



# 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 two hours of free pre-application assistance. We encourage you to schedule a pre-application meeting with the contact person specified for the location of your proposal, below. If you use up your two hours of free pre-application assistance, we will continue to assist you after you submit Part 1 of the application and the application fee. You may schedule a meeting with us at any point in the process.

Upon completion of the application, please enclose a check for the initial fee and mail to:

**Department of Ecology  
Cashiering Unit  
PO Box 47611  
Olympia, WA 98504-7611**

For Fiscal Office Use Only: 0299-3030404-B00-216--001--000404

Check the box for the location of your proposal. For assistance, call the appropriate office listed below:

| Check box                           | Ecology Permitting Office  | Contact   |
|-------------------------------------|--|---|
| <input type="checkbox"/>            | <b>Chelan, Douglas, Kittitas, Klickitat, or Okanogan County</b><br>Ecology Central Regional Office (509) 575-2490  | Lynnette Haller<br>(509) 457-7126<br><a href="mailto:lynnette.haller@ecy.wa.gov">lynnette.haller@ecy.wa.gov</a> |
| <input checked="" type="checkbox"/> | <b>Adams, Asotin, Columbia, Ferry, Franklin, Garfield, Grant, Lincoln, Pend Oreille, Stevens, Walla Walla, or Whitman County</b><br>Ecology Eastern Regional Office (509) 329-3400 | Karin Baldwin<br>(509) 329-3452<br><a href="mailto:karin.baldwin@ecy.wa.gov">karin.baldwin@ecy.wa.gov</a>       |
| <input type="checkbox"/>            | <b>San Juan County</b><br>Ecology Northwest Regional Office (206) 594-0000   | David Adler<br>(425) 649-7267<br><a href="mailto:david.adler@ecy.wa.gov">david.adler@ecy.wa.gov</a>             |
| <input type="checkbox"/>            | <b>For actions taken at Kraft and Sulfite Paper Mills and Aluminum Smelters Only</b><br>Ecology Industrial Section (360) 407-6900  | James DeMay<br>(360) 407-6868<br><a href="mailto:james.demay@ecy.wa.gov">james.demay@ecy.wa.gov</a>             |
| <input type="checkbox"/>            | <b>For actions taken on the US Department of Energy Hanford Reservation Only</b><br>Ecology Nuclear Waste Program (509) 372-7950   | Lilyann Murphy<br>(509) 372-7951<br><a href="mailto:lilyann.murphy@ecy.wa.gov">lilyann.murphy@ecy.wa.gov</a>    |

JUN 05 2024

\$1,904.00

4612200

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

**New project or equipment:**

- \$1,904: Basic project** initial fee covers up to 16 hours of review.
- \$12,614: Complex project** initial fee covers up to 106 hours of review.

**Change to an existing permit or equipment:**

- \$357: Administrative or simple change** initial fee covers up to 3 hours of review. Ecology may determine your change is complex during the completeness review of your application. If you project is complex, you must pay the additional xxx before we will continue working on your application
- \$1,190: Complex change** initial fee covers up to 10 hours of review
- \$350flat fee:** Replace or alter control technology equipment under 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 below, then check the box next to it to acknowledge that you agree.**

- 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 bill you \$119 per hour for the extra time.
- You must include all information requested by this application. Ecology may not process your application if it does not include all the information requested.
- Submittal of this application allows Ecology staff to visit and inspect your facility.

## Part 1: General Information

### I. Project, Facility, and Company Information

1. Project Name: Endicott Grain Storage – Modification to Temporary Storage
2. Facility Name: Northwest Grain Growers (NWGG), Endicott Grain Storage
3. Facility Street Address: 1500ft West of Endicott on West Endicott Road,
4. Facility Legal Description: Township 17N, Range 41E, Section 30
5. Company Legal Name (if different from Facility Name): Northwest Grain Growers
6. Company Mailing Address (street, city, state, zip): 850 N 4th Ave; Walla Walla WA 99362

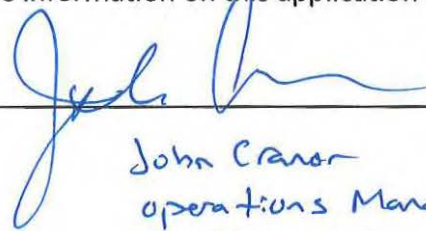
### II. Contact Information and Certification

1. Facility Contact Name (who will be onsite): POC: John Cranor
2. Facility Contact Mailing Address (if different than Company Mailing Address): n/a
3. Facility Contact Phone Number: NWGG Office, (509) 525-6510
4. Facility Contact E-mail: John Cranor, jcranor@nwgrgr.com
5. Billing Contact Name (who should receive billing information): POC: John Cranor
6. Billing Contact Mailing Address (if different Company Mailing Address): n/a

7. Billing contact Phone Number: John Cranor Cell (509) 386-3959 or NWGG Office
8. Billing Contact E-mail: John Cranor, jcranor@nwgrgr.com
9. Consultant Name (optional – if 3<sup>rd</sup> party hired to complete application elements): Scott Somers
10. Consultant Organization/Company: ID1, Inc.
11. Consultant Mailing Address (street, city, state, zip): 1351 Hains Avenue, Richland, WA 99354
12. Consultant Phone Number: (509) 539-5094
13. Consultant E-mail: srsomers22@gmail.com
14. Responsible Official Name and Title: John Cranor, Logistics and Operations Department
15. Responsible Official Phone: (509) 386-3959
16. Responsible Official E-mail: jcranor@nwgrgr.com
17. Responsible Official Certification and Signature:

I certify that the information on this application is accurate and complete.

Signature: \_\_\_\_\_



Date: \_\_\_\_\_

5-28-24

John Cranor  
operations Manager  
Northwest Grain Growers



## Part 2: Technical Information

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

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

### III. Project Description

- Written narrative describing your proposed project.
- Projected construction start and completion dates.
- Operating schedule and production rates.
- List of all major process equipment and 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.

### IV. State Environmental Policy Act (SEPA) Compliance

Check the appropriate box below.

- SEPA review is complete. Include a copy of the final SEPA checklist and SEPA determination (e.g., DNS, MDNS, and EIS) with your application. **On-file**
- SEPA review has not been conducted:
  - If 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 the 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 <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-document-templates>

### V. Emissions Estimations of Criteria Pollutants

Does your project generate criteria air pollutant emissions?  Yes  No

If yes, please provide the following information regarding your criteria emissions in the application.

- The names of the criteria air pollutants emitted (i.e., NO<sub>x</sub>, SO<sub>2</sub>, CO, PM<sub>2.5</sub>, PM<sub>10</sub>, TSP, VOC, and Pb)
- Potential emissions of criteria air pollutants in tons per hour, tons per day, and tons per year (include calculations)
- If there will be any fugitive criteria pollutant emissions, clearly identify the pollutant and quantity

### VI. Emissions Estimations of Toxic Air Pollutants

Does your project generate toxic air pollutant emissions?  Yes  No

If yes, please provide the following information regarding your toxic air pollutant emissions in your application.

- The names of the toxic air pollutants emitted (specified in [WAC 173-460-150<sup>1</sup>](#))
- Potential emissions of toxic air pollutants in pounds per hour, pounds per day, and pounds per year (include calculations)
- If there will be any fugitive toxic air pollutant emissions, clearly identify the pollutant and quantity

**VII. Emission Standard Compliance**

- 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 Chapter 70A.15 RCW.

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

**VIII. Best Available Control Technology**

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

**IX. Ambient Air Impacts Analyses**

Please 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 air impacts analyses (include only if modeling is required)
  - Exhaust height
  - Exhaust inside dimensions (ex. diameter or length and width)
  - Exhaust gas velocity or volumetric flow rate
  - Exhaust gas exit temperature
  - The volumetric flow rate
  - Description of the discharges (i.e., vertically or horizontally) and whether there are any obstructions (ex., raincap)
  - Identification of the emission unit(s) discharging from the point
  - The 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
  - Whether the facility is in an urban or rural location

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

To request ADA accommodation, call Ecology at (360) 407-6800, 711 (relay service), or (877) 833-6341 (TTY)

## Part 2: Technical Information

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

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

### III. Project Description

Please attach the following to your application.

Written narrative describing your proposed project.

#### **Spring 2024 Update-**

*The operability, maintenance and logistics of the Endicott Outdoor Grain Storage will not change. NWGG request a modification to this facility's Air Operating Permit. The basis of this request is directly tied to seasonal weather abnormalities that will result in uncommon crop growth; thus projected grain yields will surpass Endicott storage volumes. Spring 2024 rainfall and soil/ambient moisture content, accompanied with warm, mild temperatures have provide optimum plant growth and propagation. It is NWGG intent to increase the Endicott grain storage pad to a capacity of 2Mbu, effectively doubling the size and permitted storage. The expanded footprint of the windrow pile will remain stacker-based. Site modifications are civil, mainly target toward pile gradient, slope, drainage, etc., followed by additional asphalt where the stacker and truck off-load occurs. Truck delivery conditions will not change (80% hopper:20% rear dump). Endicott highway to stacker off-load will remain gravel with fugitive dust control planning & driver awareness. No additional power or site services are required.*

#### **Modified from Original NOC**

*NWGG have grain storage operations within the town of Endicott, this property and operation is a stand-alone facility to collect the overburden of grains harvested within the local area. In 2021, a temporary grain storage pile was constructed using a single windrow design, 1Mbu and measures 460' long x 160' wide x 36' high. Over the past several years, use times have beeb July thru August, and removed prior to rain/snow months. The facility is similar to the NWGG Sheffler grain pile with minimalistic facilities, graveled surfaces and scale.*

*This project will be managed by John Cranor/NWGG Logistics and Operations Department. As noted, modifications are civil in nature. No change to the Lemar Industries adjustable inclined conveyor operating at 25000bph and moves laterally to form a windrow pile shape.*

*The pile will consist of a windrow design, with a height of 36-feet. Based on pile calculations and grain coefficients, it will take ~7hours of load time to reach a pile apex or 180,000bushels. Thereafter, the grain free-fall will be negligible as the leading edge for the windrow is formed. Inbound truck offloading occurs by the truck driving over a conveyor saddle and emptying onto the conveyor. Choke flow occurs during hopper truck, but rear emptying trucks will dump onto the conveyor. Pile removal will be performed by front-end loader directly into hopper trucks.*

*Endicott grain storage facility continues to operate under the following AOP and NWGG controls:*

- 1. The pile is operated for several months a year; in a stockpiled state, and removed prior to wet weather. NWGG estimates that the filling will occur between July-August, operating intermittently 16-hours/day. Pile removal is between September-October, lasting 3-weeks/12-hr day.*
- 2. Site access and roadway development will conform to civil construction practices. The roadway surface will be improved gravel roads, prepared bed of crushed aggregate. The roadway surface is pitched 1.5% either sided, with a 3:1 pitch at the shoulders. Road width is between 16-36 feet. This designed and constructed roadway has received a 40% control efficiency. Road use, care and maintenance will be performed per NWGG Fugitive Dust Control Plan (applied from Sheffler site).*



3. *Offloading choke flow is be achievable with hopper style trucks, similar chock flow design has received a 60% control efficiency. Rear bumping trucks will make-up the minority use of this site. The ratio of hopper:rear dump is estimated at 80:20.*
4. *Grain pile conveyance is open-topped, concaved-shaped and transported at 25,000 bushels/hour. A weir gate establishes a uniform profile that limits the amount of spillage and fugitive impacts. Furthermore, this profile is largely below the cross-sectional area, limiting the impact of wind induced emissions. Given the conveyance rate, the time required to move 1Mbu of grain is 40-hours of operating time. NWGG has received concurrence from RWC to use the WSU data set for grain conveyance drops.*
5. *The windrow design affords less emissions than tradition singular grain piles. The initial pile will require 180,000bu to achieve a full conical pile and will occur during off-peak times. It is estimated to take 4 days of early harvest delivery to reach the 35-foot peak, thereafter, the stacker is moved forward at a rate that limits grain free-fall and therefore emissions. Emission calculations are based on AP-42 headhouse factors until the initial pile is formed and thereafter will apply the WSU conveyance fall factors as the stacker forms a windrow.*
6. *A front-end loader is used to pick-up the pile and place grain into hopper trailers for transport to the main elevator or sales destination. To empty the pile takes several weeks.*
7. *NWGG/Endicott receives PUD shore power.*

Projected construction start and completion dates.

*Endicott expects to have modifications completed and accept grain for the 2024 season.*

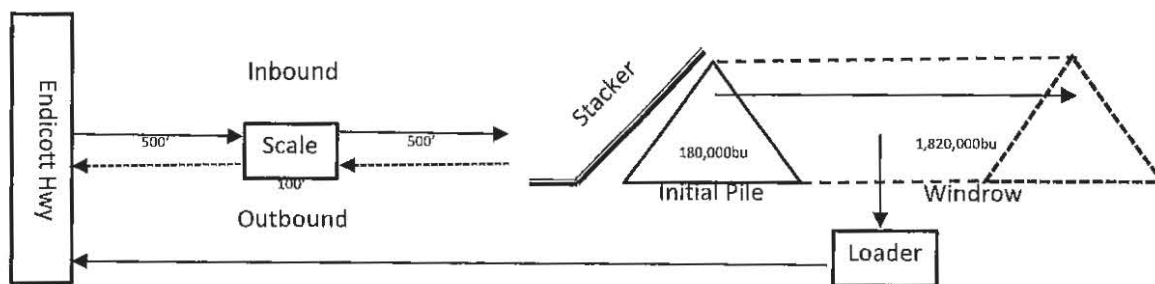
Operating schedule and production rates.

*Endicott grain pile will be used as a temporary collection and storage point. Grain will be delivered from early July-August; unloading from September-October, then idle for the remainder of the year.*

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

- *Inbound Grain*
  - *80% Hopper Trucks: 105,000lbs. gross, 35,000lbs truck tare, 70,000lbs net grain.*
  - *20% Rear Dump: 55,000lbs. gross, 23,000lbs truck tare, 35,000lbs net grain.*
- *Weight Scale and Controller Shed*
- *Windrow Fill Conveyor, Lemar Industries, 25,000bph*
- *Front-end Loader, CAT, 220bu/scoop.*
- *Outbound Grain*
  - *100% Hopper Trucks: 105,000lbs. gross, 35,000lbs truck tare, 70,000lbs net grain.*

Process flow diagram with all emission points identified.



Plan view site map.

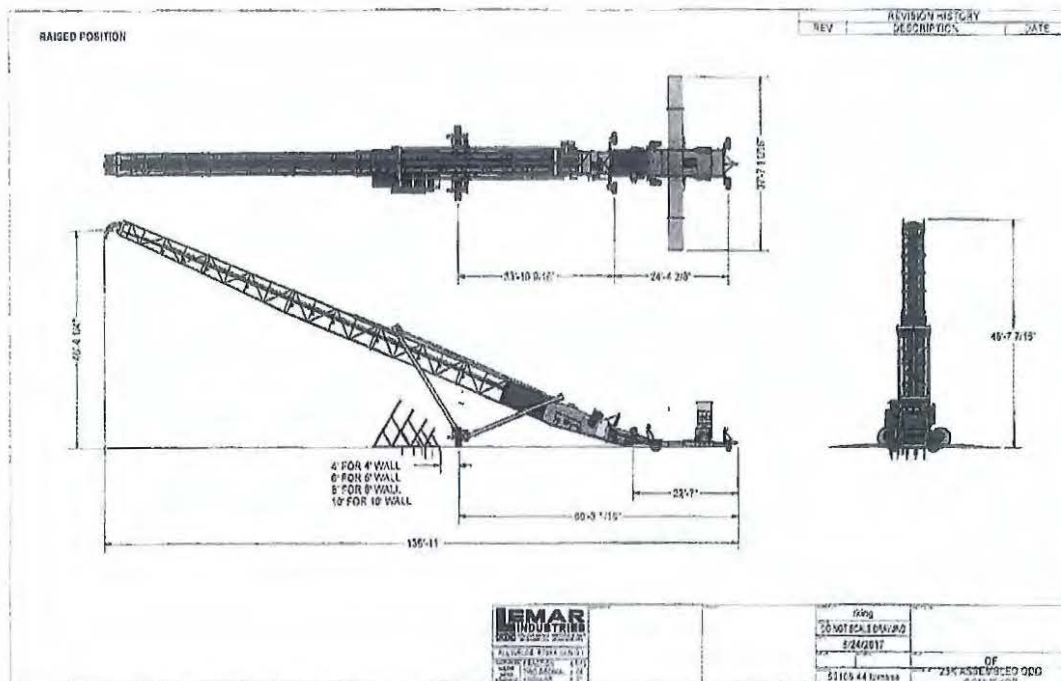


Manufacturer specification sheets for major process equipment components.

The pile conveyor is a commercial-available system being procured for this use. Technical specifications and background information is available at the following address.

<https://www.lemarindustries.com/pile-conveyers>





Manufacturer specification sheets for pollution control equipment.

None.

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

*The front-end loader is diesel powered and used ~200 gallons to pick-up the 1Mbu pile. NWGG buys non-road and winterized diesel with 15ppm sulfur.*

#### IV. State Environmental Policy Act (SEPA) Compliance

Check the appropriate box below.

SEPA review is complete:

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: **On-File**

If 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: *Whitman County*

If the 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 <https://ecology.wa.gov/Regulations-Permits/SEPA/Environmental-review/SEPA-document-templates>

#### V. Emissions Estimations of Criteria Pollutants

Does your project generate criteria air pollutant emissions?  Yes  No

If yes, please provide the following information regarding your criteria emissions in your application.

- The names of the criteria air pollutants emitted (i.e., NO<sub>x</sub>, SO<sub>2</sub>, CO, PM<sub>2.5</sub>, PM<sub>10</sub>, TSP, VOC, and Pb).  
*Particulate Matter (as TSP, PM<sub>10</sub>, PM<sub>2.5</sub>)*
- Potential emissions of criteria air pollutants in tons per hour, tons per day, and tons per year (include calculations).  
*See attached .xls spreadsheets*
- If there will be any fugitive criteria pollutant emissions, clearly identify the pollutant and quantity.  
*Particulate Matter (as TSP, PM<sub>10</sub>, PM<sub>2.5</sub>), haul roads, attached .xls spreadsheets*

## VI. Emissions Estimations of Toxic Air Pollutants

Does your project generate toxic air pollutant emissions?  Yes  No

If yes, please provide the following information regarding your toxic air pollutant emissions in your application.

- The names of the toxic air pollutants emitted (specified in [WAC 173-460-150<sup>1</sup>](#))
- Potential emissions of toxic air pollutants in pounds per hour, pounds per day, and pounds per year (include calculations)
- If there will be any fugitive toxic air pollutant emissions, clearly identify the pollutant and quantity

## VII. Emission Standard Compliance

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 Chapter 70.94 RCW.

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

## VIII. Best Available Control Technology

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

The following NWGG operations detail should be given "weight of measure" and applied as BACT strategies:

- a) *Windrow pile design is intrinsically less emission impacting than making standalone, single pile design – normalized to volume stored. NWGG estimates that it takes 4 days to establish an initial cone; thereafter, the windrow is filled from the leading edge. During these initial days, the grain freefall is 35-feet, but diminishes rapidly. Applying differential equations to cone geometry, the grain free fall distance is cut in half (18-feet) after several hours of filling and thereafter the grain pile expanse uniformly, taking an additional 7-hours to reach the conveyor apex (35-feet).*
- b) *The majority of the delivery trucks are hopper trucks, having lower emission factors than rear-dumping trucks and known to generate less particulate emissions. NWGG management can have authority over truck types, directing rear dumping trucks to its Endicott township elevator as needed.*
- c) *Chock flow is likely to be achieved with hopper trucks by choking the receiver belt and grain exits the truck at a coordinated managed rate. This technique limits the "freefall" of grain and potential particulate.*
- d) *The conveyor is open-topped. Yet, although the conveyor is not enclosed, the design is concaved. The weir gate is set so the cross-sectional profile of the grain is below the inflection point of the concaved conveyor. This acts to shelter the grain from cross winds and secondary spillage and particulate re-entrainment.*
- e) *A Fugitive Dust Control Plan will be incorporated from Sheffler Grain Pile and used at this site.*

## IX. Ambient Air Impacts Analyses

Please provide the following:

- Ambient air impacts analyses for Criteria Air Pollutants (including fugitive emissions)  
*See attached spreadsheets*
- Ambient air impacts analyses for Toxic Air Pollutants (including fugitive emissions)
- Discharge point data for each point included in air impacts analyses (include only if modeling is required)
  - Exhaust height. *The release point of the stacker is 35-feet.*
  - Exhaust inside dimensions (ex. diameter or length and width). *Does not apply*
  - Exhaust gas velocity or volumetric flow rate. *Does not apply*

<sup>1</sup> <http://apps.leg.wa.gov/WAC/default.aspx?cite=173-460-150>  
ECY 070-410 (Rev. June 2023)

- Exhaust gas exit temperature . *Does not apply*
- The volumetric flow rate. *Does not apply*
- Description of the discharges (i.e., vertically or horizontally) and whether there are any obstructions (ex., raincap) *Does not apply*
- Identification of the emission unit(s) discharging from the point. *Does not apply*
- The distance from the stack to the nearest property line  
*Property line to northern edge (nearest point): 50-feet, dry land farm/fields.*
- Emission unit building height, width, and length  
*Grain pile dimensions 920' long x 160' wide x 35' high. Slope of pile between 25-27°.*
- Height of tallest building on-site or in the vicinity and the nearest distance of that building to the exhaust. *Does not apply.*
- Whether the facility is in an urban or rural location: *Rural*

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

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