Emission Unit ID: 443

300 300 Area Emissions

300 Area Diffuse/Fugitive

This is a MINOR, FUGITIVE, non-point source emission unit.

300 Diffuse/Fugitive Emissions

Abatement Technology ALARACT WAC 246-247-040(4)

state only enforceable: WAC 246-247-010(4), 040(5), 060(5)

Zone or Area	Abatement Technology	Required # of Units	Additional Description
	Administrative Controls		Abatement controls as required in the following Conditions and Limitations.

Monitoring Requirements

state enforceable: WAC 246-247-040(5), 060(5), and federally enforceable: 40 CFR 61 subpart H

Federal and State Regulatory	Monitoring and Testing Requirements	Radionuclides Requiring Measurement	Sampling Frequency
WAC 246-247-075(3)	Appendix B, Method 114	Each radionuclide that could contribute greater than 10 percent of the potential-to-emit TEDE	Per the sitewide ambient monitoring program

Sampling Requirements Per the sitewide ambient monitoring program samples will be collected from the existing near-facility monitoring stations

Additional Requirements

See Section 5 of the general conditions in this license for additional information.

Additional monitoring or sampling requirements established by this License will be listed in the Conditions and Limitations section, if applicable.

Operational Status Diffuse and fugitive emissions are generally associated with sources that are not actively ventilated such as inactive buildings or excavation activities. This emission unit (300 Area Diffuse/Fugitive) is an ongoing source of emissions.

This Emission Unit has 2 active Notice(s) of Construction.

Project Title	Approval No	Date Approved	NOC_ID
Operation of the Radiological Counting Facility	AIR 06-639	7/5/2006	675

Conditions (state only enforceable)

1) The total abated emission limit for this Notice of Construction is limited to 1.40E-03 mrem/year to the Maximally Exposed Individual (WAC 246-247-040(5)).

2) This approval applies only to those activities described below. No additional activities or variations on the approved activities that constitute a "modification" to the emission unit, as defined in (WAC 246-247-030(16)) may be conducted.

The radiological analyses performed in the RCF are used to identify the need for additional analyses and worker protection or operational decisions. Various types of sample media are prepared and analyzed including soil, groundwater, filters, smears, and miscellaneous materials (e.g., pipe, concrete, clothing, oil, and surface water). In addition, a limited number of radiological standards are prepared each year in the RCF. Each sample is field screened and labeled prior to acceptance into the RCF. The annual sample load through the RCF is expected to be less than 2000 liters of soil, solid, liquid and miscellaneous samples per year. This does not include smears, air filters or any other sample that does not require invasive sample preparation techniques. Sample logs and facility operators verify the annual sample load. The facility acceptance criteria for samples requiring invasive preparation is 5 mrem/hour or less on contact.

Sample preparation typically involves physical processes (e.g., evaporation of liquids, wet ball milling of soils and other solids), mounting of air filters and other smears, and depositing the prepared material on planchets prior to counting rather than radiochemistry. Sample preparation activities may be conducted in an enclosure (e.g., glove bag), depending on the sample activity level or contaminants determined by field screening.

3) The PTE for this project as determined under WAC 246-247-030(21)(a-e) [as specified in the application] is 1.41E-03 mrem/year. Approved are the associated potential release rates (Curies/year) of:

Alpha - 0	6.36E-06	Liquid/Particulate Solid	WAC 246-247-030(21)(a)
Alpha release rate based on Am-241.			
B/G - 0	4.31E-05	Liquid/Particulate Solid	WAC 246-247-030(21)(a)
Beta/Gamma release rate based on Cs-137.			

The radioactive isotopes identified for this emission unit are (no quantities specified):

Am - 241	Am - 243	C - 14	Co - 60	Cs - 137
Eu - 152	Eu - 154	Eu - 155	H - 3	Ni - 63
Pu - 234	Pu - 238	Pu - 239	Pu - 240	Pu - 241
Pu - 242	Ra - 226	Ra - 228	Sr - 90	Tc - 99
Th - 228	Th - 232	U - 234	U - 235	U - 236
U - 238				

The potential release rates described in this Condition were used to determine control technologies and monitoring requirements for this approval. DOE must notifiy the Department of a "modification" to the emission unit, as defined in WAC 246-247-030(16). DOE must notify the Department of any changes to a NESHAP major emission unit when a specific isotope is newly identified as contributing greater than 10% of the potential TEDE to the MEI, or greater than 25% of the TEDE to the MEI after controls. (WAC 246-247-110(9)) DOE must notify the Department of any changes to potential release rates as required by state or federal regulations including changes that would constitute a significant modification to the Air Operating Permit under WAC 173-401-725(4). Notice will be provided according to the particular regulation under which notification is required. If the applicable regulation(s) does not address manner and type of notification, DOE will provide the Department with advance written notice by letter or electronic mail but not solely by copies of documents.

4) It is recognized that other radionuclides may be present in very limited quantities.

5) Radiological material is controlled through the use of standard radiological control procedures. Sample activities at the Radiological Counting Facility are conducted under a radiological work permit. Samples are opened in a small contamination area (CA) that is established just prior to opening the sample. After sample handling activities (e.g., sample preparation or counting) are completed, the area is surveyed and the CA is removed.

6) The facility must maintain a log for this activity or emission unit per (WAC 246-247-060(5)).