



DEPARTMENT OF
ECOLOGY
State of Washington

**STATEMENT OF BASIS
FOR
FINAL AIR OPERATING PERMIT NO. 09AQ-C107
GREATER WENATCHEE REGIONAL LANDFILL AND RECYCLING CENTER
DOUGLAS COUNTY, WASHINGTON**

**PREPARED BY
THE WASHINGTON STATE DEPARTMENT OF ECOLOGY
CENTRAL REGIONAL AIR QUALITY SECTION
15 WEST YAKIMA AVENUE, SUITE 200
YAKIMA, WASHINGTON 98902
(509) 575-2490**

September 8, 2009

TABLE OF CONTENTS

1.0 LIST OF ABBREVIATIONS4

2.0 GENERAL INFORMATION.....5

Company Name5

Facility Name5

Parent Company.....5

Unified Business Identification Number5

Standard Industrial Classification Code.....5

Mailing Address.....5

Source Address5

Responsible Official.....5

Engineering Contact.....5

3.0 BACKGROUND.....5

3.1 Introduction.....5

Basis for Title V Applicability5

Attainment Classification5

Timeline6

4.0 SOURCE DESCRIPTION.....6

4.1 Physical Description6

4.2 Description of Processes.....6

Process #1, Source-Wide6

Process #2, Solid Waste Landfill6

Process #3, Landfill Gas / Flare.....9

Process #4, Petroleum Contaminated Soil and Screening.....9

Process #5, Rock Crusher and Diesel Engine9

5.0 NEW SOURCE REVIEW HISTORY9

5.1 Municipal Solid Waste Landfill10

5.2 Trench 1 & North Berm.....10

5.3 Flare10

5.4 Landfill Expansion10

6.0 AIR OPERATING PERMIT HISTORY10

7.0 FEDERAL REGULATIONS.....11

7.1 New Source Performance Standards.....11

7.1.1, Nonmetallic Mineral Processing Plants NSPS11

7.1.2, MSW Landfill NSPS12

7.1.3, Stationary Compression Ignition ICE NSPS.....12

7.2 National Emission Standards for Hazardous Air Pollutants12

7.2.1, Asbestos NESHAP.....12

7.2.2, MSW Landfill NESHAP12

7.2.3, Stationary RICE NESHAP13

8.0 COMPLIANCE ASSURANCE MONITORING.....13

8.2 Applicability13

Basis for Title V Applicability13

9.0 INSIGNIFICANT EMISSION UNITS AND ACTIVITIES14

10.0 GAPFILLING.....14

11.0	STREAMLINING	15
12.0	COMPLIANCE CERTIFICATION.....	15
13.0	ENFORCEABILITY.....	15
14.0	OPERATIONAL FLEXIBILITY	15
15.0	OTHER PERMITTING ISSUES.....	16
15.1	State Ambient Air Quality Standards	16
16.0	COMPLIANCE SUMMARY	16
16.1	Compliance Status	16
16.2	Notice of Violation No. 1732	16
16.3	Other Reported Violations.....	16

1.0 LIST OF ABBREVIATIONS

AOP	Air Operating Permit
CFR	Code of Federal Regulations
CO	Carbon Monoxide
CO ₂	Carbon Dioxide
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
GWRLRC	Greater Wenatchee Regional Landfill and Recycling Center
lb	pound
LFG	Landfill Gas
m ³	Cubic meters
Mg	Megagram
M _{NMOC}	NMOC Mass Emission Rate
MSW	Municipal Solid Waste
NMOC	Non Methane Organic Compound
NOC	Notice of Construction
NO _x	Oxides of Nitrogen
NSPS	New Source Performance Standard
PCS	petroleum contaminated soil
PM ₁₀	Particulate Matter with an Aerodynamic Diameter of 10 micrometers or less
PSD	Prevention of Significant Deterioration
RCW	Revised Code of Washington
RICE	reciprocating internal combustion engine
SO ₂	Sulfur Dioxide
TSP	Total Suspended Particulate
VOC	Volatile Organic Compound
WAC	Washington Administrative Code
yd ³	Cubic yard
yr	Year

2.0 GENERAL INFORMATION

Company Name: Waste Management of Washington, Inc.

Source Name: Greater Wenatchee Regional Landfill and Recycling Center

Owner: Waste Management of Washington, Inc.

Parent Company: Waste Management National Services, Inc.

Unified Business Identification Number: 601415286

Standard Industrial Classification Code: 4953

Mailing Address: Greater Wenatchee Regional Landfill
PO Box 2963
Wenatchee, WA 98807

Source Address: 191 South Webb Road
East Wenatchee, WA 98802

Responsible Official: Dave Lowe
District Manager
Greater Wenatchee Regional Landfill and Recycling Center
191 Webb Road
East Wenatchee, WA 98802
Phone: 509-224-0151
Cell/24-hr phone: 509-435-2114
Fax: 509-244-0207

Source Contact: Eric Keogh
Greater Wenatchee Regional Landfill and Recycling Center
191 Webb Road
East Wenatchee, WA 98802
Phone: 509-884-2802
Cell: 509-860-3260
Fax: 509-884-3724

3.0 BACKGROUND

3.1 INTRODUCTION

This document sets forth the legal and factual basis for the permit conditions in an AOP issued by the State of Washington Department of Ecology for a solid waste landfill located in East Wenatchee, Washington. This document is called a “statement of basis” and is required by Washington State regulations [Chapter 173-401 WAC]. A statement of basis does not contain enforceable permit conditions. Enforceable permit conditions are contained in the AOP itself.

Basis for Title V Applicability:

GWRLRC is subject to Title V, Air Operating Permit Regulation, by virtue of being subject to the 40 CFR, Part 60, Subpart WWW, (NSPS). The NSPS states that MSW landfills with a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters are subject to part 70 (Title V) permitting requirements. GWRLRC’s design capacity is approximately 30 million cubic meters (39.2 cubic yards).

Attainment Classification:

GWRLRC is located in an area which is in attainment or unclassified for all criteria pollutants.

Renewal Timeline

October 2, 2007 – Ecology received GWRL’s AOP renewal application
November 16, 2007 – Ecology deemed AOP renewal application incomplete
March 5, 2008 – Ecology received additional AOP renewal application materials
March 11, 2008 – Ecology deemed AOP renewal application complete
July 22, 2009 – Ecology issued Draft AOP renewal
August 25, 2009 – Public comment period on Draft AOP ended
August 28, 2009 – Ecology issued Proposed AOP renewal
September 2, 2009 – EPA states “permit is now eligible for issuance”

See also “Air Operating Permit History” in section 6.0.

4.0 SOURCE DESCRIPTION

4.1 PHYSICAL DESCRIPTION

GWRLRC is a 148.4-acre municipal solid waste landfill. It began operation in the late-1960s, was vertically and laterally expanded in 2008 and is expected to continue operation through 2048. The landfill’s maximum design capacity is 30,000,811 m³ (39,239,580 yd³) with maximum waste acceptance rates of 3,119 tons per day and 810,940 tons per year. The landfill is located in an arid climate that typically receives an average of 8.6 inches of precipitation per year. Those lands surrounding the landfill are predominately used for agriculture. There are some residences nearby. A site map is included as Figure 1.

4.2 DESCRIPTION OF PROCESSES

MSW is accepted primarily from Douglas, Kittitas, and Chelan counties for disposal. Besides MSW, the landfill also accepts asbestos, construction demolition and landclearing debris, industrial non-hazardous wastes, petroleum contaminated soil, sewage sludge, and wood wastes. GWRLRC is prohibited from accepting hazardous wastes. Waste is delivered to the landfill using waste collection vehicles, including front loaders, rear loaders, and roll-off trucks. The source is not currently open to the public. The general public is directed to the South Wenatchee Transfer Station where a recycling area is provided. The recycling area includes drop boxes and containers for recycled aluminum, cardboard, newspapers and glass. The landfill generally operates Monday through Saturday, 5:00 a.m. to 5:00 p.m..

Process #1, Source-Wide

Process #1 includes source-wide emissions originating from site operations which include; excavation, soil stockpiling, construction of lined disposal cells, and the associated leachate collection systems. Emissions include fugitive dust from motor vehicle operation, and emissions related to source-wide support services such as storage tanks, maintenance, housekeeping, and miscellaneous, insignificant emissions activities. Process #1 emission limits, work practice standards and permit conditions also apply to all significant emission units located at the source. The source’s estimated potential emissions are listed in Table 1.

Process #2, Solid Waste Landfill

The current site of the landfill was opened in 1962 and was operated as an open burning dump until 1970. It is estimated that during that period up to 25 tons per day were burned in the West Trench. Demolition debris continued to be burned in the west trench through 1972. Then up to 100 tons per day of primarily residential and agricultural wastes were deposited through 1978, and septage and sewage sludge was accepted at the site from approximately 1979 through 1990. During this time, sludge was placed in lined and unlined ponds, landfarmed, and commingled with the MSW. Present day rate of waste acceptance varies seasonally, with lower volume in the winter and higher volume in the summer. Waste is placed in cells, compacted, and covered on a daily basis. Waste is compacted in thin layers with an assumed compaction density of 1,100 to 1,300 lbs/yd³. Ecology has approved use of an alternate daily cover to be used at the landfill. Trench 1 and the northeast half of the North Berm were closed and capped during the summer of 2000. A vertical expansion of the existing landfill cells and the addition of new cells was approved in 2008. The primary source of MSW landfill emissions is landfill gas, generated by biodegradation, of which the main components are methane, NMOC, and CO₂. The volume of LFG which is generated within the landfill is minimized by controlling the amount of liquid which is introduced into the landfill, thereby retarding the decomposition process. Routine monitoring for the LFG is conducted on a quarterly basis to ensure that the gas is not migrating away from the landfill.

Figure 1. Process flow diagram of Landfill (adapted from SCS Engineers diagram submitted with October 2, 2007, AOP renewal application).

Table 1. Summary of estimated potential emissions from GWRLRC (adapted from the October 2, 2007, Title V Operating Permit Renewal Application, NOC Order No. 00AQCR-1000 Third Revision, and NOC Order No. 08AQ-C062).

Pollutant	“Old” Landfill Fugitives	“Expansion” Landfill Fugitives	Enclosed LFG Flare	Roads	Two Leachate Ponds	Rock Crushing, Screening & PCS Storage	Units
TSP	38.5	72.1	4.459	20		0.062	ton/yr
PM₁₀	6.1	24.1	4.459	5		0.033	ton/yr
PM_{2.5}		2.9	4.459			0.010	ton/yr
SO₂			7.73			0.002	ton/yr
CO			26.50			0.025	ton/yr
NO_x			15.90			0.029	ton/yr
VOC / NMOC	23.32	2.48	0.1749		1.9	0.628	ton/yr
Acetone	293.1		2.198				lb/yr
Acrylonitrile ^{hap}	75.11		0.5644				lb/yr
Benzene ^{hap}	193.9	26.2	1.455		1.16	0.024	lb/yr
Butane	110.1		0.8257				lb/yr
Carbon Disulfide ^{hap}	9.875		0.07406				lb/yr
Carbon Tetrachloride ^{hap}	0.1377		0.001033				lb/yr
Carbonyl sulfide ^{hap}	6.583	0.0185	0.04937				lb/yr
Chlorobenzene ^{hap}	6.293		0.04720				lb/yr
Chlorodifluoromethane	19.62		0.1472				lb/yr
Chloroethane ^{hap}	18.04		0.1353				lb/yr
Chloroform ^{hap}	801.0		6.008				lb/yr
1,2-Dichlorobenzene ^{hap}	6.904		0.05178				lb/yr
1,4-Dichlorobenzene ^{hap}	2.167		0.01625				lb/yr
1,2-Dichloroethane		14.6					
Dichlorodifluoromethane ^{hap} (Freon 12)	424.5		3.1838				lb/yr
Ethylidene Chloride ^{hap} (1,1-Dichloroethane)	52.00		0.3900				lb/yr
Vinylidene Chloride ^{hap} (1,1-Dichloroethene)	4.336		0.03252				lb/yr
Ethylene Dichloride ^{hap} (cis-1,2-Dichloroethane)	9.074		0.06805				lb/yr
1,2-Dichloroethene	61.57		0.4618				lb/yr
Dichlorodifluoromethane (Freon 12)	60.30		0.4523				lb/yr
Dichlorotetrafluoroethane	11.28		0.08457				lb/yr
Ethanol	280.3		2.103				lb/yr
Ethylbenzene ^{hap}	109.5		0.8208				lb/yr
Ethyl Chloride ^{hap} (Chloroethane)							lb/yr
Ethylene Dibromide	0.04202		0.000315 2				lb/yr
Ethyl Mercaptan	31.68		0.2376				lb/yr
Formaldehyde						0.030	
Hexane ^{hap}	126.6		0.9495				lb/yr
Hydrogen Sulfide ^{hap}	583.8	860	17.5				lb/yr
Mercury ^{hap}	0.01310		0.03930				lb/yr
Methyl Chloride ^{hap}	13.67		0.1025				lb/yr

Pollutant	“Old” Landfill Fugitives	“Expansion” Landfill Fugitives	Enclosed LFG Flare	Roads	Two Leachate Ponds	Rock Crushing, Screening & PCS Storage	Units
Methylene Chloride ^{hap}	271.7		2.038				lb/yr
Methyl Ethyl Ketone ^{hap} (2-Butanone)	114.4		0.8574				lb/yr
Methyl isobutyl ketone ^{hap}	41.89		0.3142				lb/yr
Methanethiol ^{hap} (Methyl Mercaptan)	26.79		0.2009				lb/yr
Pentane	53.09		0.3982				lb/yr
2-Propanol	673.5		5.051				lb/yr
Propylene Dichloride	4.548		0.03411				lb/yr
Styrene ^{hap}	4.309		0.03232				lb/yr
Tetrachloroethane ^{hap}	41.67		0.3125				lb/yr
Tetrachloroethylene ^{hap} (Tetrachloroethene)	138.4		1.038				lb/yr
Toluene ^{hap}	3400		25.5				lb/yr
1,1,1-Trichloroethane ^{hap} (Methylchloroform)	14.33		0.1075				lb/yr
Trichloroethylene ^{hap} (Trichloroethene)	82.87		0.6215				lb/yr
Trichlorofluoromethane (Freon 11)	23.35		0.1752				lb/yr
Trimethyl Benzene	25.95		0.1946				lb/yr
Vinyl Chloride ^{hap}	102.6	53.1	0.7594		2.09		lb/yr
Xylenes ^{hap}	287.3		2.155				lb/yr
Total HAP	3.3	0.47	0.033		0.0016	0.000012	ton/yr

Process #3, Landfill Gas / Flare

Landfill gas is collected with an active collection system. The collection system is predicted to collect 90% of the landfill gas. Collected landfill gas is currently routed to a single enclosed flare, with a capacity of 2,000 scfm.

Process #4, Petroleum Contaminated Soil and Screening

Petroleum contained soil (PCS) is accepted for disposal at the landfill. Soils contaminated with the volatile light hydrocarbons must be disposed of within 48 hours and may be used as daily cover. The less volatile heavy hydrocarbon and diesel PCS may be stored, over lined portions of the landfill, for longer period. These PCS may be used as daily cover before or after being screened. Screened rock may be used on site, typically in trenches; screened rock may not be removed from the site.

Process #5, Rock Crusher and Diesel Engine

A rock crusher does not currently exist as a permanent emission unit at this site. However, the permittee has permission to install and operate a rock crusher and a diesel fired generator, by January 8, 2010. Ecology may extend the installation date upon a satisfactory showing that an extension is justified. Alternatively, or additionally, the landfill may contract with a second party to perform rock crushing within the site. Such rock crusher may operate within the conditions of the Air Operating Permit or under their own valid air permit.

5.0 NEW SOURCE REVIEW HISTORY

In Washington State, new sources of air pollutants are potentially subject to four types of new source review (air quality permitting). Federal new source review includes Prevention of Significant Deterioration

(Title 40 Code of Federal Regulations Part 52.21) and Nonattainment New Source Review (Title 40 Code of Federal Regulations Part 52.24). These Federal programs apply to large sources with potential emissions equal or greater than specified thresholds. Additionally, State new source review, referred to as Notice of Construction permitting, applies to smaller sources and the lesser emissions at the larger sources. Notice of Construction permitting may be required for criteria pollutants (WAC 173-400-110) and/or toxic air pollutants (WAC 173-460-030).

5.1 MUNICIPAL SOLID WASTE LANDFILL

The establishment of this landfill predates new source review requirements.

5.2 TRENCH 1 & NORTH BERM

Trench 1 and the northeast half of the North Berm were capped during the summer 2000. Closure of these cells was permitted under Notice of Construction Order No. 00AQCR-1000, issued April 21, 2000. Initially, a passive landfill gas collection system and eleven open flares were approved. Passive landfill gas collection wells and fourteen open flares were installed. Partially due to the discrepancy between the approved and installed systems, Greater Wenatchee Regional Landfill requested that the Order be revised.

On January 29, 2003, Notice of Construction Order No. 00AQCR-1000 First Revision was issued. The revised Order mandated installation and use of an active landfill gas collection system and a single enclosed flare. Additionally, the revised Order deleted previously required landfill gas monitoring probe requirements.

On April 13, 2006, Notice of Construction Order No. 00AQCR-1000 Second Revision was issued. The revised order increased the landfill gas flaring capacity, provided that all flaring capacity is achieved through the use of enclosed flares meeting Best Available Control Technology. As this Order addresses facility-wide landfill gas collection and control requirements, the Order is no longer specific to the final cover of Trench 1 and the northeast half of North Berm.

5.3 FLARE

The existing flare is permitted under Notice of Construction Order No. 00AQCR-1000 Third Revision, as briefly described above. Additional flaring capacity was approved by Notice of Construction Order No. 00AQCR-1000 Second Revision, issued April 13, 2006.

Upon replacing the previously installed 500 scfm landfill gas flare with a new 2000 scfm landfill gas flare, Greater Wenatchee Regional Landfill source tested the new flare. The February 8, 2007, source test demonstrated that the flare was operating in exceedance (ie., 0.030 lb SO₂/MMBTU) of its prescribed emission limit (ie., 0.011 lb SO₂/MMBTU) for sulfur dioxide. On November 16, 2007, Greater Wenatchee Regional Landfill applied to increase the flare's sulfur dioxide emission limit (ie., 0.090 lb SO₂/MMBTU). Ecology granted the new emission limit, in Notice of Construction Order No. 00AQCR-1000 Third Revision.

5.4 LANDFILL EXPANSION

A vertical and horizontal expansion of the Landfill was permitted under Notice of Construction Order No. 08AQ-C062, issued July 9, 2008. The expansion included horizontal expansion to the west and north of the original Landfill, including the addition of 92.5 acres of lined disposal modules.

The expansion project also included the establishment of a second leachate collection pond, a soil screen, a rock, concrete and asphalt crusher, and a 350 horsepower diesel generator.

Of significant note was the triggering of a Second Tier toxics analysis, as allowed by WAC 173-460-090, for hydrogen sulfide and vinyl chloride emissions. The Second Tier toxics analysis concluded that, "the risks from inhalation exposure to hydrogen sulfide and vinyl chloride are within acceptable levels...."

6.0 AIR OPERATING PERMIT HISTORY

Title V of the 1990 Federal Clean Air Act Amendments required all states to develop a renewable operating permit program for industrial and commercial sources of air pollution. Congress structured the air

operating permit system as an administrative tool for applying existing regulations to individual sources. The goal is to enhance accountability and compliance by clarifying in a single document which requirements apply to a given business or industry.

The Washington State Clean Air Act (Chapter 70.94 Revised Code of Washington) was amended in 1991 and 1993 to provide the Department of Ecology and local air agencies with the necessary authority to implement a state-wide operating permit program. The law requires all sources emitting one hundred tons or more per year of a criteria pollutant, or ten tons of a hazardous air pollutant, or twenty-five tons in the cumulative of hazardous air pollutants, to obtain an operating permit. Criteria pollutants include sulfur dioxide, nitrogen oxides, particulate matter, carbon monoxide, and volatile organic compounds.

Ecology authored Chapter 173-401 of the Washington Administrative Code (WAC), which specified the requirements of Washington State's Operating Permit Regulation. This regulation became effective on November 4, 1993. On November 1, 1993, this regulation was submitted to the United States Environmental Protection Agency (EPA), for program approval. On December 9, 1994, EPA granted interim approval of Chapter 173-401 WAC. This interim approval was extended until EPA granted final approval on August 13, 2001. The current version of this regulation was filed on September 16, 2002. On March 12, 1996, EPA promulgated the Standards of Performance for Municipal Solid Waste Landfills (Subpart WWW). Subpart WWW required the acquisition of Title V permits for subject landfills with a design capacity greater than or equal to 2.5 million megagrams or 2.5 million cubic meters.

The permittee submitted a complete Title V application on July 1, 1997. On April 2, 1999, Ecology issued AOP No. DE 99AOP-C122 (valid 4/2/99 thru 5/10/00). The Permit went through an administrative permit amendment, to update the responsible official, resulting in AOP Order No. DE 99AOP-C122, First Revision, issued July 13, 2000 (valid 5/11/00 thru 10/19/01). The Permit went through a reopening for cause, to incorporate NOC Order No. 00AQCR-1000, resulting in AOP Order No. DE 99AOP-C122 Second Revision, issued October 19, 2001 (valid 10/20/01 thru 7/25/02). Finally, the permit went through a combined administrative amendment, to add a second responsible official, and reopening for cause, to incorporate NOC Order No. 00AQCR-1000 First Revision, resulting in AOP Order No. DE 99AOP-C122 Third Revision, issued July 26, 2002 (valid 7/26/02 thru 4/2/04).

This is the second five-year renewal of GWRLRC's AOP. The first renewal was issued as AOP No. 04AQ-C007, on March 8, 2004, and was effective April 3, 2004 through April 12, 2006. On April 13, 2006, Ecology approved a significant modification of the AOP to allow for an increase in the landfill gas flaring capacity. AOP No. 04AQ-C007 First Revision, was effective April 13, 2006 through March 6, 2008. On March 7, 2008, Ecology approved another significant modification of the AOP to allow an increase in the sulfur dioxide emission limit placed on the landfill gas flare. AOP No. 04AQ-C007 Second Revision, was effective March 7, 2008 through April 2, 2009.

See also "Renewal Timeline" in section 3.1.

7.0 FEDERAL REGULATIONS

7.1 NEW SOURCE PERFORMANCE STANDARD (NSPS)

7.1.1 Nonmetallic Mineral Processing Plants. Standards of Performance for Nonmetallic Mineral Processing Plants (Title 40 Code of Federal Regulations Part 60 Subpart OOO). The NSPS applies to nonmetallic mineral processing plants for which construction, modification, or reconstruction commenced on or after August 31, 1983. The affected facilities are each crusher, grinding mill, screening operation, bucket elevator, belt conveyor, bagging operation, storage bin, and enclosed truck or railcar loading station. The NSPS was updated with an effective date of April 28, 2009, in part to update monitoring and recordkeeping requirements for facilities that commence construction, modification, or reconstruction on or after April 22, 2008. Nonmetallic mineral crushing operations were approved by Order No. 98AQ-C062, issued July 9, 2008. Currently, the source does not include any of potential affected facilities. The permittee intends to contract with a second party to locate, on site, for short periods of time, to perform the permitted crushing operations. The owner or operator of any such crusher shall be responsible for meeting

the applicable requirement of this NSPS. If the permittee becomes the owner or operator of any affected facility, they will be responsible for all applicable requirement of this NSPS.

7.1.2 MSW Landfill. On March 12, 1996, EPA promulgated the Standards of Performance for Municipal Solid Waste Landfills (Title 40 Code of Federal Regulations Part 60 Subpart WWW). The NSPS applies to each municipal solid waste landfill that commenced construction, reconstruction, or modification, or began accepting waste, on or after May 30, 1991. The NSPS requires landfills with a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters to submit Non-Methane Organic Compound (NMOC) emission reports. When the precontrolled NMOC emissions are calculated at or above 50 megagrams per year additional requirements are triggered. Ecology received a copy of the permittee's initial *Design Capacity Report* and *NMOC Report* on June 4, 1996. The initial NMOC emission rate report listed the NMOC emission rate as 67 Mg/yr using the default variable values listed in 40 CFR 60.754(a)(1)(i). Subsequent NMOC emission rate reports measured NMOC concentrations as measured by Tier 2 (40 CFR 60.754(a)(3)). The *New Source Performance Standards Tier 2 Sampling, Analysis, and Landfill NMOC Emissions Estimates*, received March 6, 2009, list total landfill NMOCs as 22 Mg/yr, 24 Mg/yr, 26 Mg/yr, 28 Mg/yr, and 30 Mg/yr, for calendar years 2009 through 2013, respectively.

7.1.3 Stationary Compression Ignition Internal Combustion Engines. Standards of Performance for Stationary Compression Ignition Internal Combustion Engines (Title 40 Code of Federal Regulations Part 60 Subpart IIII). The NSPS applies to stationary compression ignition internal combustion engines that commence construction after July 11, 2005, and were manufactured after April 1, 2006. The NSPS became effective on July 11, 2006. A stationary compression ignition internal combustion engine, to fire the rock crusher, was approved by Order No. 98AQ-C062, issued July 9, 2008. (Specifically, the Order was based upon analysis of a 375 ph (280 kW) diesel CP ACERT Caterpillar Engine, meeting EPA Tier 3 emission requirements. Use of alternate engines with the same or lesser emissions is allowable.) Currently, the source does not include a stationary compression ignition internal combustion engines. The permittee currently intends to contract with a second party to operate a rock crusher and engine, on site, for short periods of time, to perform the permitted crushing operations. The owner or operator of any such engine shall be responsible for meeting the applicable requirement of this NSPS. If the permittee becomes the owner or operator of any such engines, they will be responsible for all applicable requirement of this NSPS.

7.2 NATIONAL EMISSION STANDARDS FOR HAZARDOUS AIR POLLUTANTS (NESHAP)

7.2.1 Asbestos. National Emission Standard for Asbestos. (Title 40 Code of Federal Regulations Part 61 Subpart M). On April 5, 1984, EPA promulgated the National Emission Standard for Asbestos. The NESHAP applies to a variety of asbestos related activities. One of these activities is waste disposal. GWRLRC is a waste disposal facility that receives asbestos containing waster material from manufacturing, fabricating, demolition, renovation, or spraying operation wastes. The Landfill is subject to this NESHAP.

7.2.2 MSW Landfills. On January 16, 2003, EPA promulgated the National Emission Standards for Hazardous Air Pollutants: Municipal Solid Waste Landfills (Title 40 Code of Federal Regulations Part 63 Subpart AAAA). The NESHAP applies to municipal solid waste landfills that have accepted waste since November 8, 1987, or has additional capacity for waste deposition, and may include a bioreactor, and meets any one of three other criteria.

The applicability criteria defines a subject landfill as one that is a major source or collocated with a major source as defined in 40 CFR 63.2 of subpart A. Specifically, major source is defined as, "a stationary source or group of stationary sources located within a contiguous area and under common control that emits or has the potential to emit considering controls, in aggregate, 10 tons per year or more of any hazardous air pollutant or 25 tons per year or more of any combination of hazardous air pollutants...." As indicated in Table 1, the Landfill has the potential to emit less than 10 tons per year each individual hazardous air pollutant and less than 25 tons per year in combination of hazardous air pollutants.

The applicability criteria also define a subject landfill as one that has a design capacity equal to or greater than 2.5 million megagrams and 2.5 million cubic meters and has estimated uncontrolled emissions equal to

or greater than 50 megagrams per year NMOC. As discussed in 7.1, the Landfill's estimated uncontrolled emissions of NMOC are currently less than 50 megagrams per year.

Based upon this information, the Landfill is NOT subject to the Landfill NESHAP.

7.2.3 Stationary Reciprocating Internal Combustion Engines. (Title 40 Code of Federal Regulations Part 63 Subpart ZZZZ). The NESHAP became effective on June 15, 2004. The NESHAP applies to all existing, new, or reconstructed stationary reciprocating internal combustion engine (RICE). A stationary RICE, to fire the rock crusher, was approved by Order No. 98AQ-C062, issued July 9, 2008. (Specifically, the Order was based upon analysis of a 375 ph (280 kW) diesel CP ACERT Caterpillar Engine, meeting EPA Tier 3 emission requirements. Use of alternate engines with the same or lesser emissions is allowable.) Currently, the source does not include a stationary RICE. The permittee currently intends to contract with a second party to operate a rock crusher and engine, on site, for short periods of time, to perform the permitted crushing operations. The owner or operator of any such engine shall be responsible for meeting the applicable requirement of this NESHAP. If the permittee becomes the owner or operator of any such engines, they will be responsible for all applicable requirement of this NESHAP.

8.0 COMPLIANCE ASSURANCE MONITORING (CAM)

8.1 On October 22, 1997, EPA promulgated the Compliance Assurance Monitoring rule (Title 40 Code of Federal Regulations Part 64). This Rule requires specialized pollutant-specific monitoring for those emission units which meet the following criteria:

- 8.1 The unit is located at a Title V Air Operating Permit source
 - 8.2 The unit is subject to an emission limitation or standard for the applicable regulated air pollutant (or surrogate thereof), other than an emission limitation or standard that is exempt.
 - 8.3 The unit uses a control device to achieve compliance with any such emission limitation or standard; and
 - 8.4 The unit has potential pre-control device emissions of the applicable regulated air pollutant that are equal to or greater than 100 percent of the amount, in tons per year, required for a source to be classified as an Air Operating Permit source.
- 8.2 Applicability.

The emission unit considered for CAM applicability was the landfill itself. Following is a summary of how the landfill matches up with the above listed criteria:

- 8.2.1 Greater Wenatchee Regional Landfill is a Title V Air Operating source (see Basis for Title V Applicability, on page 4).
- 8.2.2 CAM exempts post November 15, 1990, New Source Performance Standard emission limitations/standards from triggering CAM. While the Landfill is subject to the Landfill NSPS, Subpart WWW, the NSPS was promulgated in 1996, and thus it cannot trigger CAM. However, Notice of Construction Order No. 00AQCR-1000 Third Revision, requires a destruction efficiency of 99% for NMOC, sulfur compounds, and organic TAPs (ex., hydrogen sulfide). The NMOC standard is specified as an alternative to a volatile organic compound (VOC) emission limitation or standard. VOC is a surrogate for ozone. Therefore, the Landfill is subject to an emission standard for an applicable regulated surrogate air pollutant.

This is both an emission standard and emission limit for H₂S, which is a regulated Hazardous Air Pollutant.

- 8.2.3 The Landfill has a landfill gas collection system which must be routed to a control device. The control device tied to the emission standard discussed above is an enclosed flare.
- 8.2.4 While landfills can produce a significant quantity of NMOC emissions, only a portion of the NMOC emissions are collected and made available for control. This Landfill estimates that they collect 90% of the landfill gas produced. Based upon the February 8, 2007, sources test, and the associated NMOC content in the landfill gas, when the flare is operated at full capacity (2000 scfm), potential collected precontrol NMOC emissions are approximately 7 tons per year.

Additionally, based upon the February 8, 2007, sources test, and the associated H₂S content in the landfill gas, when the flare is operated at full capacity (2000 scfm), potential collected precontrol H₂S emissions are approximately 1.9 tons per year. 10 tons per year of a Hazardous Air Pollutant (i.e., H₂S) classifies a source as an Air Operating Permit source.

CAM has been identified as an inapplicable requirement for the Landfill, based upon NMOC and H₂S emission standards/limits on the flare.

9.0 INSIGNIFICANT EMISSION UNITS AND ACTIVITIES

Insignificant emission units are those units which are regulatorily exempt from some AOP requirements. While the insignificant emission units listed below are subject to the generally applicable requirements specified in Column 1 of Section 5.1 of the AOP, the permittee is not required to perform testing, monitoring, recordkeeping, or reporting for these units and activities, unless specified by Ecology. Ecology has not required any testing, monitoring, recordkeeping, or reporting for these units. The permittee may certify continuous compliance, for these units and activities, if there were no observed, documented, or known instance of noncompliance during the reporting period. The permit shield, permit proviso 1.1, does not apply to any insignificant emission unit or activity. The following units and activities have been identified, by the permittee, as insignificant:

Emissions generated by haul trucks are insignificant on the basis that they generate only fugitive emissions [WAC 173-401-530(1)(d), 5/7/94]

Emissions from the evaporation pond and the cold cleaner are insignificant on the basis of their potential to emit. [WAC 173-401-530(4)(d), 5/7/94]

Units or activities which qualify as insignificant solely on the basis of their potential-to-emit may not exceed the emission thresholds of Table 2, unless the AOP is first modified.

Table 2. Insignificant Emissions Units Thresholds. [WAC 173-401-530(4)]

TSP	PM ₁₀	VOC	CO	SO ₂	NO _x	Lead
0.5 tpy	0.75 tpy	2 tpy	5 tpy	2 tpy	2 tpy	0.005 tpy

10.0 GAPFILLING

Section 5 of the air operating permit identifies requirements that are applicable to existing emission units at the source. The air operating permit must contain emission limitations and standards, including those operational requirements and limitations that assure compliance with all applicable requirements at the time of permit issuance. Where the applicable requirement does not require periodic testing or monitoring, periodic monitoring sufficient to yield reliable data has been identified and included in the permit. This action is termed gapfilling.

The last column of the tables in section 5, contain the monitoring, recordkeeping, and reporting to be performed by the permittee (MRR). This column identifies the periodic action that must be taken to demonstrate compliance with the applicable requirement. It should be noted that in addition to the MRR a source must consider all other credible evidence when certifying to their compliance status.

For some applicable requirements no action is warranted and instead the permittee will annually certify their compliance status. These requirements are identified with, "no additional monitoring required," stated in the MRR column.

Many applicable requirements specified periodic MRR while gapfilling was used for the remainder. The source of the MRR is identified in brackets for each MRR requirement. Those that reference WAC 173-401-615(1) were gapfilled. Below is a brief explanation of the basis for each instance of gapfilling.

Table 3. Identification and basis of “gapfilled” items.

Applicable Requirement(s)	Gapfilling basis
5.1.4, 5.1.5, 5.1.6, 5.1.7, 5.1.9	This source has not had a history of violating these "nuisance" requirements. Since these could be subjective, we determined it is appropriate to consider complaints in MRR.
5.2.19, 5.2.22, 5.3.1, 5.3.6, 5.3.11	Simple records, generally already kept, will be helpful in proving such operations.
5.1.3, 5.2.20, 5.4.16	This source has not had a history of visible emissions and is not expected to have problems complying with established visible emission standards. Monthly MRR is determined to be appropriate. Additionally, action is required when visible emissions are observed at times other than the monthly survey.
5.2.14, 5.2.15, 5.2.17	Development and implementation of these documents fulfill the applicable requirement. Periodic review/inspections will aid in assuring that the documents contents are being followed.

Those requirements that specify “no additional monitoring required” as the MRR, have been determined to require no specific monitoring. However, the responsible official will be required to certify the source’s compliance status, with these requirements, at least annually.

11.0 STREAMLINING

This Air Operating Permit does not include any streamlined provisions.

12.0 COMPLIANCE CERTIFICATION

By virtue of the Air Operating Permit application and the issuance of this permit, the reporting frequency for compliance certification for this source shall be annual.

13.0 ENFORCEABILITY

Unless specifically designated otherwise, all terms and conditions of the Air Operating Permit, including any provisions designed to limit the source’s potential to emit, are enforceable by EPA, and citizens, under the Federal Clean Air Act. Those terms and conditions which are designated as state-only enforceable, as indicated by (S), are enforceable only by Ecology. It should be noted that state-only terms and conditions will become federally enforceable upon approval of the requirement in the State Implementation Plan. However, the enforceability of the terms and conditions of this Air Operating Permit are not expected to change during the Permit term. All terms and conditions of the Air Operating Permit are enforceable by Ecology.

Following is an example of how to identify a state-only enforceable condition. At the end of Condition 2.7.2 the following notation occurred: “[WAC 173-400-107(3), 8/20/93, 7/11/02 (S)].” If a version of the regulation is cited with no reference to enforceability, it is federally enforceable. Thus, this notation means that the authority for this permit condition is contained in the 8/20/93 version of WAC 173-400-107 (this is the version of WAC 173-400-107 that is in the SIP and is federally enforceable) and in the 7/11/02 version of WAC 173-400-107. The (S) after 7/11/02 means that the 7/11/02 version of WAC 173-400-107 is State-only enforceable.

14.0 OPERATIONAL FLEXIBILITY

The permittee did not request or specify any alternative operating scenarios.

In the event that an emission unit is not operated during a period equal to or greater than the monitoring period designated, no monitoring is required. (ex., A monthly visible emission survey is not required if the emission unit is not operated during the month that the survey covers. A monthly visible emission survey is required if the emission unit is operated for any portion of the month that the survey covers.)

Recordkeeping and reporting must note the reason why, and length of time, the emission unit was not operated.

15.0 OTHER PERMITTING ISSUES

15.1 STATE AMBIENT AIR QUALITY STANDARDS. The following regulations are ambient air quality standards that apply generally to all areas of the state. There are no on-going monitoring, recordkeeping, or reporting requirements specific to the source to prove compliance with the ambient air quality standards. Compliance with the ambient air quality standards is required, and the following regulations are triggered for any source when undergoing New Source Review for Notice of Construction or Prevention of Significant Deterioration permitting and are generally reported in the permits as findings as required, or when an actual or suspected violation of an ambient air quality standard is found locally.

WAC 173-470-010, -020, -030, -100, -160, 1/3/89

WAC 173-470-110, -150, 1/3/89 (S)

WAC 173-474, 9/30/87 (S)

WAC 173-475, 2/29/80 (S)

(S) means state only requirement

16.0 COMPLIANCE SUMMARY

16.1 COMPLIANCE STATUS. A Full Compliance Evaluation (FCE)¹ was completed for Greater Wenatchee Regional Landfill on November 13, 2008. The FCE showed that as of September 30, 2008², Greater Wenatchee Regional Landfill was *in compliance*³. Documents related to this and other FCEs completed for Greater Wenatchee Regional Landfill are available for public viewing from the Department of Ecology, Central Regional Office. Interested persons may make an appointment to view these documents by calling (509) 575-2490 and asking for the public records disclosure coordinator.

16.2 NOTICE OF VIOLATION NO. 1732

On October 18, 2004, Ecology issued Notice of Violation (NOV) No. 1732, to Waste Management for air quality violations at the Greater Wenatchee Regional Landfill, occurring prior to August 17, 2004. The violations cited included permitting, recordkeeping, monitoring, and reporting requirement violations. Most notably, Ecology alleged that Waste Management operated a portable crusher on-site without obtaining the required air quality permits. NOV No. 1732 was resolved by pre-penalty Settlement Agreement and Agreed Order No. 2035, effective March 28, 2005. In the Settlement, Waste Management neither admitted nor denied the alleged violations, and made a payment of \$8,500, to the Air Pollution Control Account.

16.3 OTHER REPORTED VIOLATIONS

The permittee has submitted annual *Compliance Certifications*, required by AOP condition 4.3. In the *Compliance Certifications*, the permittee has stated their compliance status with respect to each permit term and condition. The permittee has reported some violations of permit terms and conditions. Generally, these violations have not been categorized as “high priority” and thus the most recent ones have not resulted in formal enforcement action. The *Compliance Certifications* are available for review at the Department of Ecology’s Central Regional Office, located in Yakima, Washington. Interested persons may make an appointment to view these documents by calling (509) 575-2490 and asking for the public records disclosure coordinator.

¹ An FCE is a comprehensive evaluation of the compliance status of a source. It evaluates all regulated pollutants at all regulated emission units, and it addresses the compliance status of each unit, as well as the source’s continuing ability to maintain compliance at each emission unit.

² This is the most recent date (i.e., end of time period covered) of a document used in making the compliance status determination.

³ Defined per HPV criteria from “The Time and Appropriate (T&A) Enforcement Response to High Priority Violations (HPVs)”, EPA, December 22, 1998.