonstration applies to all pits, caissons, and filter pits which have the potential for exposing tank waste to the pit environment, except 241-ER-152, 241-S-151, 241-UX-154, 241-TX-154, 244-CR Vault DCRT, 244-A Lift Station DCRT, and 244-TX DCRT which must follow an approved Notice of Construction.

If the work activities are such that they can be performed without removal of the pit covers, the controls listed in this ALARACT demonstration do not apply. Instead, the work shall be performed using appropriate controls from the latest revision of HNF-5183, "Tank Farms Radiological Control Manual" and the latest revision of TFC-ESHQ-RP_RWP_C-02, "Radiological Containment". Activities which may be conducted in this manner include pit videos/borosopes, filling seal loops, valve handle change-out, pit wash-downs or other decontamination activities, fixative application, radiological surveys, remote operation of pit drains, leak detector troubleshooting or change-out, pit drain leak rate tests, core drilling cover blocks and removal or insertion of gas sampling lines. Any activity not included in the list must be approved by WDOH on a case-by-case basis.

Pits that do not have the potential for exposing tank waste to the pit environment do not require implementation of ALARACT controls for entry. Examples include flush pits, service pits, annulus pump pits and leak detection pits. These pits shall be accessed using appropriate controls from the latest revision of HNF-5183, "Tank Farms Radiological Control Manual" and the latest revision of TFC-ESHQ-RP_RWP-C-02, "Radiological Containment".

PREPARATION WORK:

A pre-job survey is performed on the exterior surface of the pit and the surrounding area.

A splashguard (monitorable surface) is installed around the pit.

Before the pit covers are removed, an approved fixative may be applied inside the pit and/or the pit may be decontaminated. These processes are generally performed through an access port. If there is no access port(s), the pit covers are raised and suspended to provide access. A radiological survey is performed, and/or fixative may be applied inside the pit. The pit covers are then removed when necessary to perform work inside the pit. With the pit covers off, additional decontamination activities may include the use of chemicals, peel and strip paints, water, or manual scrub brushes.

A temporary or permanent cover is installed over the pit if ever left unattended.

After all activities in the pit are completed, the pit covers are reinstalled and the splashguard is removed.

Laydown area:

If work is not feasible to be performed in a pit, equipment may be removed from the pit and placed in an adjacent laydown area. The laydown area will border the pit and be monitored for contamination. Examples for when a laydown area may be used include wrapping equipment (e.g. jumpers, valves, pumps, sump pumps, cover blocks, cover plates), replacing equipment (e.g. gaskets, leak detectors, valves, funnels, piping, jumpers), and other repairs on equipment.

2. Controls

a. Follow ALARACT demonstration for "Riser Preparation/Opening" (ALARACT 1).

b. Follow ALARACT demonstration for "Packaging and Transportation of Waste" (ALARACT 4).

c. The pit covers are lifted and contained if the removable contamination level is greater than 50,000 disintegrations per minute (dpm)/100 square centimeters (cm²) beta-gamma and 70 dpm/100cm² alpha and moved to a storage area.

d. Uniformly distributed removable contamination levels within the pit are decontaminated to less than 100,000 dpm/100cm² beta-gamma and 2,000 dpm/100cm² alpha by washing and/or applying an approved fixative. A device to reduce contamination may be inserted through an opening in the pit to reduce contamination by applying water and/or fixative into the pit. An approved fixative will be applied to pit surfaces if contamination levels exceed the limits stated above or as needed.

Note: The fixative will adhere to the contamination to ensure minimization of potential airborne contamination.

e. Swipes will be taken on the splashguard surface facing the interior of the pit and the laydown area. Splash guards and laydown area are to be maintained below 50,000 dpm/100cm² beta-gamma and 70 dpm/100cm² alpha.

f. Use a splashguard extending to the edge of the pit. The splashguard will be taped or sealed to the edge of the pit. If it is not feasible to seal the splashguard to the edge of the pit, an additional rail will be installed at the base of the handrail and the splashguard will be taped or sealed to that bottom rail or sealed to the matting or groundcover around the pit. This rail will be as close as possible to the pit edge. A ground cover is then placed around the edge of the pit and extends under the bottom rail. Alternative configurations for splashguards are listed below in f.(a).

f.(a). Alternative configurations for the splashguard include:

1. For above ground pits, the pit wall may be used as the splashguard and the groundcover will be secured to the top of the pit wall and draped over the exterior side of the pit wall and on the ground around the pit.

2. For above ground pits, the splashguard may extend from the inside of the pit wall in addition to being draped over the outside of the pit wall.

3. For pits that are partially above grade, an alternative is to use a combination of pit wall and railing to support the splashguard.

4. In cases where a weather enclosure is placed around the pit, the interior of the weather enclosure may be used as the splashguard.

5. A single or double gate may be placed in the splashguard to allow pit access.

6. If a laydown area is used the area will be covered by plastic to form a base layer and enclosed within a splash guard. A layer of matting will then be used to protect the base or barrier layer.

Note: Additional layers of plastic may be placed on top of the matting to wrap equipment when needed.

The splash guard and plastic would control the spread of any contamination outside the laydown/wrapping area and the matting will ensure that the base plastic layer remains intact. The laydown area may be located next to the pit with a single splash guard around both areas. Single or double gates may be placed in the splashguard for access purposes.

f.(b) In instances where the splashguard and the pit equipment are in close proximity, a slit or flap may be installed in the splashguard. The slit or flap will be sealed when not in use and can only be used for short periods of time (typically less than an hour) and when no other pit activities that could displace contamination are occurring unless the opening in the splashguard is closed.

1. The time that the slits or flaps are open shall be minimized.
2. Slits and flaps shall be sealed when not in use.
3. No activities which have the potential to disturb removable contamination greater than 5,000 dpm/100cm² beta-gamma and/or greater than 70 dpm/100cm² alpha, shall occur when the flaps or slits are open.

g. If sustained wind speeds are >25 miles per hour (mph), then do not open pits.

h. A local wind speed device may be utilized in lieu of Hanford Meteorological Station readings, if local wind speed readings are taken in an unobstructed location representative of the work area.

i. A local wind speed device is used to measure wind speeds, then the use of the local wind speed device and the measured wind speed readings must be documented in the Work Record.

j. HPT coverage will be performed as specified in the Radiological Work Permit.

k. Use approved Containment Selection Guide, Attachment A, found in the latest revision of TFC-ESHQ-RP_RWP_C-02, Radiological Containment.

l. Active ventilation may be utilized in accordance with the PTRAEU NOC.

m. Core drilling through a pit cover (cover block or cover plate) shall be performed in accordance with contamination controls as specified in the latest revision of HNF-5183, Tank Farms Radiological Control Manual and the latest revision of TFC-ESHQ-RP_RWP_C-02, Radiological Containment and below:

1. Verify fixed and removable contamination is less than 5,000 dpm/100cm² beta-gamma and less than 70 dpm/100cm² alpha in the area to be core drilled or decontaminate to below these levels utilizing non-vigorous hand methods (wiping or scraping) in areas to be core drilled.

2. If decontamination is unsuccessful, cover the area to be core drilled with fixative or tape (tape must be substantial, such as duct tape) minimizing the potential of airborne contamination during the initial drilling.

3. Ensure drill bit is kept wet during core drilling.

4. Verify fixed and removable contamination is maintained less than 5,000 dpm/100cm² beta-gamma and less than 70 dpm/100 cm² alpha during and after core drilling.

n. Radiologically contaminated material with removable contamination greater than 50,000 dpm/100cm² beta-gamma and greater than 70 dpm/100cm² alpha left in the laydown area must be wrapped if left

unattended.

o. The pit covers are lifted and contained if the removable contamination level is greater than 50,000 dpm/100cm² beta-gamma and 70 dpm/100cm² alpha and moved to a storage area.

p. A temporary or permanent cover is placed over the pit if the pit is ever left unattended.

3. Monitoring

a. At a minimum, pre and post-job contamination surveys (smears) shall be taken.

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 non-point source.

6. Facility Description

a. This ALARACT demonstration applies to all Tank Farm pits except 241-ER-152, 241-S-151, 241-UX-154, 241-TX-154, 244-CR Vault DCRT, 244-A Lift Station DCRT, and 244-TX DCRT.

**STATE OF WASHINGTON
DEPARTMENT OF HEALTH
ENVIRONMENTAL HEALTH PROGRAMS
OFFICE OF RADIATION PROTECTION**

Docket No:
REQUEST FOR ADJUDICATIVE PROCEEDING

In Re The Approval of:
ALARACT 06.2, "Tank Farm ALARACT Demonstration for Pit Access" (replaces ALARACT 06.1)

Draft Approval No: **AIR 15-113**

THE STATE OF WASHINGTON TO:

**Mr. Kevin W. Smith, Manager
United States Department of Energy
Office of River Protection
P.O. Box 450, MSIN: H6-60
Richland, Washington 99352-0450**

If you wish to request an adjudicative proceeding, you or your attorney must COMPLETE AND FILE THIS FORM OR A DOCUMENT PROVIDING SUBSTANTIALLY THE SAME INFORMATION WITH THE DEPARTMENT OF HEALTH ADJUDICATIVE SERVICE UNIT WITHIN TWENTY-EIGHT (28) DAYS OF YOUR RECEIPT of this Request for Adjudicative Proceeding form and a copy of the Office of Radiation Protection's approval, **AIR 15-113**.

You must file your application in a manner that shows proof of service on the Adjudicative Service Unit, at the following address:

Department of Health
Adjudicative Service Unit
310 Israel Road S.E.
P.O. Box 47879
Olympia, WA 98504-7879

With your application, you must include a copy of the Office of Radiation Protection's approval.

FILING SHALL NOT BE DEEMED COMPLETE UNTIL THE ADJUDICATIVE SERVICE UNIT ACTUALLY RECEIVES YOUR APPLICATION.

YOU HAVE THE RIGHT TO a formal hearing in this matter conducted pursuant to Revised Code of Washington (RCW) 43.70.115, Chapter 34.05 RCW, and Chapter 246-10 of the Washington Administrative Code (WAC). Alternatively, you may waive the formal hearing and submit a written statement and supporting documents setting out your position, your defenses, and any mitigating circumstances that you wish to bring to the Department's attention.

You have the right to be represented by an attorney at your own expense.

I.

I **WILL BE** represented by an attorney. His/her name, address, and phone number are:

Name:

Address:

Phone:

I **WILL NOT BE** represented by an attorney.

If after submitting this request, you obtain attorney representation or change attorneys, you must notify the Adjudicative Service Unit.

II.

I **DO NOT** waive my right to a formal hearing.

I **DO** waive my right to a formal hearing. I understand that if I waive my right to a formal hearing, the Department may decide this matter solely with reference to information in the Department's possession and to such written statements and supporting documents as I may have submitted.

If you choose to waive your right to a formal hearing, please complete the following:

I **AM NOT** submitting documents to the Department in support of my position.

I **AM** submitting a sworn statement and/or other documents to the Department in support of my position. Instructions - Please indicate your responses below:

If you are submitting documents to the Department, please list and briefly identify all such documents in the space provided below and on any additional sheet that may be necessary.

III.

ADMISSION/DENIAL OF CONDITIONS OR LIMITATIONS

The Office of Radiation Protection's approval AIR 15-113, dated January 22, 2015, contains conditions and limitations set out as numbered paragraphs. In the space below you must indicate, in good faith, whether you admit, or do not contest, or deny the conditions or limitations. Conditions or limitations denied or not contested may later be admitted. Conditions or limitations admitted or not contested shall be conclusively deemed true for further proceedings.

Instructions: I admit, deny, or do not contest the conditions or limitations as follows
(fill in the appropriate paragraph number):

	<u>Admit</u>	<u>Deny</u>	<u>Do Not Contest</u>
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]
Paragraph _____	[]	[]	[]

Please attach any additional sheets that may be necessary to respond to all allegations.

If you have chosen not to waive your rights to a formal hearing, please state all grounds for contesting this matter in the space provided below and on any additional sheets that may be necessary.

IV.

You have the right to an interpreter, appointed at no cost, if you are a hearing impaired person or limited English speaking person. If any witness for you is a hearing impaired person or a limited English speaking person, an interpreter will be appointed at your expense.

I [DO] / [DO NOT] (circle one) request an interpreter be appointed. If an interpreter is requested, please indicate the person or persons for whom an interpreter is required and their primary language, and/or whether they are hearing impaired.

IF YOU FAIL TO FILE YOUR APPLICATION IN A TIMELY MANNER, OR IF YOU FILE YOUR APPLICATION TIMELY BUT FAIL TO APPEAR AT ANY SCHEDULED SETTLEMENT CONFERENCE, PREHEARING CONFERENCE, OR HEARING WITHOUT LEAVE TO DO SO, THE DEPARTMENT MAY DECIDE THIS MATTER WITHOUT YOUR PARTICIPATION AND WITHOUT FURTHER NOTICE TO YOU.

DATED this _____ day of _____,

Party

Party's Representative (if any)

WSBA #: _____