



Notice of Construction Application

A notice of construction permit is required before installing a new source of air pollution or modifying an existing source of air pollution. This application applies to facilities in Ecology’s jurisdiction. Submit this application for review of your project. For general information about completing the application, refer to Ecology Forms ECY 070-410a-g, “Instructions for Ecology’s Notice of Construction Application.”

Ecology offers up to 2 hours of free pre-application help. We encourage you to schedule a pre-application meeting with the contact person specified for the location of your proposal (see below). For more help than the initial 2 free hours, submit Part 1 of the application and the application fee. You may schedule a meeting with us at any point in the process.

Completing the application, enclose it with a check for the initial fee and mail to:

**WA Department of Ecology
Cashiering Unit
P.O. Box 47611
Olympia, WA 98504-7611**

For Fiscal Office Use Only:
001-NSR-216-0299-000404

Check the box for the location of your proposal. For help, call the contact listed below.		
	Ecology Permitting Office	Contact
<input type="checkbox"/> CRO	Chelan, Douglas, Kittitas, Klickitat, or Okanogan County Ecology Central Regional Office – Air Quality Program	Lynnette Haller (509) 457-7126 lynnette.haller@ecy.wa.gov
<input type="checkbox"/> ERO	Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, or Whitman County Ecology Eastern Regional Office – Air Quality Program	Jolaine Johnson (509) 329-3452 jolaine.johnson@ecy.wa.gov
<input type="checkbox"/> NWRO	San Juan County Ecology Northwest Regional Office – Air Quality Program	Dave Adler (425) 649-7267 david.adler@ecy.wa.gov
<input type="checkbox"/> IND	Kraft and Sulfite Paper Mills and Aluminum Smelters Ecology Industrial Section – Waste 2 Resources Program Permit manager: _____	James DeMay (360) 407-6868 james.demay@ecy.wa.gov
<input type="checkbox"/> NWP	U.S. Department of Energy Hanford Reservation Ecology Nuclear Waste Program	Phil Gent (509) 372-7983 phil.gent@ecy.wa.gov



Notice of Construction Application

Check the box for the fee that applies to your application.

New project or equipment

<input checked="" type="checkbox"/>	\$1,500: Basic project initial fee covers up to 16 hours of review
<input type="checkbox"/>	\$10,000: Complex project initial fee covers up to 106 hours of review

Change to an existing permit or equipment

<input type="checkbox"/>	\$200: Administrative or simple change initial fee covers up to 3 hours of review Ecology may determine your change is complex during completeness review of your application. If your project is complex, you must pay the additional \$675 before we will continue working on your application.
	\$875: Complex change initial fee covers up to 10 hours of review
<input type="checkbox"/>	\$350 flat fee: Replace or alter control technology equipment (WAC 173-400-114) Ecology will contact you if we determine your change belongs in another fee category. You must pay the fee associated with that category before we will continue working on your application.

Read each statement, then check the box next to it to acknowledge that you agree.

<input type="checkbox"/>	The initial fee you submitted may not cover the cost of processing your application. Ecology will track the number of hours spent on your project. If the number of hours Ecology spends exceeds the hours included in your initial fee, Ecology will charge you \$95 per hour for the extra time.
<input type="checkbox"/>	You must include all information in this application. Ecology may not process your application if it does not include all the information requested.
<input type="checkbox"/>	Submittal of this application allows Ecology staff to inspect your facility.



Notice of Construction Application

Part 1: General Information

I. Project, Facility, and Company Information

1. Project Name:	Landfill Gas Improvements, Enclosed Flare System for Active Cells and Closed Landfill
2. Facility Name:	Asotin County Regional Landfill
3. Facility Street Address:	2901 6th Avenue, Clarkston, WA 99403
4. Facility Legal Description:	Section 36, Township 11 North, Range 45 East of the Willamette Meridian
5. Company Legal Name (if different than Facility Name):	Not Applicable
6. Company Mailing Address (street, city, state, zip):	Same as Street Address (above)

II. Contact Information and Certification

1. Facility Contact Name (who will be on-site): Stephen Becker	
2. Facility Contact Mailing Address (if different than Company Mailing Address) 2901 6th Avenue, Clarkston, WA 99403	
3. Facility Contact Phone Number: 509-758-1965	4. Facility Contact Email: acrl@clarkston.com
5. Billing Contact Name (who should receive billing information): Stephen Becker, Solid Waste Supervisor	
6. Billing Contact Mailing Address (if different than Company Mailing Address) Same as facility address above.	
7. Billing Contact Phone Number: 509-758-1965	8. Billing Contact Email: acrl@clarkston.com
9. Consultant Name (optional – if 3rd party hired to complete application): Robert Martin	
10. Consultant Organization/Company: Jacobs Engineering Group Inc.	
11. Consultant Mailing Address (street, city, state, zip): 999 W. Riverside Avenue, Suite 500, Spokane, WA 99201	
12. Consultant Phone Number: 509-464-7200	13. Consultant Email: robert.martin@ch2m.com
14. Responsible Official Name and Title (person responsible for project policy or decision-making): Stephen Becker, Solid Waste Supervisor	
15. Responsible Official Mailing Address: 2901 6th Avenue, Clarkston, WA 99403	
16. Responsible Official Phone: 509-758-1965	17. Responsible Official Email: acrl@clarkston.com
18. Responsible Official Certification and Signature I certify that the information on this application is accurate and complete.	
Signature _____ Date _____	



Notice of Construction Application Part 2: Technical Information

The Technical Information may be sent with this application to the Ecology Cashiering Unit, or may be sent directly to the appropriate Ecology office along with a copy of this application.

For all sections, check the box next to each item as you complete it.

III. Project Description

Attach the following to your application:

- Description of your proposed project
- Projected construction start and completion dates
- Operating schedule and production rates
- List of all major process equipment with manufacturer and maximum rated capacity
- Process flow diagram with all emission points identified
- Plan view site map
- Manufacturer specification sheets for major process equipment components
- Manufacturer specification sheets for pollution control equipment
- Fuel specifications, including type, consumption (per hour and per year), and percent sulfur

See Section III, Project Description and **Attachment A**.

IV. State Environmental Policy Act (SEPA) Compliance

Check the appropriate box below. See Section IV, SEPA and **Attachment E**

- SEPA review is in process.
Include a copy of the final SEPA checklist and SEPA determination (e.g., DNS, MDNS, EIS) with your application.

- SEPA review has not been conducted.

- If SEPA review will be conducted by another agency, list the agency. You must provide a copy of the final SEPA checklist and SEPA determination before Ecology will issue your permit.

Agency Reviewing SEPA:

-
- If SEPA review will be conducted by Ecology, fill out a SEPA checklist and submit it with your application. You can find a SEPA checklist online at <http://www.ecy.wa.gov/programs/sea/sepa/forms.htm>.



Notice of Construction Application

V. Emissions Estimations of Criteria Pollutants

Does your project generate air pollutant emissions? Yes No

If yes, provide the following information about your air pollutant emissions:

- Air pollutants emitted, such as carbon monoxide (CO₂), lead (Pb), nitrogen dioxide (NO₂), ozone (O₃), and volatile organic compounds (VOC), particulate matter (PM_{2.5}, PM₁₀, TSP), sulfur dioxide (SO₂)
- Potential emissions of criteria air pollutants in tons per hour, tons per day, and tons per year (include calculations)
- Fugitive air pollutant emissions – pollutant and quantity

See Section V. Emissions Estimations of Criteria Pollutants; supporting data provided in **Attachments F**, data summaries and calculations provided in **Attachment G**.

VI. Emissions Estimations of Toxic Air Pollutants

Does your project generate toxic air pollutant emissions? Yes No

If yes, provide the following information about your toxic air pollutant emissions:

- Toxic air pollutants emitted (specified in [WAC 173-460-150¹](#))
- Potential emissions of toxic air pollutants in pounds per hour, pounds per day, and pounds per year (include calculations)
- Fugitive toxic air pollutant emissions - pollutant and quantity

See Section VI. Emissions Estimations of Toxic Air Pollutants and **Attachment G**.

VII. Emission Standard Compliance

Does your project comply with all applicable standards identified? Yes No

- Provide a list of all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, and emission standards adopted under the Washington Clean Air Act, Chapter 70.94 RCW.

See Section VII. Emission Standard Compliance.

VIII. Best Available Control Technology

- Provide a complete evaluation of Best Available Control Technology (BACT) for your proposal.

See Section VIII. Best Available Control Technology (BACT).



Notice of Construction Application

¹ <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460-150>

IX. Ambient Air Impacts Analyses

Does your project cause or contribute to a violation of any ambient air quality standard or acceptable source impact level? Yes No

Provide the following:

- Ambient air impacts analyses for criteria air pollutants (including fugitive emissions)
- Ambient air impacts analyses for toxic air pollutants (including fugitive emissions)
- Discharge point data for each point included in ambient air impacts analyses (include only if modeling is required)
 - Exhaust height
 - Exhaust inside dimensions (diameter or length and width)
 - Exhaust gas velocity or volumetric flow rate
 - Exhaust gas exit temperature
 - Volumetric flow rate
 - Discharge description (i.e., vertically or horizontally) and if there are any obstructions (e.g., raincap)
 - Emission unit(s) discharging from the point
 - Distance from the stack to the nearest property line
 - Emission unit building height, width, and length
 - Height of tallest building on-site or in the vicinity, and the nearest distance of that building to the exhaust
 - Facility location (urban or rural)

See Section IX. Ambient Air Impacts Analyses and **Attachment G**.

Notice of Construction Application

Part 2: Technical Information

III. Project Description.....	2
IV. State Environmental Policy Act (SEPA) Compliance.....	4
V. Emission Estimations of Criteria Pollutants.....	5
VI. Emission Estimations of Toxic Air Pollutants.....	5
VII. Emission Standard Compliance.....	6
VIII. Best Available Control Technology (BACT).....	7
IX. Ambient Air Impacts Analysis.....	8
Cited References.....	9

Supporting Attachments:

Attachment A. Vicinity and Site Location Map

Attachment B. Site Map and Process Flow Diagram

Attachment C. *Basis of Design for the 2018 Landfill Gas System Upgrades Project* (Great West Engineering, 2018a)

Attachment D. Technical Specifications for Major Process & Pollution Control Equipment

D.1 Technical Specifications, Landfill Gas Flare Station (Great West Engineering, 2018b)

D.2 Manufacturer Drawings: Overall Site Layout, Enclosed Flare, Blowers, Control Panel (set of 3 drawings)

D.3 Manufacturer Specifications: Enclosed Ground Flare Station and Related Components

Attachment E. Supporting SEPA Documentation

Attachment F. Landfill Gas Sampling Methods and Analytical Results

Attachment G. Emissions Calculations and Regulatory Review

III. Project Description

Written narrative describing your proposed project.

Asotin County Regional Landfill (ACRL) is in Asotin County, located in the southeastern corner of Washington State. ACRL is located approximately 3 miles southwest of the City of Clarkston. The landfill area occupies 76.5 acres within the southern portion of Section 36, Township 11 North, Range 45 East, Willamette Meridian. The site address is 2901 6th Avenue, Clarkston, Washington 99403. **Attachment A** contains vicinity and site location maps. **Attachment B** contains a site map showing site features, waste units, vapor extraction system layout, and the single emission point referenced in this Notice of Construction (NOC) Application.

Since 1995, ACRL has operated under an air permit issued by the Washington Department of Ecology (Ecology), Order No. DE 95AQ-E142 (Ecology, 1995). The purpose of this NOC Application is to obtain an updated air permit for the construction of an enclosed ground flare system designed to capture and thermally destroy landfill gases from both the Active Landfill Unit (Cells A-D) and Closed Landfill Unit's vapor extraction (VE) system. The enclosed ground flare system is proposed for construction in 2018 and will replace the existing open, candlestick flare, which was permitted in 1995 and has been in operation since that time.

The basis of design and rationale for the proposed enclosed ground flare system are described in *Asotin County Regional Landfill Basis of Design for the 2018 Landfill Gas System Upgrades Project* (Great West Engineering, 2018a), which is provided in **Attachment C**. The upgraded flare station will be a single point source emission that replaces the existing candlestick flare in the exact same location.

The construction plans and technical specifications for the project (*Contract Documents for the Asotin County Regional Landfill – 2018 Landfill Gas System Improvements Project*, Great West Engineering, March 2018) were reviewed by the Waste 2 Resources Program of Ecology and determined that the upgrades are in conformance with WAC 173-351-220(4) and (5) and recommended to Asotin County Health Department to approve the modifications. ACHD in turn approved the project based on Ecology's recommendation.

The Technical Specifications for the flare station (Specification Section 02715) are provided in **Attachment D**. The construction plans are available through Asotin County upon Request – *Asotin County Regional Landfill 2018 Landfill Gas System Upgrades Project, Construction Plans* (Great West Engineering, 2018c).

Project construction start and completion dates.

The project duration is expected to be 5-7 months. The work is scheduled to start on June 1, 2018, and completion is expected by December 31, 2018. Ultimately, the project schedule depends on the flare station manufacturer's schedule to build and deliver the blower and flare skids to the site for assembly.

Operating schedule and production rates.

The enclosed flare system is designed and intended to be operated continuously to capture and thermally destroy landfill gases generated from both the Active Landfill Unit and Closed Landfill Unit. Both systems have individual wellheads to regulate and measure landfill gas flows and gas content. As described in **Attachment C**, the peak landfill gas generation rate is estimated at approximately 500

standard cubic feet per minute (scfm), collectively from both landfill units over the 25-year design life of the flare station. The system is designed with dual (two) blowers but only requires one blower to function at up to the 500-scfm rate; the blowers will alternate running times for wear and be used as back-up in case there is scheduled or unscheduled time of one of the blower units

Scheduled downtime will be for scheduled maintenance of the blower units (rebuilt, etc.) and other scheduled maintenance to the blower skid equipment or the flare stack unit. Unscheduled downtime will occur if there is a malfunction or equipment repair is needed.

List of all major process equipment with manufacturer and maximum rated capacity.

The major process equipment components of the flare station include the gas handling skid (blower skid) and the flare stack with an integrated control system. The flare station draws a vacuum on the wellfield from the Active Landfill Unit's LGTs and the Closed Landfill Unit's LGWs (SVE system). The wellfield is made up of gas wellheads on each of the wells, lateral pipes connecting the wellheads and monitoring stations to manifold pipes and a main header that connects the manifolds to the flare station.

The flare station consists of the gas handling skid (blower skid) and the flare stack. The modular units are built in the factory for assembly in the field. The flare station is specified to extract, demist, process the condensate, compress and combust a maximum of 18 MMBtu/hr (600 scfm of 50% CH₄) of landfill gas. The enclosed ground flare station includes three (3) principal sub-systems:

- 1) Enclosed Ground Flare Unit;
- 2) Landfill Gas Handling Skid;
- 3) Integrated Control System.

The combination of these sub-systems include the following components.

Enclosed Ground Flare Unit:

- a. Automatic actuated shutdown valve
- b. Flame arrester
- c. Stainless steel LFG burner
- d. Flare stack
- e. Interconnecting piping
- f. Internal electrical wiring
- g. Instrumentation and control devices
- h. Junction and terminal boxes as required
- i. Sampling ports for both inlet and outlet gases
- j. Pilot and ignition system

Landfill Gas Handling Skid:

- a. Landfill gas blowers
- b. Demister system (knock-out tank)
- c. Process valves
- d. Process pipes
- e. Structural skid
- f. Internal electrical wiring
- g. Instrumentation including flow meter

Integrated Control System:

- a. Enclosures, cabinets and junction boxes
- b. Motor Control Center (MCC) equipment

Specifications for these items are summarized below as detailed in the *Technical Specifications* (Great West Engineering, 2018b):

- Process flow diagram with all emission points identified.

Attachment B is a site map showing the location of the single emission point for the proposed enclosed ground flare system, which is the same location as the existing permitted candlestick flare. **Attachment B** has been annotated to constitute the process flow diagram showing the flow of landfill gas from the respective wellfields routed to the Enclosed Ground Flare Station for thermal destruction.

- Plan view site map.

Attachment A is the vicinity and site location maps, and **Attachment B** contains a site map showing the existing landfill gas extraction systems.

- Manufacturer specification sheets for major process equipment components.

Attachment D.1 includes Technical Specifications for the Landfill Gas Flare Station.

Attachment D.2 includes a series of three drawings of the Enclosed Ground Flare Station developed by the manufacturer showing the overall layout in plan-view and cross-section.

Attachment D.3 is the engineering submittal for the Enclosed Ground Flare Station, prepared by the manufacturer, Perennial Energy, LLC.

- Manufacturer specification sheets for pollution control equipment.

As provided in **Attachments D.2 and D.3** (described above).

- Fuel specifications, including type, consumption (per hour and per year) and percent sulfur.

Not applicable.

The Enclosed Ground Flare Station will thermally destruct landfill gas.

IV. State Environmental Policy Act (SEPA) Compliance

- SEPA review is complete: Include a copy of the final SEPA checklist and SEPA determination (e.g., DNS, MDNS, EIS) with your application.

Asotin County Regional Landfill has a permit for Municipal Solid Waste Landfilling issued by Asotin County Health Department in 2008 and is effective through 2018 (Asotin County Health Department, 2008). A permit renewal request through the department is currently in process. The landfilling

operations include vapor extraction and emissions control as part of routine landfilling operations as described in **Attachment C**.

Attachment E provides a copy of SEPA checklist developed in 2010 in support of the *2010 Solid Waste Management Plan Update*, and the related Declaration of Non-significance (DNS) letter from Karst Riggers representing the Asotin County Building and Planning Department, dated June 28, 2010.

Attachment E also includes a DNS addendum from Asotin County Building and Planning Department from their review of the proposed new enclosed flare system as described in this NOC Application, dated _____ (*pending*).

V. Emissions Estimations of Criteria Pollutants

Does your project generate criteria air pollutant emissions? Yes, No

Attachment F summarizes landfill gas sampling and supporting data for emission estimates of criteria pollutants for this NOC Application as summarized below. **Attachment G** summarizes the emissions calculations for this NOC Application as summarized below.

The names of the criteria air pollutants emitted?

Reference Table 1 of **Attachment G** for the criteria air pollutants emitted, which include PM₁₀, PM₂₅, CO, SO₂, NO₂, VOC, GHG, TAPs, and HAPs.

Potential emissions of criteria air pollutants in tons per hour, tons per day, and tons per year (include calculations).

Reference Table 1 of **Attachment G** for the emissions estimates for the criteria air pollutants emitted for PM₁₀, PM₂₅, CO, SO₂, NO₂, VOC, GHG, TAPs, and HAPs. Supporting calculations for the information summarized in Table 1 is provided in Worksheet 1 (Scenario 1) and Worksheet 2 (Scenario 2).

If there will be any fugitive criteria pollutant emissions, clearly identify the pollutant and quantity.

None (not applicable).

VI. Emissions Estimations of Toxic Air Pollutants

Does your project generate toxic air pollutant emissions? Yes, No

As described under Section V above, reference Table 1 in **Attachment G**.

The names of the toxic air pollutants emitted (specified in WAC 173-460-150)?

Potential emissions of toxic air pollutants in tons per hour, tons per day, and tons per year (include calculations).

If there will be any fugitive toxic air pollutant emissions, clearly identify the pollutant and quantity.

None (not applicable).

VII. Emission Standard Compliance

Does your project comply with all applicable standards identified? Yes, No

Provide a list of all applicable new source performance standards, national emission standards for hazardous air pollutants, national emission standards for hazardous air pollutants for source categories, and emission standards adopted under the Washington Clean Air Act, Chapter 70.94 RCW.

The Federal New Source Performance Standards (NSPS) in Chapter 40 Code of Federal Regulations (CFR) Part 60 and National Emission Standards for Hazardous Air Pollutants in 40 CFR Part 63 were reviewed as part of this NOC Application, as described below.

For a municipal solid waste landfill to be regulated under the NSPS rules, the landfill must have a design capacity equal to or greater than 2,500,000 cubic meters (m³) and 2,500,000 megagrams (Mg). The combined capacity of the ACRL facility, with the modified capacity of Cells A-D is 3,873,000 m³ and 2,499,500 Mg. Therefore, the facility's design capacity is below the 2.5 million megagrams and therefore not subject to the NSPS rule for MSW landfills (40 CFR 60 Subpart WWW), the Federal Emission Guidelines (EG) for MSW landfills (40 CFR Subpart Cc), or the National Emission Standards for Hazardous Air Pollutants (NESHAP) for MSW landfills (40 CFR Subpart AAAA). 40 CFR 60 Subpart XXX applies to landfills that commenced construction, reconstruction, or modification after July 17, 2014. Modification means an increase in the permitted volume design capacity of the landfill by either lateral or vertical expansion based on its permitted design capacity as of July 17, 2014. The proposed project does not include an increase in the landfills design capacity, so the Subpart is not applicable.

In addition, Title V of the Clean Air Act requires states to adopt a U.S. Environmental Protection Agency (EPA)-approved air operating permit program for major sources, as Washington State has done under Chapter 173-401 WAC. A major source is defined as a source with an annual potential to emit more than 100 tons per year of any pollutant regulated under the federal Clean Air Act, or more than 10 tons per year of any one hazardous air pollutant (HAP), or 25 tons per year of total HAPs. Sources below all three threshold values are considered to be minor sources for Title V purposes. Because ACRL's design capacity is low enough that the landfill is not subject to EG, NSPS, or NESHAP regulations and guidelines, and because estimated emissions from all cells combined at this landfill are lower than the criteria outlined above, Title V is not required.

Additional explanation of emission compliance is provided in the **Attachment G**, Regulatory Review.

VIII. Best Available Control Technology

Provide a complete evaluation of Best Available Control Technology (BACT) for your proposal.

The County currently operates a gas collection and control system (GCCS) at the ACRL to manage landfill gas. The ACRL is not required to have a GCCS. The landfill is under the mass and volume thresholds for the New Source Performance Standards and Title V. However, the system was originally installed to control landfill gases from the Closed Landfill Unit. The Closed Landfill Unit is now under a voluntary cleanup action to removal volatile organic compound vapors.

The GCCS is comprised a series of gas extraction wells in both the Active and Closed Landfill Units, a gas collection piping network, and a blower/flare station to thermally destroy the landfill gas. The system is currently permitted under Order No. DE95AQ-E142, dated August 23, 1995 with Ecology.

The current system has a permitted capacity of approximately 240 scfm. Thermal destruction is accomplished through use of two blowers and an open, candle-stick flare unit manufactured by Perennial Energy, Inc. (PEI). The open candle-stick flare has a reported efficiency of 98% for the designed flow rate of 240 scfm and minimum influent methane concentration of 35%.

Beginning in 2004, landfill gas extraction rates began to decrease from the closed landfill gas wells due to low methane content. The naturally-decreasing methane concentrations in the older fill areas were low enough to interrupt the open, candle-stick flare operations. System operations were subsequently adjusted to address these conditions, including reducing the extraction flows from the closed landfill unit wells and cycling the flows to the flare.

In 2012, the gas system from the closed landfill unit was decoupled from the main system. A separate blower was installed to extract gas from the closed landfill unit for pilot testing the vapor extraction (VE) system.

The current flare station is nearing its operational life and several of the components are outdated and have been discontinued from manufacturing. As such, this project updates the system with a state-of-the-art enclosed ground flare unit and new gas handling skid. The proposed station features increased capacity and the ability to operate at lower methane concentrations. The new enclosed flare is expected to have a destruction efficiency of at least 98% and is sized to accommodate future gas generation rates from both the active landfill unit and the closed landfill VE system.

The upgrades to the flare system were designed to provide treatment over a 25-year design horizon through 2043. This life expectancy is based on a reasonable length of operation for the flare and air handling equipment assuming proper operation and maintenance of the equipment.

The components of the system upgrades are represented in this application. Required blower and flare specifications are based on the landfill gas generation models provided. Slight changes to the system design may be required during construction, including minor deviations to piping layout and/or valve placements to accommodate field conditions. This system is designed to capture and destroy the maximum possible amount of methane and pollutants in the landfill gas.

IX. Ambient Air Impacts Analyses

Please provide the following:

Does your project cause or contribute to a violation of any ambient air quality standard or acceptable source impact level? Yes, No

Ambient air impacts analyses for criteria air pollutants (including fugitive emissions)

Reference the emissions estimates shown in Table 2 of **Attachment G**.

Ambient air impacts analyses for toxic air pollutants (including fugitive emissions)

Reference the emissions estimates shown in Table 2 of **Attachment G**.

Discharge point data for each point included in ambient air impacts analyses (include only if modeling is required)

- Exhaust height
- Exhaust inside dimensions (diameter or length and width)
- Exhaust gas velocity or volumetric flow rate
- Exhaust gas exit temperature
- Volumetric flow rate
- Discharge description (i.e., vertically or horizontally) and if there are any obstructions (e.g., raincap)
- Emission unit(s) discharging from the point
- Distance from the stack to the nearest property line Emission unit building height, width, and length
- Height of tallest building on-site or in the vicinity, and the nearest distance of that building to the exhaust
- Facility location (urban or rural)

Does your project cause or contribute to a violation of any ambient air quality standard or acceptable source impact level? Yes, No

Reference the emissions estimates shown in Table 2 of **Attachment G**. The proposed project expected potential to emit (PTE) emissions for flows up to 500 scfm (Scenario 2) for all the TAPs identified were less than their respective SQERs.

Cited References

Asotin County Building Department. 2010. Determination of Non-Significance (DNS) letter regarding 2010 Solid Waste Management Plan Update.

Asotin County Building Department. 2018. [*pending*]

Great West Engineering. 2018a. *Asotin County Regional Landfill Basis of Design for the 2018 Landfill Gas System Upgrades Project*. Prepared for Asotin County, Washington. March 29.

Great West Engineering. 2018b. *Technical Specifications*.

Great West Engineering. 2018c. *Asotin County Regional Landfill 2018 Landfill Gas System Upgrades Project, Construction Plans*.

Jacobs Engineering Group (Jacobs). 2018a. *Technical Memorandum: Landfill Gas Sampling Methods and Analytical Results for Asotin County Regional Landfill NOC Application*. April 30.

Jacobs Engineering Group (Jacobs). 2018b. *Technical Memorandum: Emissions Estimates and Regulatory Review for NOC Application – Asotin County Regional Landfill*. June 26.

Washington Department of Ecology (Ecology). 1995. *Air Permit, Enforcement Order No. DE 95AQ-E142*.