



U.S. Department of Energy

Hanford Field Office
P.O. Box 550
Richland, Washington 99352

December 17, 2024

24-ECD-0192

Mr. David Bray
Air and Radiation Branch Manager
U.S. Environmental Protection Agency
Region 10
1200 Sixth Avenue, Suite 155, AWT-07
Seattle, Washington 98101

Ms. Stephanie Schleif
Program Manager
Nuclear Waste Program
Washington State Department of Ecology
3100 Port of Benton Boulevard
Richland, Washington 99354

Addressees:

NOTIFICATION OF AN OFF-PERMIT CHANGE TO INCLUDE TSCR HVAC ENGINE AT TANK FARMS IN THE HANFORD SITE AIR OPERATING PERMIT, PERMIT NUMBER 00-05-006

The U.S. Department of Energy, Hanford Field Office (HFO) submits the attached off-permit change notification to include the Tank-Side Cesium Removal (TSCR) heating, ventilation, and air conditioning (HVAC) engine to the Hanford Air Operating Permit (AOP).

A diesel engine is needed to power a generator in support of the TSCR project. This generator will be in place for the life of TSCR to run the HVAC unit. The engine used will not exceed an aggregate maximum power output of 50 horsepower, which is equivalent to approximately 127,000 BTU/hr. Accordingly, this change is exempt from new source review and notice of construction requirements per Washington Administrative Code 173-400-110(4)(c)(iv).

The Notification of Off-Permit Change is being submitted to the Washington State Department of Ecology for its administration of the Hanford AOP, and to the U.S. Environmental Protection Agency, Region 10, as part of the notification process for off-permit changes outlined in the Hanford AOP.

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If you have any questions, please contact me, or you may contact Corey Low, Acting Assistant Manager for Safety and Environment, at (509) 376-4820.

Sincerely,

Brian T.
Vance

 Digitally signed by Brian
T. Vance
Date: 2024.12.17
17:30:22 -08'00'

Brian T. Vance
Manager

ECD:BRT

Attachment:
Notification of Off-Permit Change to
TSCR HVAC Engine

cc w/attach:
F. J. Carleo, HMIS
J. M. McAuley, EPA (Region 10)
M. F. Williams, Ecology
Administrative Record
WRPS Correspondence
Environmental Portal, G3-35

cc w/o attach:
T. G. Beam, WRPS
S. D. Bolling, WRPS
C. Buck, Wanapum
L. Contreras, YN
S. L. Dahl-Crumpler, Ecology
J. T. Hamilton, WRPS
M. Murphy, CTUIR
A. Smith, NPT

Attachment
24-ECD-0192

Notification of Off-Permit Change

(4 pages including cover sheet)

NOTIFICATION OF OFF-PERMIT CHANGE
Permit Number: 00-05-006, Renewal 2

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

The following changes are allowed pursuant to WAC 173-401-724(1), WAC 173-401-724(2), and WAC 173-401-724(6):

1. Change is not specifically addressed or prohibited by the AOP terms and conditions;
2. Change does not weaken the enforceability of the existing AOP conditions;
3. Change is not a Title I modification or subject to the acid rain requirements under Title IV of the FCAA;
4. Change meets all applicable requirements and does not violate an existing permit term or condition;
5. Change has complied with applicable preconstruction review requirements established pursuant to RCW 70.94.152.

Description of the change:	
<p>Discharge Point: TSCR HVAC Engine 200 East Area, Building 241AP26 Diesel engine used to power TSCR HVAC unit.</p> <p>A diesel engine is needed to power a generator in support of the Tank-Side Cesium Removal (TSCR) project. This generator will be in place for the life of TSCR to run the HVAC unit. The engine used will not exceed an aggregate maximum power output of 50 horsepower, which is equivalent to approximately 127,000 BTU/hr. Accordingly, this change is exempt from new source review and notice of construction requirements per WAC 173-400-110(4)(c)(iv). Engine specifics are provided below:</p>	
Engine Type	4-Cycle, In-Line, 4-Cylinder, Diesel
Regulatory Category	Non-Emergency Stationary
Model Year	2024
Displacement (per cylinder)	2.2 L
Maximum Power Output	40.2 HP (19<=kW<37)
Fuel Type	Compression Ignition
Date of change: (To be provided in the agency approval order.)	
Upon submittal to the Washington State Department of Ecology.	

Describe the emissions resulting from the change:

The engine will comply with the requirements of 40 CFR 60, Subpart III – Standards of Performance for Stationary Compression Ignition Internal Combustion Engines. The engine will be certified by the manufacturer as meeting the emission standard from 40 CFR 1039 – Control of Emissions From New And In-use Nonroad Compression-Ignition Engines greater than or equal to 19 kilowatts and less than 37 kilowatts as provided below:

Certified NMHC + NO _x , if applicable	4.7 g/kW-hr
Certified CO	5.5 g/kW-hr
Certified PM	0.03 g/kW-hr

Describe the new applicable requirements that will apply as a result of the change:

(To be provided in the agency approval order.)

The following applicable requirements are proposed and are consistent with the content and formatting in AOP 00-05-006, Renewal 3, for similar Discharge Points.

Requirement Citation: NSPS Subpart III

Condition Approval

Condition:

(1) Non-methane hydrocarbons (NMHC) and nitrogen oxides (NO_x) emission limit of 4.7 g/kW-hr.

(2) Carbon monoxide (CO) emission limit of 5.5 g/kW-hr.

(3) Particulate matter (PM) emission limit of 0.03 g/kW-hr.

Compliance Requirement:

(1) Compliance will be demonstrated by (A) operating and maintaining the engine and control devices according to the manufacturer's emission-related written instructions and (B) change only those emission-related settings that are permitted by the manufacturer.

(2) If engine is not installed, configured, operated, maintained, and controlled according to manufacturer's emission related written instructions, or if emission-related settings are changed in a way that is not permitted by the manufacturer, compliance must be demonstrated by keeping a maintenance plan and records of conducted maintenance to demonstrate compliance and must, to the extent practicable, maintain and operate the engine in a manner consistent with good air pollution control practices for minimizing emissions. In addition, if the engine is not installed, configured and controlled according to manufacturer's emission-related written instructions, or if the emissions related settings are changed in a way that is not permitted by the manufacturer, the operator must conduct an initial performance test to demonstrate compliance with the applicable emissions standards within 1 year of such action.

Required Records:

(1) Manufacturer's maintenance or operation manual

(2) Developed maintenance plan, if applicable

(3) Performance test, if applicable

(4) Documentation of maintenance performed

(5) Hours of operation

State-Only: No

Calculation Model: Not applicable

Condition Approval

Condition: Use of fuel per 40 CFR 80.510(b). [40 CFR 60.4207(b)]

Periodic Monitoring: Compliance will be demonstrated by use of fuel containing no greater than 0.0015 weight percent sulfur (15 parts per million by weight).

Test Method: Not applicable

Test Frequency: Not applicable

Required Records: Vendor certification for diesel fuel sulfur content for all purchases.

State-Only: No

Calculation Model: Not applicable