



WASHINGTON STATE
DEPARTMENT OF
E C O L O G Y

**STATEMENT OF BASIS
FOR
DRAFT
AIR OPERATING PERMIT
FOR
LAB WASHINGTON LLC'S
ASH RECYCLING FACILITY
Klickitat County, Washington**

**PREPARED BY:
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**DRAFT
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1.0 LIST OF ABBREVIATIONS

AOP	Air Operating Permit
ARF	Ash Recycling Facility
CAM	Compliance Assurance Monitoring
CFR	Code of Federal Regulations
CO	Carbon monoxide
CO ₂ e	Carbon dioxide equivalent
Ecology	Washington State Department of Ecology
EPA	United States Environmental Protection Agency
FCE	full compliance evaluation
HAP	Hazardous air pollutants
IEU	insignificant emissions unit
Lb/yr	pounds per year
mm	millimeter
MRR	Monitoring, recordkeeping, and reporting
NOC	Notice of Construction
NO _x	Oxides of nitrogen
PM	Particulate matter
PM ₁₀	Particulate matter with an aerodynamic diameter of 10 micrometers or less
PM _{2.5}	Particulate matter with an aerodynamic diameter of 2.5 micrometers or less
RRLF	Roosevelt Regional Landfill
S	state-only enforceable
SIP	State Implementation Plan
SO ₂	Sulfur dioxide
Ton/yr	tons per year
TPY	tons per year
TSP	Total suspended particulates
WAC	Washington Administrative Code

2.0 GENERAL INFORMATION

Company Name: LAB Washington LLC

Source/Plant Name: Ash Recycling Facility at Roosevelt Regional Landfill

Parent Company: LAB USA

Unified Business Identification Number: 603-412-912

Standard Industrial Classification Code: 4953

Source Location: 500 Roosevelt Grade Road
Roosevelt, Washington 99356
Klickitat County, Washington
Section 27, T. 4 N., R. 21 E., W.M.

Mailing Address: 115 West Bay Drive
Suite 302
Olympia, WA 98502

Responsible Official: Kane Flett
VP of Operations
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211 N Broadway
Suite 211
Green Bay, WI 54303
Phone: 920-544-2855
Email: kane.flett@labusa.us

Site Contact: Ruben Finn
Title
Phone: 509-713-4645
Email: ruben.finn@labusa.us

Basis for Title V Operating Permit Applicability:

For Title V applicability, LAB Washington's Ash Recycling Facility is the same source as the Roosevelt Regional Landfill.

The Roosevelt Regional Landfill has the potential-to-emit greater than: 100 tons per year (tpy) of the individual criteria pollutants carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM), and sulfur dioxide (SO₂); 25 tpy of total Hazardous Air Pollutants (HAP); and 100,000 tpy of carbon dioxide equivalent (CO_{2e}) emissions.

Ecology received notification, on April 27, 2016, of intent to operate the Roosevelt Regional Landfill (operated by Republic Services Inc.) and the Ash Recycling Facility (operated by LAB Washington) under separate Title V Air Operating Permits.

Attainment Classification:

This source is located in an area that is unclassified for all criteria pollutants.

Timeline:

- March 24, 2017 – Ecology received the initial Title V Air Operating Permit application.
- March 31, 2017 – Ecology deemed the renewal Title V Air Operating Permit application incomplete.
- April 3, 2017 – Ecology received updates to the renewal Title V Air Operating Permit application.
- April 3, 2017 – Ecology deemed the renewal Title V Air Operating Permit application complete.

- May 10, 2017 – Ecology posted notice of receipt of the Title V Air Operating Permit in the *Permit Register*.
- April 10, 2019 – Ecology issued Draft Title V Air Operating Permit.

See also Sections 6.0 and 7.0.

3.0 INTRODUCTION

This document sets forth the legal and factual basis for the permit conditions in a Title V Air Operating Permit issued by the State of Washington Department of Ecology for LAB Washington LLC's Ash Recycling Facility (ARF) located at the Roosevelt Regional Landfill (RRLF), in Roosevelt, Washington. This document, called a "statement of basis," does not contain enforceable permit conditions, only supplemental description and explanation. Enforceable permit conditions are contained in the Title V Air Operating Permit.

4.0 SOURCE DESCRIPTION

The ARF processes incinerator ash mined from, or accepted for disposal in, the RRLF Ash Monofill. See Figure 1.

Ash is stockpiled in a storage bay outside of the ARF. Up to three days of ARF capacity may be stockpiled. The ash is processed through an impact crusher and sorted according to size. Ash greater than 100 mm is sent through an oversize sorter. Ash 100 mm or smaller, is stockpiled in a storage bay outside.

To process the ash, it is first fed into a hopper. From there, the ash is divided into four streams, based on size (i.e., 0-4 mm, 4-9 mm, 9-16 mm, & 16-100 mm). Utilizing 1 impact crusher, 2 feed hoppers, 2 screens, 4 overbelt magnet separators, 3 magnet pulleys, 7 eddy-current separators, 1 sorter, 1 fines crusher, 4 vibration chutes, 1 acceleration belt conveyor, and 25 conveyors, the ash is split into four streams. These streams included ferrous metals, nonferrous metals, stainless steel, and mineral. The metals are shipped for sale. The minerals are stockpiled, in a storage bay, and then (re)placed in the ash monofill, by Roosevelt Regional Landfill. (Note: Ash monofill mining, hauling of ash, and (re)placement of ash, are regulated under a separate permit, issued for the RRLF.) See figures 2 through 7.

Figure 1: Site map of ARF

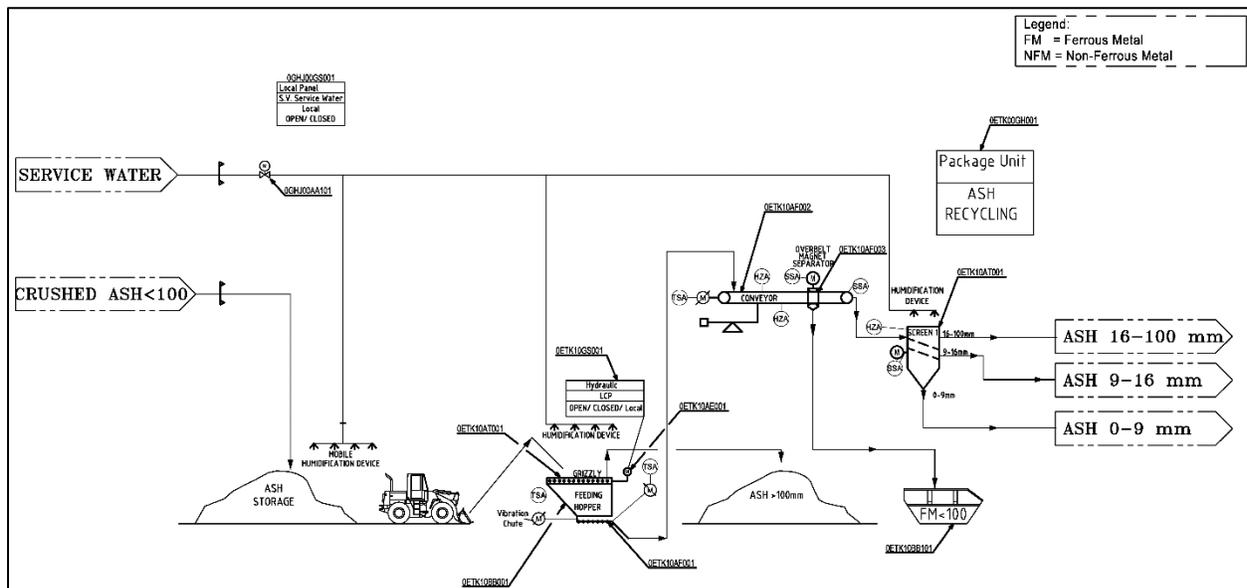


Figure 2: ARF process flow diagram: Feeding and Screening (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

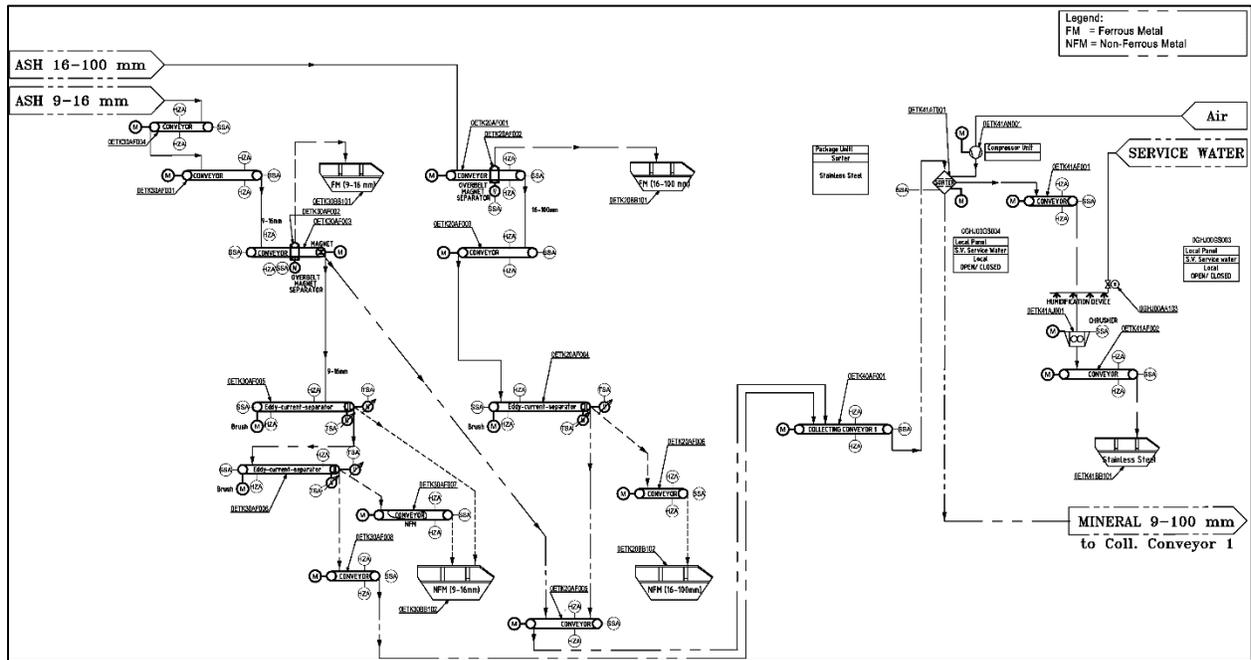


Figure 3: ARF process flow diagram: Fraction 9-16 mm & 16-100 mm (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

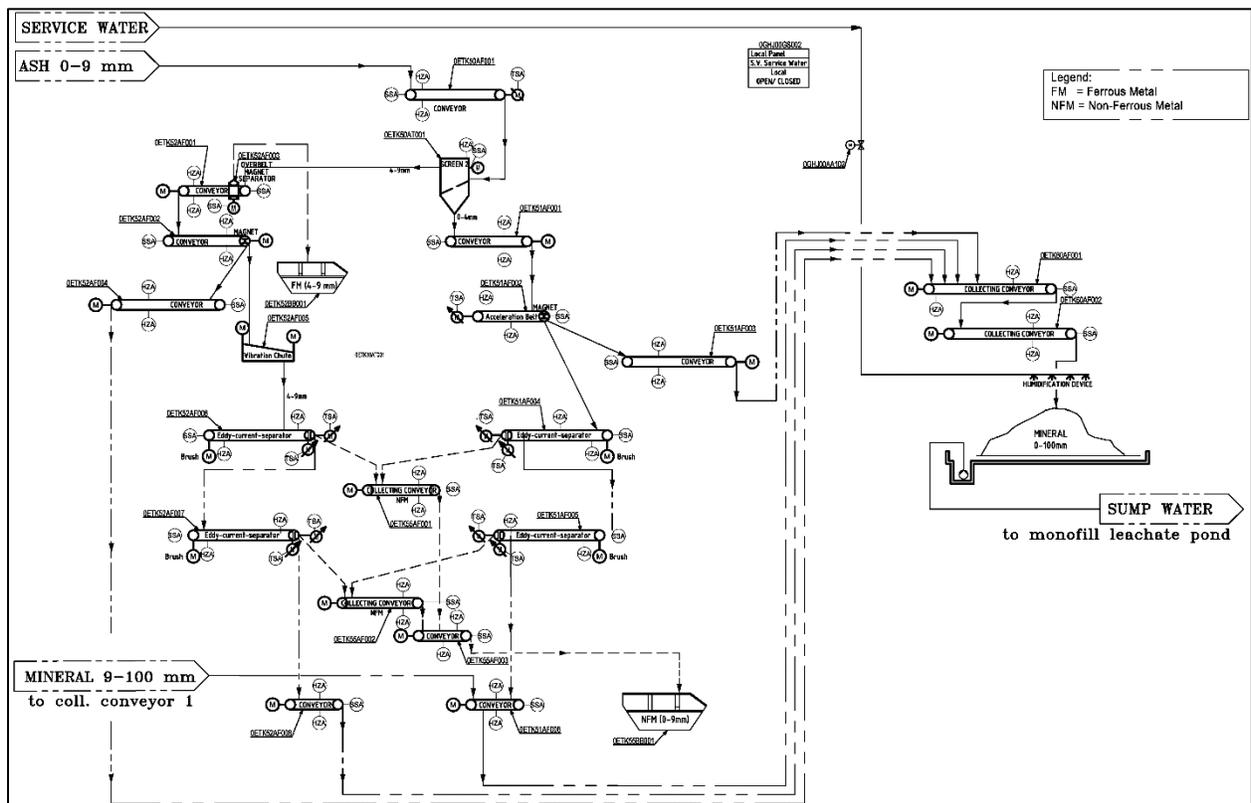


Figure 4: ARF process flow diagram: Fraction 0-4 mm & 4-9 mm (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

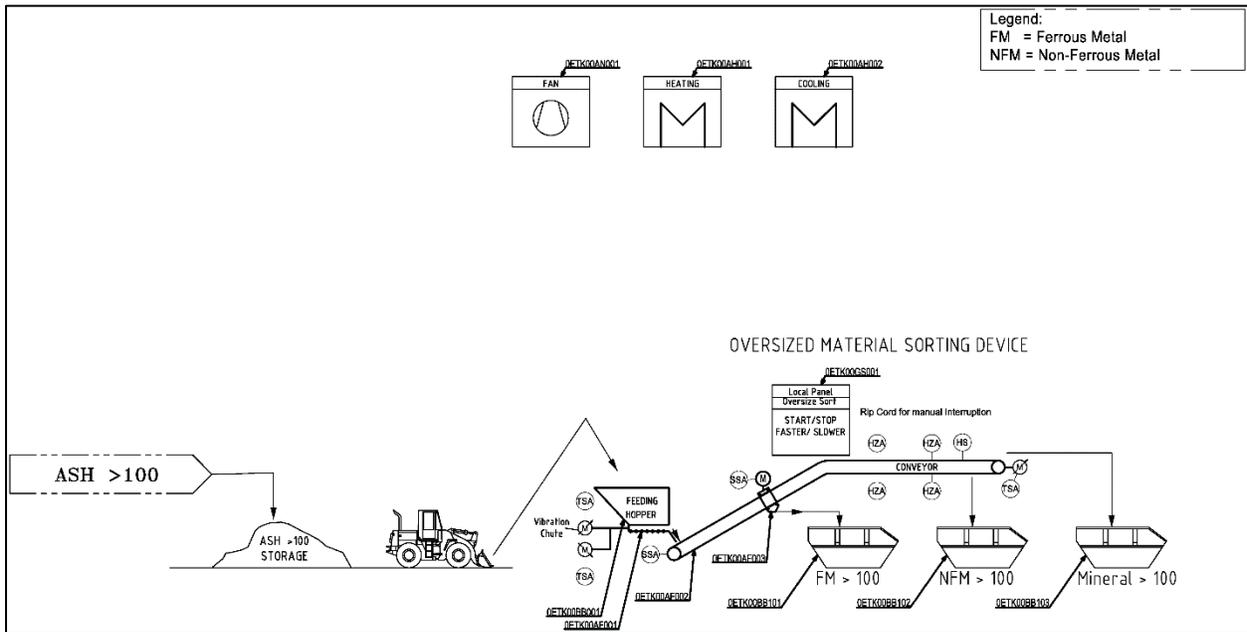


Figure 5: ARF process flow diagram: Oversized material sorting station (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

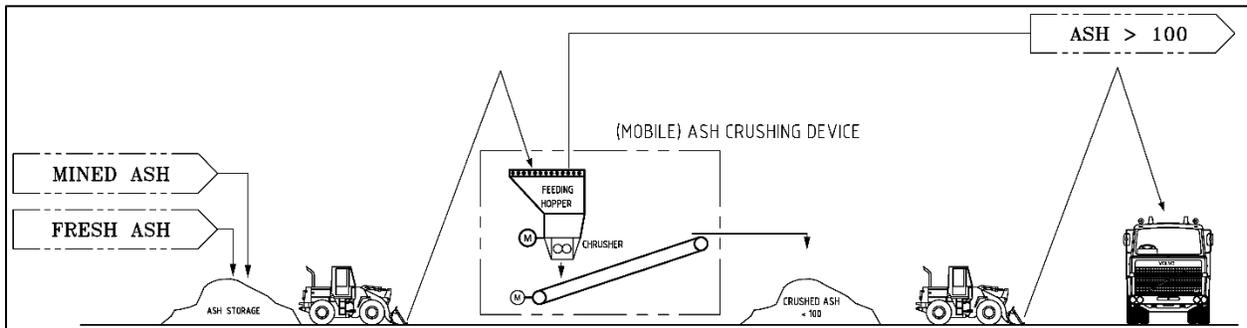


Figure 6: ARF process flow diagram: Ash crushing station (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

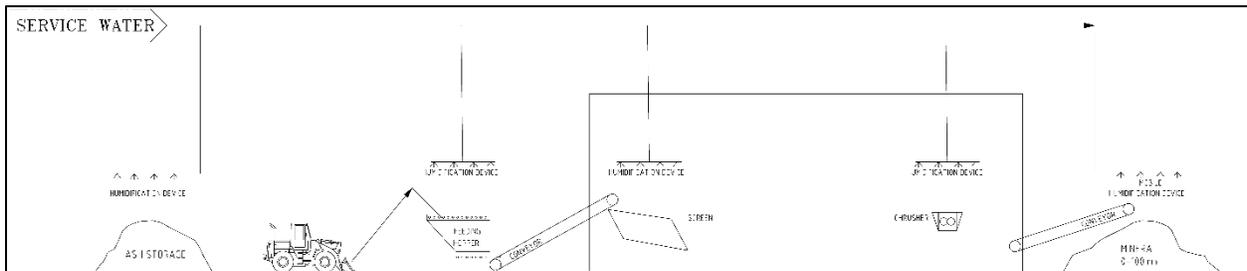


Figure 7: ARF process flow diagram: Humidification device for dust suppression (adapted from 3/24/17, Initial AOP Application from HDR Engineering, Inc.).

Table 1: Summary of Potential Emissions for ARF

Pollutant	Total*	Units
TSP	3.28	ton/yr
PM ₁₀	1.29	ton/yr
PM _{2.5}	0.64	ton/yr
Hazardous Air Pollutants		
Antimony	1.21	lb/yr
Arsenic	0.3072	lb/yr
Barium	5.6	lb/yr
Beryllium	0.01	lb/yr
Cadmium	0.837	lb/yr
Chromium	1.40	lb/yr
Dioxin	0.00000106	lb/yr
Lead	46	lb/yr
Mercury	0.225	lb/yr
Nickel	0.61	lb/yr
Selenium	0.07	lb/yr
Silver	0.18	lb/yr

*Based upon spreadsheet submitted by email on 8/7/18.

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 WAC 173-400-700 through 750) and Nonattainment New Source Review (Title 40 Code of Federal Regulations Part 52.24 and WAC 173-400-800 through 860). 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 (NOC) 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).

Installation and operation of the ARF was originally approved under NOC Order No. 15AQ-C197, issued to LAB Washington, LLC on March 25, 2015. The facility commenced operation on April 4, 2016.

On November 22, 2017, LAB Washington submitted an application to double annual production, from 150,000 tons per year, to 300,000 tons per year, of ash processed through the ARF. The expansion was approved as NOC Order No. 15AQ-C197 First Revision, issued on August 10, 2018.

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 source 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. Minor revisions to chapter 173-401 were made on September 16, 2002, and were approved by EPA on December 2, 2002. The current, state-only enforceable, version of this regulation was updated on August 16, 2018.

Under AOP law and regulations, LAB Washington LLC's Ash Recycling Facility is the same source as Roosevelt Regional Landfill. The Roosevelt Regional Landfill currently operates under AOP No. 14AQ-C182. However, LAB Washington notified Ecology of "their intent to operate the Roosevelt Regional Landfill (operated by Republic Services, Inc.) and the Ash Recycling Facility (operated by LAB Washington) under separate Air Operating permits", in an email letter, received on April 27, 2016. See Figure 8.

The initial complete AOP application was due by April 4, 2017. It was completed and deemed complete on April 3, 2017.

See also "Timeline" in Section 2.0.

7.0 FEDERAL REGULATIONS

No emission unit specific Federal regulations have been identified as applicable.

8.0 COMPLIANCE ASSURANCE MONITORING (CAM).

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:

1. The unit is located at a Title V Air Operating Permit source
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.
3. The unit uses a control device to achieve compliance with any such emission limitation or standard; and
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.

The ARF has no emission units with pre-controlled emissions equal to or greater than 100 percent of the amount required to be classified as an AOP source. Nor does the ARF utilize any control device.

9.0 INSIGNIFICANT EMISSION UNITS AND ACTIVITIES

There are no Insignificant Emission Units (IEU) or activities, as defined in WAC 173-401-530, WAC 173-401-532, or WAC 173-401-533, that are associated with operation of the ARF. (LAB AOP Application, Page 4, sent March 24, 2017.)

10.0 GAPFILLING

Section 3 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.

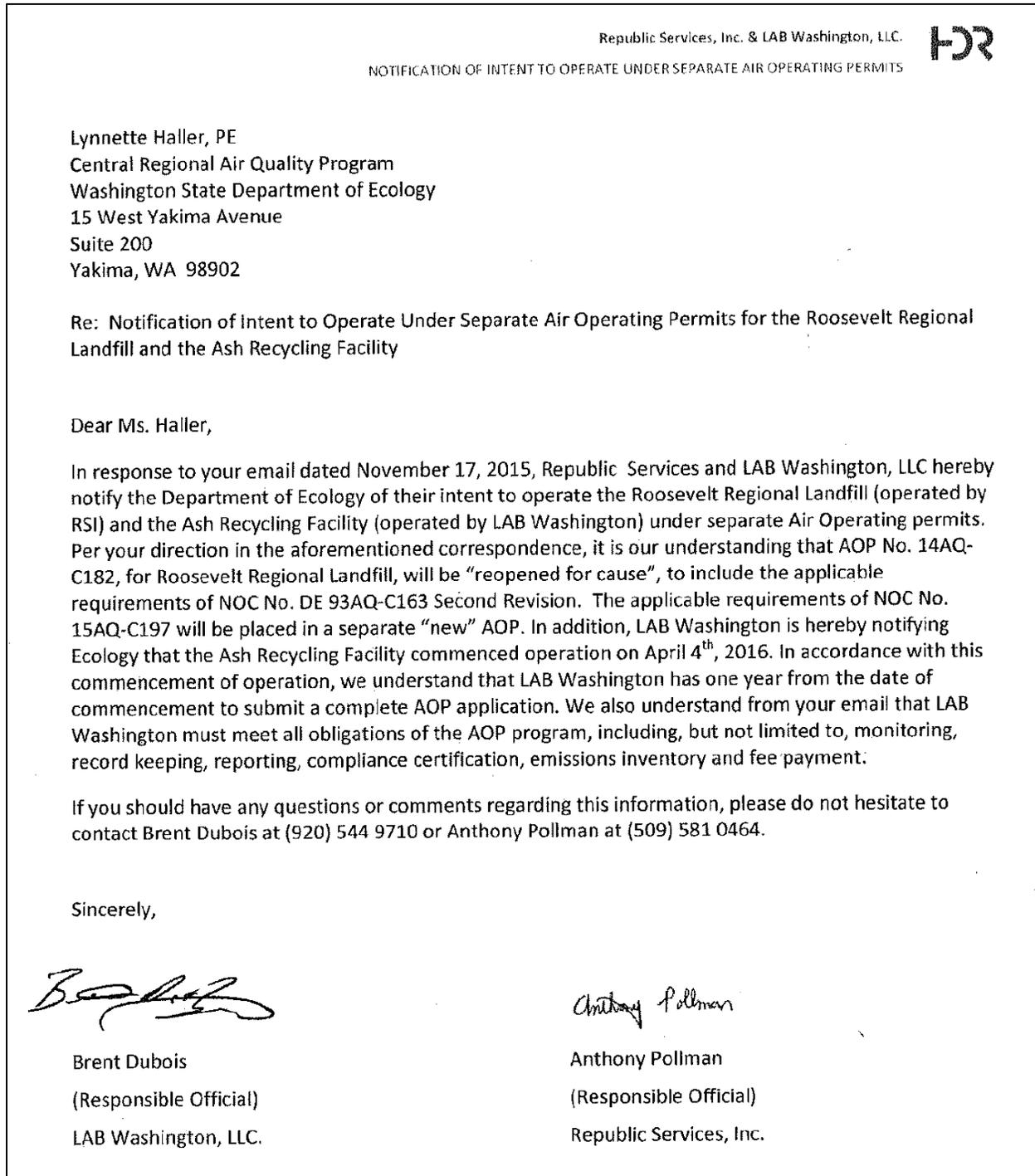


Figure 8: Notification of Intent to Operate Under Separate Air Operating Permits for the RRLF and the ARF (received by email, dated April 27, 2016, from Ryan Asman of HDR).

The last column of the tables in Section 3, 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 when it does not come specifically from the identified applicable requirement(s). Those that reference WAC 173-401-615(1) were gapfilled. Table 2 lists a brief explanation of the basis for each instance of gapfilling.

Table 2: Identification and Basis of “Gapfilled” Items

Applicable Requirement(s)	Gapfilling Basis
3.1.4, 3.1.5, 3.1.6	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.
3.1.4, 3.1.6, 3.1.10, 3.1.13, 3.1.14	Test methods were not specified for several generally applicable requirements. A statement of the test method which will be used as the basis for compliance was specified.
3.1.18	Development and implementation of these documents fulfills the applicable requirement. Periodic review/inspections will aid in assuring that the documents contents are being followed.

11.0 STREAMLINING

Streamlining is where one or more applicable requirement is recognized as being less stringent than another applicable requirement. Upon a satisfactory showing that one applicable requirement is more stringent, it may formally subsume the less stringent applicable requirement(s). This AOP does not include any streamlining.

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. Terms and conditions which are designated as state-only enforceable, 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 173-401-605(3), 9/16/02, 8/16/18 (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 9/16/02 version of WAC 173-400-107 (this is the version of WAC 173-400-605(3) that is in the SIP and is federally enforceable) and in the 8/16/18 version of WAC 173-400-605(3). The (S) after 8/16/18 means that the 8/16/18 version of WAC 173-400-605(3) is State-only enforceable.

Note that, “WAC 173-401 is not federally enforceable. EPA decided not to make provisions of approved State operating permit rules federally enforceable, but instead, will only enforce the provisions of the Act itself. For example, the Act specifically allows EPA and citizens to enforce the terms of issued permits and to enforce the Act's requirement for sources to have permits, to submit complete and timely permit applications, and to abide by the terms of their permits. EPA and citizens can also enforce the requirements for permitting authorities to not issue a

permit if EPA objects, to notify affected states, to reopen permits, and to issue permits, permit revisions, and renewals in accordance with the EPA approved State rules. However, the provisions of WAC 173-401 which apply to sources or to the permitting authorities are not enforceable by EPA or by citizens under the Act.” [Per, *Region 10 Answers and Questions #2*, From Joan Cabreza, March 19, 1996,)

14.0 OPERATIONAL FLEXIBILITY

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

However, 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. For example, 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 Personnel Designations.

All Title V Air Operating Permit submittals, including applications, reports, and compliance certifications, must include certification by a responsible official of truth, accuracy, and completeness. Certification must state that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. It is a criminal offense to knowingly make any false material statement, representation or certification in any form, in any notice or report required by the air operating permit. Additionally, it is a criminal offense to knowingly render inaccurate any required monitoring device or method.

According to 40 CFR §70.2 (and WAC 173-401-200(29)), for a corporation “Responsible Official” means: a president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit and either: (i) The facilities employ more than 250 persons or have gross annual sales or expenditures exceeding \$25 million (in second quarter 1980 dollars); or (ii) The delegation of authority to such representatives is approved in advance by the permitting authority.

15.2 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 173-476, 11/21/13 (S)

16.0 COMPLIANCE SUMMARY

To date, the ARF has not undergone a Full Compliance Evaluation (FCE). In the *LAB AOP Application*, sent March 24, 2017, LAB Washington certified that they are in compliance with all terms of their NOC. Publicly disclosable documents are available for public viewing from the Department of Ecology, Central Regional Office and can be obtained by contacting the Public Records Disclosure Coordinator at 509-575-2490.