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OFFICE OF RIVER PROTECTION

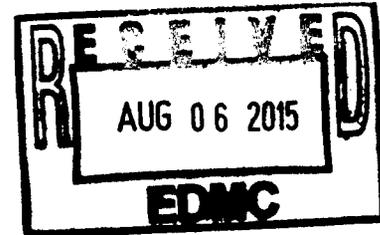
P.O. Box 450, MSIN H6-60
Richland, Washington 99352

AUG 06 2015

15-ECD-0033

Ms. Jane A. Hedges, Program Manager
Nuclear Waste Program
Washington State
Department of Ecology
3100 Port of Benton Blvd.
Richland, Washington 99354

Mr. Donald Dossett, Unit Manager
Office of Air and Toxics
U.S. Environmental Protection Agency
1200 Sixth Ave.
Seattle, Washington 98101



Addressees:

HANFORD SITE AIR OPERATING PERMIT NOTIFICATION OF OFF-PERMIT CHANGE FOR DIESEL ENGINES USED AT THE WASTE TREATMENT AND IMMOBILIZATION PLANT MATERIAL HANDLING FACILITY

Attached for your review is the Notification of Off-Permit Change for four diesel engines supporting construction activities at the Waste Treatment and Immobilization Plant (WTP) Material Handling Facility (MHF). This change will incorporate two engines located at the WTP MHF South-40 Laydown Area into the Hanford Site Air Operating Permit (AOP) and remove two engines from the AOP previously located at the MHF North-10 Laydown Area.

The two diesel engines being incorporated into the AOP have operated in the MHF laydown areas as "non-road" engines per WAC 173-400-030(56). However, review of future use plans determine that the units have the potential to remain in the same location for greater than one year and no longer meet the definition of non-road engines. The engines would therefore operate as stationary engines subject to 40 CFR 63, Subpart ZZZZ, National Emission Standard for Hazardous Air Pollutant for Stationary Reciprocating Internal Combustion Engines. Per WAC 173-401-530(2)(a), the stationary engines cannot qualify as insignificant emission units, because each is subject to the National Emission Standard for Hazardous Air Pollutant. Therefore, these engines are identified for incorporation into the AOP.

The two diesel engines being removed from the AOP were previously operated as stationary engines at the MHF North-10 Laydown Area. Due to operational activity in the North-10 Laydown Area, the engines have been removed and repurposed for non-road engine use to support MHF South-40 Laydown Area operations.

Addressees
15-ECD-0033

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AUG 06 2015

This notification is submitted per the requirements of WAC 173-401-724, consistent with Washington State Department of Ecology's role as permitting authority for the Hanford Site AOP. I certify this document was prepared in accordance with applicable requirements as required by the WTP Contract [DE-AC27-01RV14136, Section H.26, Environmental Permits, paragraph (g)].

If you have any questions, please contact Dennis W. Bowser, Environmental Compliance Division, (509) 373-2566.



Kevin W. Smith
Manager

ECD:DWB

Attachment

cc w/attach:

B.G. Erlandson, BNI
R.G. Haggard, BNI
P.M. Gent, Ecology
R.A. Kaldor, MSA
Administrative Record
BNI Correspondence
Environmental Portal, LMSI

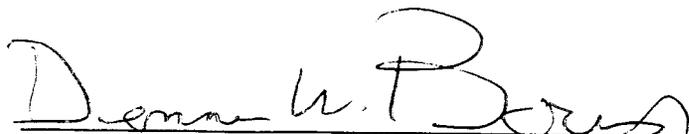
cc w/o attach:

J. Cox CTUIR
S. Harris, CTUIR
D. Zhen, EPA (Region 10, Seattle)
G. Bohnee, NPT
K. Niles, Oregon energy
E.T. Faust, RL
D.R. Hildebrand, RL

Attachment
15-ECD-0033
(5 Pages)

Hanford Site Air Operating Permit
Notification of Off-Permit Change

Permit Number 00-05-006, Renewal 2, Rev. B


Dennis W. Bowser
Dennis W. Bowser

HANFORD SITE AIR OPERATING PERMIT

Notification of Off-Permit Change

Permit Number: 00-05-006, Renewal 2, Rev. B

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

This change is allowed pursuant to WAC 173-401-724(1,2) as:

1. Change is not specifically addressed or prohibited by the permit terms and conditions
2. Change does not weaken the enforceability of the existing permit conditions
3. Change is not a Title I modification or a change 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.

The following information is provided pursuant to WAC-173-401-724(3):

Description of the change:

The following two engines, #1 and #2, are used to support activities associated with the Hanford Tank Waste Treatment and Immobilization Plant (WTP) Material Handling Facility (MHF) laydown yard. In previous years, the engines were operated as “non-road” engines. Review of future needs show that they have the potential to remain in the same location for more than 12 consecutive months and the non-road engine designation would no longer apply per WAC 173-400-030(56). As stationary sources, the engines will not be subject to a new source review (NSR) per WAC 173-400-110, and submittal of a Notice of Construction (NOC) application is not required. Instead, the engines are exempt from this requirement per WAC 173-400-110(4)(c)(iv), because the diesel fuel used contains less than 0.05% sulfur (0.0015% sulfur fuel is used) and the aggregate heat input for each location is less than 1,000,000 Btu per hour (Btu/hr). The heat input capacities were estimated using EPA’s AP-42, Chapter 3.3, Table 3.3-1 average brake horsepower-specific fuel consumption of 7,000 Btu/hp-hr.

Per WAC 173-401-530(2)(a), the engines cannot qualify as insignificant emission units because they are subject to NESHAP Subpart ZZZZ. Therefore, this notification of off-permit change is submitted to the Washington State Department of Ecology (Ecology) per WAC 173-401-724 to incorporate engines #1 and #2 into the Hanford Site Air Operating Permit (AOP) 00-05-006, Renewal 2. The engines’ details include:

Engine #1: WTP MHF South-40 Laydown Yard Laborers Tent

General Information	
Description	Diesel engine powered light tower/generator
Location	WTP MHF South-40 Laydown Yard Laborers Tent
Engine Specifications	
Make/Model	Amida/LT7080D-6MH
Model Year	2002
Maximum power output	15.5 HP
Fuel Type	0.0015% Ultra-Low Sulfur Diesel (ULSD)
Heat input capacity	108,500 Btu/hr
Regulatory Status	
WAC 173-400	Exempt from New Source Review per WAC 173-400-110(4)(c)(iv)
WAC 173-401	Subject to Hanford Site AOP per WAC 173-401-530(2)(a)
40 CFR 60, Subpart IIII	Exempt per 40 CFR 60.4200(a)(2)
40 CFR 63, Subpart ZZZZ	Subject per 40 CFR 63.6590(a)(1)(ii)

Engine #2: WTP MHF South-40 Laydown Yard Warm-up/Cool-down Tent

General Information	
Description	Diesel engine powered light tower/generator
Location	WTP MHF South-40 Laydown Yard Warm-up/Cool-down Tent
Engine Specifications	
Make/Model	Amida/AL5080D-4MH
Model Year	2004
Maximum power output	12 HP
Fuel Type	0.0015% ULSD
Heat input capacity	84,000 Btu/hr
Regulatory Status	
WAC 173-400	Exempt from New Source Review per WAC 173-400-110(4)(c)(iv)
WAC 173-401	Subject to WAC 173-401-530(2)(a)
40 CFR 60, Subpart IIII	Exempt per 40 CFR 60.4200(a)(2)
40 CFR 63, Subpart ZZZZ	Subject per 40 CFR 63.6590(a)(1)(ii)

The following two WTP MHF engines #3 and #4 are currently included in the Hanford Site Air Operating Permit (AOP) 00-05-006, Renewal 2, Rev. B, Attachment 1, Table 1.4 as stationary engines. Due to changes in WTP MHF operations, the North-10 Laydown Area no longer requires a diesel engine power source. As a result, the engines were removed and have been repurposed for non-road engine use throughout the MHF.

As non-road engines per WAC 173-400-030(56), the units are not subject to the stationary engine requirements of 40 CFR 63, Subpart ZZZZ, and therefore, qualify as Insignificant Emission Units (IEU's) per WAC 173-401-533 (2)(g). As IEU's, the engines do not require identification in the AOP.

Engine #3: WTP MHF North-10 Laydown Area 1 of 2

General Information	
Description	Diesel engine powered light tower
Location	WTP MHF North-10 Laydown Yard
Engine Specifications	
Make/Model	Amida/AL5080D-4MH
Model Year	2001
Maximum power output	12 HP
Fuel Type	0.0015% ULSD
Heat input capacity	84,000 Btu/hr

Engine #4: WTP MHF North-10 Laydown Area 2 of 2	
General Information	
Description	Diesel engine powered light tower
Location	WTP MHF North-10 Laydown Yard
Engine Specifications	
Make/Model	Amida/AL5080D-4MH
Model Year	2001
Maximum power output	12 HP
Fuel Type	0.0015% ULSD
Heat input capacity	84,000 Btu/hr
Date of Change:	
<p>The diesel engines #1 and #2 were previously operated as non-road engines. The engines will be operated as stationary engines exempt from NSR per WAC 173-400-110(4)(c)(iv) but subject to 40 CFR 63, Subpart ZZZZ.</p> <p>The engines #3 and #4 were previously included in the Hanford Site AOP as stationary engines, but are currently being operated as non-road engines. Per WAC 173-400-035(2), non-road engines are not subject to NSR requirements nor 40 CFR 63, Subpart ZZZZ regulations. The changes will be completed by August, 2015.</p> <p>This notification is being submitted to Ecology and EPA consistent with WAC 173-401-724 requirements.</p>	
Describe the emissions resulting from the change:	
<p>The emission rates for criteria pollutants and Toxic Air Pollutants (TAP) from engines #1 and #2 will be estimated, upon request, using calculations based on manufacturer emission factors or from the U. S. EPA's, <i>Compilation of Air Pollutant Emission Factors</i>, AP-42, Section 3.3, Gasoline and Diesel Industrial Engines.</p>	

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

Engine #1 and #2

New Source Performance Standards (NSPS) Applicability: 40 CFR 60, Subpart IIII

Per 40 CFR 60.4200(a)(2), the provisions of NSPS Subpart IIII do not apply to the engines because each commenced construction prior to July 11, 2005.

National Emissions Standards for Hazardous Air Pollutants (NESHAP) Applicability: 40 CFR 63, Subpart ZZZZ.

Per 40 CFR 63.6590(a)(ii), the applicable provisions of NESHAP Subpart ZZZZ applies to the engines because they are stationary compression ignition reciprocating internal combustion engines (RICE) and located at a major source of hazardous air pollutant emissions (i.e., the Hanford Site). Because each engine was manufactured prior to June 12, 2006, each is classified as an "Existing stationary RICE." Per 40 CFR 63 Subpart ZZZZ, Table 2c, Requirements for Existing Compression Ignition Stationary RICE Located at a Major Source of HAP Emissions with a capacity rating less than 100 horsepower include:

- Change oil and filter every 1000 hours of operations or annually, whichever comes first
- Inspect air cleaner every 1,000 hours of operation or annually, whichever comes first
- Inspect all hoses and belts every 500 hours of operation or annually, whichever comes first, and replace as necessary.