Agency: Department of Ecology AO # 16-09

Original Notice
Supplemental Notice to WSR ______
Continuance of WSR ______

Preproposal Statement of Inquiry was filed as WSR 18-09-105 ; or
Expedited Rule Making--Proposed notice was filed as WSR _____; or
Proposal is exempt under RCW 34.05.310(4) or 34.05.330(1).
Proposal is exempt under RCW _____.

Title of rule and other identifying information: (describe subject) Air Quality Fee Rule – Chapter 173-455 WAC – consolidates most of the air quality related fees into one chapter. This makes it easier for the regulated community to find what fees they may need to pay.

General Regulations for Air Pollution Sources – Chapter 173-400 WAC – establishes the regulatory framework to ensure healthy air quality in Washington and that we meet federal air quality standards.

Hearing location(s):

<table>
<thead>
<tr>
<th>Date</th>
<th>Time</th>
<th>Location (be specific)</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Hearing 1</td>
<td>July 25, 2018</td>
<td>10 am</td>
<td>Wenatchee Red Lion Hotel, 1225 N. Wenatchee Ave, Wenatchee, WA 98801</td>
</tr>
<tr>
<td>Hearing 2</td>
<td>July 26, 2018</td>
<td>10 am</td>
<td>Best Western Plus Lake Front Hotel, 3000 W. Marina Drive, Moses Lake, WA 98837</td>
</tr>
</tbody>
</table>

Date of intended adoption: October 17, 2018 (Note: This is NOT the effective date)

Submit written comments to:
Name: Jean-Paul Huys
Address: Department of Ecology, Air Quality Program, P.O. Box 47600, Olympia, WA 98504-7600
Email: Submit comments by mail, online, or at the hearing(s).
Fax: N/A
Other: Submit comments online at: http://ac.ecology.commentinput.com/?id=rU53f
By (date) August 3, 2018

Assistance for persons with disabilities:
Contact Hanna Waterstrat
Phone: (360) 407-7668
Fax: N/A
TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711.
Email: hanna.waterstrat@ecy.wa.gov
Other: N/A
By (date) July 5, 2018

Purpose of the proposal and its anticipated effects, including any changes in existing rules:
Ecology proposes to amend Chapters 173-455 and 173-400 WAC to:

- Revise the registration program structure, including requiring all sources to register.
- Increase fees to more fully cover the costs of the air quality source registration program.
- Revise the fee process to create an equitable distribution of fees across all sources, and establish a process to revise fees without going through rulemaking.
• Align Chapters 173-400 and 173-455 WAC.
• Match hourly rate charge in WAC 173-455-050, -100(2) and -130 with the current Ecology hourly billing rate (currently $95).
• Identify, and where appropriate, make needed edits in Chapters 173-455 and 173-400 WAC to increase clarity and readability.

The proposed revisions to Chapters 173-455 and 173-400 WAC will:
• Require all sources to register.
• Revise the existing annual fee structure for the registration program to establish:
  o Six registration tiers.
  o An annual fee for each source based on its tier assignment.
  o Registration Tiers based on total emissions of \( PM_{10} \), VOC, CO, NO\(_x\) and SO\(_2\), that Ecology will assign by August 1 of the year before the new fee schedule goes into effect, with a 60 day period to appeal an assignment.
  o Cap on the fees for tier 6 (synthetic minor source).
• Phase in the new fee structure in 2019, 2020, and 2021.
• Remove registration fee amounts from the rule in 2022 and beyond, and establish a process for determining annual fees outside of rulemaking:
  o Set fees annually or biennially based on a budget.
  o Post a draft budget and tier fee schedule on our website by August 1 of the year before the new fee schedule goes into effect.
  o Hold a 60-day public comment period on the draft fee schedule.
  o Finalize and post the final budget and fee schedule by December 1 of the year before the new fee schedule goes into effect.
• Update the hourly rate charge in WAC 173-455-050, -100(2) and -130 to match current Ecology billing rates.
• Edit Chapters 173-455 and 173-400 WAC to improve clarity and readability.

Reasons supporting proposal:
• The existing registration program structure does not require all sources of air pollution to register. Under this rulemaking, we propose requiring all sources to register. Lack of registration hampers and complicates the program because it fails to collect fees from an estimated 148 sources. The remaining 387 sources currently registered in the program are currently covering the administrative costs for Ecology to regulate all 535 sources.
• Existing registration program fees fund approximately 50 percent of the estimated cost of operating the program. The rulemaking would better align fees to more fully cover program costs.
• The current fee process for the registration program does not equitably distribute fees across all registered sources. The rulemaking would increase fairness. Establishing a process to determine fees outside of rulemaking simplifies the process and allows us to recover our costs through more frequent, more predictable, and smaller fee increases.

Statutory authority for adoption: Chapter 70.94 RCW, RCW 70.94.151, RCW 70.94.153, and RCW 70.94.892

Statute being implemented: Chapter 70.94 RCW

Is rule necessary because of a:
  Federal Law? ☒ Yes ☐ No
  Federal Court Decision? ☐ Yes ☒ No
  State Court Decision? ☐ Yes ☒ No
If yes, CITATION:

Agency comments or recommendations, if any, as to statutory language, implementation, enforcement, and fiscal matters: N/A
Name of proponent: (person or organization) Department of Ecology
☐ Private
☐ Public
☒ Governmental

Name of agency personnel responsible for:

<table>
<thead>
<tr>
<th>Name</th>
<th>Office Location</th>
<th>Phone</th>
</tr>
</thead>
<tbody>
<tr>
<td>Drafting: Jean-Paul Huys</td>
<td>Lacey</td>
<td>(360) 407-6827</td>
</tr>
<tr>
<td>Implementation:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ecology – Central Regional Office</td>
<td>Union Gap</td>
<td>(509) 575-2490</td>
</tr>
<tr>
<td>Ecology – Eastern Regional Office</td>
<td>Spokane</td>
<td>(509) 329-3400</td>
</tr>
<tr>
<td>Enforcement:</td>
<td></td>
<td></td>
</tr>
<tr>
<td>☒ See implementation</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Is a school district fiscal impact statement required under RCW 28A.305.135? ☒ Yes ☐ No
If yes, insert statement here:

The public may obtain a copy of the school district fiscal impact statement by contacting:

Name:
Address:
Phone:
Fax:
TTY:
Email:
Other:

Is a cost-benefit analysis required under RCW 34.05.328?
☒ Yes: A preliminary cost-benefit analysis may be obtained by contacting:

Name: Jean-Paul Huys
Address: Department of Ecology, Air Quality Program, P.O. Box 47600, Olympia, WA 98504-7600
Phone: (360) 407-6827
Fax: N/A
TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711.
Email: jean-paul.huys@ecy.wa.gov
Other: N/A

☐ No: Please explain:
Regulatory Fairness Act Cost Considerations for a Small Business Economic Impact Statement:

This rule proposal, or portions of the proposal, **may be exempt** from requirements of the Regulatory Fairness Act (see chapter 19.85 RCW). Please check the box for any applicable exemption(s):

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.061 because this rule making is being adopted solely to conform and/or comply with federal statute or regulations. Please cite the specific federal statute or regulation this rule is being adopted to conform or comply with, and describe the consequences to the state if the rule is not adopted.

Citation and description:

☐ This rule proposal, or portions of the proposal, is exempt because the agency has completed the pilot rule process defined by RCW 34.05.313 before filing the notice of this proposed rule.

☐ This rule proposal, or portions of the proposal, is exempt under the provisions of RCW 15.65.570(2) because it was adopted by a referendum.

☐ This rule proposal, or portions of the proposal, is exempt under RCW 19.85.025(3). Check all that apply:

☐ RCW 34.05.310 (4)(b)
  (Internal government operations)
☐ RCW 34.05.310 (4)(c)
  (Incorporation by reference)
☐ RCW 34.05.310 (4)(d)
  (Correct or clarify language)
☐ RCW 34.05.310 (4)(e)
  (Dictated by statute)
☐ RCW 34.05.310 (4)(f)
  (Set or adjust fees)
☐ RCW 34.05.310 (4)(g)
  (i) Relating to agency hearings; or (ii) process requirements for applying to an agency for a license or permit)

☐ This rule proposal, or portions of the proposal, is exempt under RCW _____.

Explanation of exemptions, if necessary:

**COMPLETE THIS SECTION ONLY IF NO EXEMPTION APPLIES**

If the proposed rule is **not exempt**, does it impose more-than-minor costs (as defined by RCW 19.85.020(2)) on businesses?

☐ No  Briefly summarize the agency's analysis showing how costs were calculated. ____

☒ Yes  Calculations show the rule proposal likely imposes more-than-minor cost to businesses, and a small business economic impact statement is required. Insert statement here:

**WA Department of Ecology**

**Small Business Economic Impact Statement:**

**Relevant Information for State Register Publication**

**Proposed amendments to WAC 173-455 Air Quality Fee Rule and WAC 173-400 General Regulations for Air Pollution Sources**

This Small Business Economic Impact Statement (SBEIS) presents the:

- Compliance requirements of the proposed rule.
- Results of the analysis of relative compliance cost burden.
- Consideration of lost sales or revenue.
- Cost-mitigating action taken by Ecology, if required.
- Small business and local government consultation.
- Industries likely impacted by the proposed rule.
- Expected net impact on jobs statewide.

A small business is defined by the Regulatory Fairness Act (chapter 19.85 RCW) as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the rule. The SBEIS only considers costs to “businesses in an industry” in Washington State. This means that impacts, for this document, are not evaluated for non-profit or government agencies.

The existing regulatory environment is called the “baseline” in this document. It includes only existing laws and rules at federal and state levels.

This information is excerpted from Ecology’s complete set of regulatory analyses of the proposed rule. For complete discussion of the likely costs, benefits, minimum compliance burden, and relative burden on small businesses, see the Regulatory Analyses (Ecology publication no. 18-02-022, June 2018)
COMPLIANCE REQUIREMENTS OF THE PROPOSED RULE, INCLUDING PROFESSIONAL SERVICES

Baseline
The baseline for our analyses generally consists of requirements in existing rules and laws. This is what allows us to make a consistent comparison between the state of the world with and without the proposed amendments.

For this rulemaking, the baseline includes:

The Washington Clean Air Act (Chapter 70.94 RCW), which authorizes Ecology to:
- Classify air contaminant sources that may cause or contribute to air pollution and require these sources to register or report to Ecology.
- Collect fees to cover the costs to operating the registration, and to cover costs to review carbon dioxide mitigation plan components.

Chapter 173-455 WAC, Air Quality Fee Rule - consolidates most of the air quality related fees into one chapter.

Chapter 173-400 WAC, General Regulations for Air Pollution Sources – establishes the regulatory framework to ensure that healthy air quality exists in Washington, including meeting federal air quality standards.

Proposed rule amendments
For this rulemaking, the proposed rule amendments that differ from the baseline and are not specifically dictated in the authorizing statute or elsewhere in law or rule include:
- Changing registration coverage and reporting.
- Setting a new registration fee structure and schedule for 2019 – 2021.
- Establishing a process to update the registration fee schedule in 2022 and beyond.
- Updating hourly rates for managing carbon dioxide mitigation.
- Allowing 90 days for payment of fees.
- Housekeeping changes.

Changing registration coverage and reporting
Baseline
Ecology’s current rule (WAC 173-400-100) explicitly lists source categories required to register. Registered sources are required to submit air emissions inventories annually.

Proposed
All air pollutant emissions sources would be required to register, but emissions inventories are due annually or as requested by Ecology. This requirement is intended to reduce the frequency of reporting for small sources, but retain Ecology’s ability to get an emissions report if necessary.

Expected impact
Under the proposed amendments, 148 additional facilities would need to register. These facilities would incur registration fees (see 2.3.2), as well as the costs of registration activities such as filling out a form and providing an emissions inventory. The state would benefit through more equitable distribution of fees and broad-based long-term funding of the registration program.

Setting a new registration fee structure and schedule for 2019 – 2021
Baseline
The fee structure, under the baseline, sets fees for periodic sources (sources that file emissions inventories with Ecology once every three years) based on source emissions category and emission rates. Table 1 summarizes the emissions that define various types of periodic source, and associated fees.

<table>
<thead>
<tr>
<th>Yearly periodic registration fee</th>
<th>$450</th>
<th>$700</th>
<th>$1,000</th>
</tr>
</thead>
<tbody>
<tr>
<td>Category</td>
<td>Small Periodic Source</td>
<td>Medium Periodic Source</td>
<td>Large Periodic Source</td>
</tr>
<tr>
<td>Air Contaminant</td>
<td>Tons per year</td>
<td>Tons per year</td>
<td>Tons per year</td>
</tr>
<tr>
<td>Carbon monoxide</td>
<td>5 to &lt; 15</td>
<td>15 to &lt; 30</td>
<td>30 to &lt; 100</td>
</tr>
<tr>
<td>Lead</td>
<td>0.005 to &lt; 0.3</td>
<td>0.3 to &lt; 0.45</td>
<td>0.45 to &lt; 0.6</td>
</tr>
<tr>
<td>Nitrogen oxides</td>
<td>2.0 to &lt; 5</td>
<td>5 to &lt; 14</td>
<td>14 to &lt; 40</td>
</tr>
<tr>
<td>Particulate matter (TSP or total suspended particulates)</td>
<td>1.25 to &lt; 6</td>
<td>6 to &lt; 12</td>
<td>12 to &lt; 25</td>
</tr>
<tr>
<td>Particulate mattef₁₀</td>
<td>0.75 to &lt; 3.5</td>
<td>3.5 to &lt; 7</td>
<td>7 to &lt; 15</td>
</tr>
<tr>
<td>Particulate mattef₂₅</td>
<td>0.5 to &lt; 2</td>
<td>2 to &lt; 5</td>
<td>5 to &lt; 10</td>
</tr>
<tr>
<td>Sulfur dioxide</td>
<td>2.0 to &lt; 5</td>
<td>5 to &lt; 14</td>
<td>14 to &lt; 40</td>
</tr>
<tr>
<td>Volatile organic compounds</td>
<td>2.0 to &lt; 5</td>
<td>5 to &lt; 14</td>
<td>14 to &lt; 40</td>
</tr>
</tbody>
</table>
The current fee structure also sets fees for sources required to submit emissions inventories annually. The fees for these sources (called annual sources) include the following three components:

- A flat fee,
- A complexity fee based on a point-based complexity rating, and
- An emissions fee based on tons of emissions.

Under the current rule, each annual source is assigned a complexity rating of one, three, or five based on the estimated amount of time Ecology will need to review and inspect the source. Table 2 summarizes the emissions thresholds above which facilities currently required to register with Ecology. Table 3 summarizes the current amounts charged for each of the three components of the fees for annual sources. The current fees for annual sources are higher than fees for periodic sources.

Table 2: Baseline annual registration emission rate threshold table

<table>
<thead>
<tr>
<th>Air Pollutant</th>
<th>Emission Rate (tons per year)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Carbon monoxide</td>
<td>100</td>
</tr>
<tr>
<td>Lead</td>
<td>0.6</td>
</tr>
<tr>
<td>Fluorides</td>
<td>3</td>
</tr>
<tr>
<td>Nitrogen oxides</td>
<td>40</td>
</tr>
<tr>
<td>Particulate matter</td>
<td>25</td>
</tr>
<tr>
<td>Particulate matter10</td>
<td>15</td>
</tr>
<tr>
<td>Particulate matter2.5</td>
<td>10</td>
</tr>
<tr>
<td>Reduced sulfur compounds (including H2S)</td>
<td>10</td>
</tr>
<tr>
<td>Sulfur dioxide</td>
<td>40</td>
</tr>
<tr>
<td>Sulfuric acid mist</td>
<td>7</td>
</tr>
<tr>
<td>Total reduced sulfur (including H2S)</td>
<td>10</td>
</tr>
</tbody>
</table>

Table 3: Baseline Annual Registration Fee Components

<table>
<thead>
<tr>
<th>Component</th>
<th>Fee Rate</th>
</tr>
</thead>
<tbody>
<tr>
<td>Flat fee</td>
<td>$1,057 per year</td>
</tr>
<tr>
<td>Complexity</td>
<td>$469 per complexity rating point</td>
</tr>
<tr>
<td>Emissions</td>
<td>$16 per ton</td>
</tr>
</tbody>
</table>

Proposed

The proposed rule amendments replace the current fees with a fee structure that includes six tiers of sources, based on emissions of the following five pollutants:

- Particulate matter (PM10),
- Volatile organic compounds (VOCs),
- Carbon monoxide (CO),
- Sulfur oxides (SOx) and
- Nitrogen oxides (NOx).

Table 4 shows how source emissions are broken into six tiers. Table 5 provides the proposed fees for each tier for 2019, 2020, and 2021. Under the proposed rule, mint distillers would pay $200 per year in 2019 – 2021. Beyond 2021, they will pay fees based on total emissions like all other sources.

Table 4: Proposed registration fee tiers

<table>
<thead>
<tr>
<th>Tier</th>
<th>Annual Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>Tier 1</td>
<td>Annual Emissions ≤ 0.01 tons/year</td>
</tr>
<tr>
<td>Tier 2</td>
<td>0.01 tons per year &lt; Annual Emissions ≤ 10 tons per year</td>
</tr>
<tr>
<td>Tier 3</td>
<td>10 tons per year &lt; Annual Emissions ≤ 20 tons per year</td>
</tr>
<tr>
<td>Tier 4</td>
<td>20 tons per year &lt; Annual Emissions ≤ 70 tons per year</td>
</tr>
<tr>
<td>Tier 5</td>
<td>70 tons per year &lt; Annual Emissions</td>
</tr>
<tr>
<td>Tier 6</td>
<td>Synthetic minor source (as defined in WAC 173-400-030) that emits or has potential to emit at or above 80 percent of the threshold for a major source (as defined in WAC 173-401-200).</td>
</tr>
</tbody>
</table>

Table 5: Proposed fees

<table>
<thead>
<tr>
<th>Tier</th>
<th>Fee 2019</th>
<th>Fee 2020</th>
<th>Fee 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>$200</td>
<td>$200</td>
<td>$200</td>
</tr>
<tr>
<td>2</td>
<td>$400</td>
<td>$575</td>
<td>$700</td>
</tr>
</tbody>
</table>
Expected impact
Under the proposed amendments, some facilities would pay higher fees than under the baseline, while others would pay lower fees. The structure of the proposed fees itself is significantly more straightforward than under the baseline, and would likely result in clearer expectations for fees.

Ecology designed the proposed amendments to set fees to cover 95 percent of program costs by 2021, which is more than the current coverage of 54 percent of costs. This change would result in benefits to other Air Quality Program functions, since Ecology would no longer have to use equivalent tax and fee-payer funds to support the registration program. The proposed fee schedule for 2019 – 2021 also better reflects the program costs incurred by each source, resulting in a fairer distribution of cost coverage burden.

It is important to note that the state clean air act authorizes fees for the funding of the registration program.

Establishing a process for setting the registration fee schedule for 2022 and beyond
Baseline
Currently, the fee structure and fee amounts are set in rule. That rule requires Ecology to go through rulemaking to make changes. The rule requires Ecology to use the fees to cover the cost of implementing the registration program. However, at this time, they cover only 54 percent of the fee-eligible costs of the registration program.

Proposed
The proposed amendments retain the assessment of annual fees to cover the costs of the registration program. They clarify the list of program components covered in the fee structure and establish a public process for assessing fees in 2022 and beyond. This process requires Ecology to:
- Prepare a budget of annual implementation costs, and comparing it to the previous year’s revenue.
- Adjust fees to fund the registration program budget, as a uniform percentage across all sources.
- Post the draft budget analysis and draft registration fee schedule on Ecology's website no later than August 1 of the year before the fee schedule goes into effect.
- Hold a 60-day public comment period before any fee changes.

Expected impact
The proposed amendments would enable Ecology to avoid rulemaking to update fee schedules which would result in significant reductions in expenditure of time and money, as well as reducing the long delay in updating the fees. Including a new public process for updating fees in the amended rule would allow Ecology to retain the transparency and public engagement that rulemaking provides.

The ability to update fees annually starting in 2022 gives Ecology more certainty in its ability to fund the registration program as authorized in statute. This additional certainty would potentially be counteracted by the uncertainty for sources resulting from the changes in fees each year based on Ecology's updated budget analysis. However, the public process created under the proposed amendments would provide transparency in the fee-setting process.

Updating hourly rates for managing carbon dioxide mitigation
Baseline
The existing set of fees for sources requiring carbon dioxide mitigation plans are provided in Table 6.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application review</td>
<td>$65 per hour with $500 cap</td>
</tr>
<tr>
<td>Mitigation plan approval</td>
<td></td>
</tr>
<tr>
<td>Payment to third party</td>
<td>$100</td>
</tr>
<tr>
<td>Purchase of CO₂ credits</td>
<td>$65 per hour</td>
</tr>
<tr>
<td>Direct investment</td>
<td>$65 per hour</td>
</tr>
<tr>
<td>Routine compliance monitoring</td>
<td></td>
</tr>
<tr>
<td>Payment to third party</td>
<td>$100 annually until full amount is paid</td>
</tr>
<tr>
<td>Purchase of CO₂ credits</td>
<td>$65 per hour</td>
</tr>
<tr>
<td>Applicant controlled project</td>
<td>$65 per hour</td>
</tr>
</tbody>
</table>

Proposed
The proposed amendments raise the hourly rate for sources requiring carbon dioxide mitigation plans to $95 per hour, as shown in Table 7.

<table>
<thead>
<tr>
<th>Activity</th>
<th>Fee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application review</td>
<td>$95 per hour with $500 cap</td>
</tr>
<tr>
<td>Mitigation plan approval</td>
<td></td>
</tr>
</tbody>
</table>
Payment to third party $100
Purchase of CO$_2$ credits $95 per hour
Direct investment $95 per hour

Routine compliance monitoring
Payment to third party $100 annually until full amount is paid
Purchase of CO$_2$ credits $95 per hour
Applicant controlled project $95 per hour

**Expected impact**
Ecology is not currently managing any carbon dioxide mitigation plans. Moreover, Ecology has never managed such a plan. Sources requiring a carbon dioxide mitigation plan pay their fees to agencies managing approval and monitoring of plans. These are currently the Energy Facility Site Evaluation Council and local clean air agencies. These agencies set their own fees. Consequently, Ecology’s proposed amendment would increase incremental fees, there would be zero resulting cost.

**Allowing 90 days for payment of fees**

**Baseline**
Currently, facilities must pay fees within 30 days of receiving a billing statement from Ecology.

**Proposed**
Under the proposed rule, facilities would be required to pay fees within 90 days of receiving their billing statement from Ecology.

**Expected impact**
Sixty more days to pay the fee would allow facilities more time to budget for the fees.

**Housekeeping changes**

**Baseline**
In implementing the requirements of WAC 173-455, Ecology has determined that some parts of the rules were unclear or poorly organized.

**Proposed**
The proposed amendments clarify and organize language and requirements to improve clarity and facilitate compliance. Other changes are necessary to make rules consistent with the substantive proposed changes outlined in the previous sections.

**Expected impact**
No behavioral impact is expected. We do expect facility owners and operators will find it easier to figure out if the rule applies to them and how to comply. This may reduce the transaction costs for those facilities.

**COSTS OF COMPLIANCE: EQUIPMENT**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of equipment.

**COSTS OF COMPLIANCE: SUPPLIES**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of supplies.

**COSTS OF COMPLIANCE: LABOR**
The proposed amendments require 148 additional facilities to register. These facilities would incur registration fees (see 3.2.2), as well as the costs of registration activities such as a form and emissions inventory.

The amount of time necessary to complete registration depends on the individual performing registration tasks. We assumed this work would be done by facility employees ranging from administrative staff to engineers, and take between 2 and 8 hours of applied work. Our estimate of annual registration labor costs is provided in Table 8.

<table>
<thead>
<tr>
<th>Employee Type</th>
<th>Wage(^1) (2018-dollars)</th>
<th>Total Cost per Source (low)</th>
<th>Total Cost per Source (high)</th>
<th>Number of Sources</th>
<th>Total Annual Cost (low)</th>
<th>Total Annual Cost (high)</th>
</tr>
</thead>
<tbody>
<tr>
<td>Office and administrative support occupations</td>
<td>$19.38</td>
<td>$38.77</td>
<td>$155.07</td>
<td>148</td>
<td>$5,738</td>
<td>$22,951</td>
</tr>
<tr>
<td>Industrial engineers</td>
<td>$52.06</td>
<td>$104.11</td>
<td>$416.44</td>
<td>148</td>
<td>$15,408</td>
<td>$61,633</td>
</tr>
</tbody>
</table>

Our assumption gave us an overall range of $6 thousand to $62 thousand per year. In 20-year present value, this annual cost is equivalent to approximately $100 thousand to $1 million over the next 20 years, depending on level of expertise and experience necessary.

**COSTS OF COMPLIANCE: PROFESSIONAL SERVICES**
Compliance with the proposed rule, compared to the baseline, is not likely to impose additional costs of professional services.

**COSTS OF COMPLIANCE: ADMINISTRATIVE COSTS**
Where applicable, Ecology estimates administrative costs ("overhead") as part of the cost of labor and professional services, above.

**COSTS OF COMPLIANCE: OTHER**
Under the proposed amendments, fees for some sources would increase as compared to the baseline. We determined 2019 – 2021 tiers for currently covered sources based on 2016 total emissions. We then compared the fees charged to those tiers under the proposed amendments to estimated baseline fees based on the most recent fee charged to each source in 2017. Fees for 2018 were assumed to be unchanged from 2017. The resulting minimum, median and maximum fee increases are provided in Table 9. All fees are conservatively assumed to be annual, and all calculations are in 2018 dollars.

Table 9: Distribution of fee increases in 2019 – 2021

<table>
<thead>
<tr>
<th></th>
<th>2019</th>
<th>2020</th>
<th>2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>Minimum</td>
<td>$99</td>
<td>$122</td>
<td>$194</td>
</tr>
<tr>
<td>Median</td>
<td>$396</td>
<td>$122</td>
<td>$242</td>
</tr>
<tr>
<td>Maximum</td>
<td>$6,926</td>
<td>$7,342</td>
<td>$7,749</td>
</tr>
</tbody>
</table>

Note that fee increase distributions do not change linearly, because fees for some facilities would decrease in 2019 and/or 2020, then increase in 2020 and/or 2021.

When estimating the quantifiable impacts of proposed rule amendments, Ecology calculates 20-year present values. This process discounts future streams of costs and benefits to comparable current values, using average historic discount rates. The current average historic rate is 1.07 percent.

We assumed there would be six percent growth in fees each biennium (based on potential wage growth).

Some facilities may experience fee reductions in early years, but see fee increases in later years that result in net increase in 20-year present value costs. Looking at the 507 facilities likely to experience net increases in 20-year present value costs, compared to the baseline, the costs of the proposed amendments were estimated to be approximately $6.4 million over the next 20 years.

Table 10 summarizes the distribution of 20-year present value fee increases by facility.

Table 10: 20-year present value fee increases

<table>
<thead>
<tr>
<th></th>
<th>Minimum</th>
<th>Median</th>
<th>Max</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>$2,586</td>
<td>$6,864</td>
<td>$169,755</td>
</tr>
</tbody>
</table>

**COMPARISON OF COMPLIANCE COST FOR SMALL VERSUS LARGE BUSINESSES**
Ecology calculated the estimated per-entity costs to comply with the proposed amendments, based on the costs estimated in Chapter 3. In this section, Ecology summarizes compliance cost per employee at affected businesses of different sizes.

We selected a random representative sample of covered sources, finding that the average affected small business likely to be covered by the proposed amendments employs approximately 12 people. The largest ten percent of affected businesses employ an average of nearly 87 thousand people. Employment numbers are based on the highest identifiable operation ownership level, and the lowest identifiable employment number if a range was identified.

Based on quantifiable fee increase estimates from Chapter 3 and fee reduction estimates from Chapter 4, we estimated the impacts to compliance costs per employee in 2019 – 2021 shown in Table 13. The disproportionate impacts found are likely to continue in subsequent years.

Table 13: Ratio of compliance cost impacts per employee

<table>
<thead>
<tr>
<th></th>
<th>Average Fee Decrease per Employee</th>
<th>Average Fee Increase per Employee</th>
</tr>
</thead>
<tbody>
<tr>
<td>Small Businesses</td>
<td>~$0.00</td>
<td>N/A</td>
</tr>
<tr>
<td>Largest 10% of Businesses</td>
<td>$66.19</td>
<td>$119.58</td>
</tr>
</tbody>
</table>
For facilities for which fees would decrease under the proposed amendments, small businesses would likely see a per-employee fee reduction, while the largest businesses would see none or near zero. This is a positive disproportion in favor of small businesses.

For facilities for which fees would increase under the proposed amendments, small businesses would see a significantly larger per-employee increase than the largest businesses would.

Finally, for the 148 sources that would need to incur registration labor costs, small businesses (averaging 16 employees) are over one thousand times smaller than the largest ten percent of businesses (averaging 21 thousand employees at the highest ownership level). The annual cost of $150 to $400 per source would inherently be disproportionately larger for small businesses, even if they employed the lowest wage labor and took the least time to complete registration tasks.

We conclude that the proposed amendments are likely to have disproportionate impacts on small businesses, and therefore Ecology must include elements in the proposed amendments to mitigate this disproportion, as far as is legal and feasible.

**CONSIDERATION OF LOST SALES OR REVENUE**

Businesses that would incur costs could experience reduced sales or revenues if the fee changes would significantly affect the prices of the goods they sell. The degree to which this could happen is strongly related to each business’s production and pricing model (whether additional lump-sum costs significantly affect marginal costs), as well as the specific attributes of the markets in which they sell goods, including the degree of influence of each firm on market prices, as well as the relative responsiveness of market demand to price changes.

The proposed amendments affect a wide variety of businesses. Those industries that are more able to control their pricing, likely due to geographic restrictions in various types of construction, for example, may trade off price increases for reduced sales (which may or may not result in reduced revenue). Industries with greater competition, such as various wholesale industries, may not be as able to control their pricing, and would not see associated impacts to sales and revenue.

**MITIGATION OF DISPROPORTIONATE IMPACT**

Equitability was a significant consideration during this rulemaking, and the proposed amendments decrease fees for small businesses in greater proportion (per employee) than for large businesses, where fees are proposed to decrease.

The baseline rule includes an extreme hardship exemption specifically for small businesses. This is retained in the proposed amendments. In addition, the proposed amendments phase in (delay compliance timetables) during the three years for which numeric fees are specified.

The process established in the proposed amendments to develop subsequent fee schedules using a public process allows small businesses to be involved in fee development, and particularly allows Ecology to allow for an up-to-date economic environment and address small business concerns as they develop. The proposed amendments also potentially reduce reporting requirements for some small sources, and while a small source is not necessarily owned by a small business, it may be more likely to be.

**SMALL BUSINESS AND LOCAL GOVERNMENT CONSULTATION**

Ecology involved small businesses and local government in its development of the proposed rule amendments, by:

- Communicating through the ECY-AQ-RULE-AND-SIP-UPDATES listserv.
- Email communication specific to the rulemaking, through the AO#16-09 AQ Fees General Distribution List, including the seven local air agencies and eight business associations.
- Postcards sent to approximately 535 registration program source addresses.
- Approximately 30 letters sent to tribal contacts.

**NAICS CODES OF INDUSTRIES IMPACTED BY THE PROPOSED RULE**

| 1119 | 2381 | 3219 | 3315 | 4234 | 4246 | 4452 | 5173 | 5419 |
| 2123 | 2389 | 3241 | 3331 | 4238 | 4249 | 4812 | 5179 | 8111 |
| 2361 | 3114 | 3253 | 3366 | 4239 | 4441 | 4861 | 5182 | 8122 |
| 2373 | 3118 | 3273 | 4233 | 4245 | 4442 | 4931 | 5413 | 8123 |

**IMPACT ON JOBS**
Under the proposed amendments’ fee increases and decreases relative to the baseline, the Washington State economy could experience the loss of approximately:

- One full-time employee (FTE) equivalent in 2019.
- Two FTE equivalents in 2020.
- Three FTE equivalents in 2021.
- By 2037, this would level off to a loss of approximately one FTE per year.

The public may obtain a copy of the small business economic impact statement or the detailed cost calculations by contacting:

Name: Jean-Paul Huys
Address: Department of Ecology, Air Quality Program, P.O. Box 47600, Olympia, WA 98504-7600
Phone: (360) 407-6827
Fax: N/A
TTY: People with speech disability may call TTY at 877-833-6341. People with impaired hearing may call Washington Relay Service at 711.
Email: jean-paul.huys@ecy.wa.gov
Other: N/A

<table>
<thead>
<tr>
<th>Date: June 19, 2018</th>
<th>Signature:</th>
<th>Polly Zehm</th>
</tr>
</thead>
<tbody>
<tr>
<td>Name: Polly Zehm</td>
<td>Signature:</td>
<td></td>
</tr>
<tr>
<td>Title: Deputy Director</td>
<td>Signature:</td>
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