



DEPARTMENT OF
ECOLOGY
State of Washington

Preliminary Regulatory Analyses

Including the:

- Preliminary Cost-Benefit Analysis
 - Least-Burdensome Alternative Analysis
 - Administrative Procedure Act Determinations
 - Regulatory Fairness Act Compliance
-

*Chapter 173-455 WAC, Air Quality Fee
Rule*

*Chapter 173-400 WAC, General Regulations
for Air Pollution Sources*

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*Chapter 173-455 WAC,
Air Quality Fee Rule and
Chapter 173-400 WAC,
General Regulations for Air Pollution Sources*

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Executive Summary

This report presents the determinations made by the Washington State Department of Ecology (Ecology) as required under Chapters 34.05 RCW and 19.85 RCW, for the proposed amendments to the Air Quality Fee Rule and General Regulations for Air Pollution Sources rule (Chapters 173-455 WAC and 173-400 WAC, respectively; the “rules”). This includes the:

- Preliminary Cost-Benefit Analysis (CBA)
- Least-Burdensome Alternative Analysis (LBA)
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

The Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to “determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the law being implemented.”

The APA also requires Ecology to “determine, after considering alternative versions of the rule...that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives” of the governing and authorizing statutes (RCW 34.05.328(1)(d)).

The Washington Regulatory Fairness Act (RFA; Chapter 19.85 RCW) requires Ecology to evaluate the relative impact of proposed rules that impose costs on businesses in an industry. It compares the relative compliance costs to small businesses to the largest businesses affected.

Quantifiable costs and benefits

The proposed amendments are likely to result in 20-year present value fee increases for registered facilities of \$6.4 million, and 20-year present value fee decreases of \$201 thousand. This is a net increase in total 20-year present value fee costs of approximately \$6.2 million.

There is also a possible 20-year present value cost of approximately \$100 thousand to \$1 million in registration labor costs.

Currently, Washington taxpayers pay the difference between the costs of running the registration program and the income from fees imposed on registered facilities. The increased costs imposed on registered facilities by the proposed amendments would therefore otherwise be paid by Washington taxpayers. As a result, of this proposed rule, \$5.5 million in taxpayer money would be freed up to be spent for other uses.

Qualitative costs and benefits

The proposed amendments would increase certainty in future funding for the registration program, and improve consistency with the Legislative mandate that polluters pay for the costs of reducing pollution.

Under the proposed amendments, 148 additional facilities would need to register. The state would benefit from the additional emissions information from those 148 facilities as well as through the resulting distribution of funding for the registration program across all sources for which the program provides services.

The net potential impacts of proposed amendments to the fee structure and future fee process on regulated facilities are unclear. The proposed changes may increase uncertainty about future fee levels (compared to the explicit baseline fees), resulting in borrowing or opportunity costs associated with additional precautionary funds for fees in planning. But they may also reduce the need for repeated interactions between Ecology staff and individual businesses to clarify and calculate fee amounts, as occurs under the baseline.

To the degree (if any) sources may impact what fee tier under which Ecology categorizes them, a clarified fee structure also allows sources more predictable long-run control of components of their fees.

Conclusion

The quantified costs to regulated facilities imposed by the proposed rule amendments are completely offset by the quantified benefits to Washington taxpayers from having the registration program costs paid by those emitting air pollution. The proposed rule amendments provide a number of qualitative benefits, including greater consistency with Legislative intent that polluters pay the costs of regulating air pollution. For these reasons, Ecology concludes, based on reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the proposed rule amendments, that the benefits of the proposed amendments are likely greater than the costs.

Least-burdensome alternative

Ecology assessed alternatives proposed rule content, and determined whether they met the goals and objectives of the authorizing statutes. Of those that would meet these goals and objectives, Ecology determined whether those chosen for the proposed rule were the least burdensome to those required to comply with them.

Ecology considered the following alternatives to the proposed rule's content.

- Keep existing fee schedule and process
- Keep existing structure and process but increase fees to fully fund program
- Apply one flat fee to all sources
- Double existing fees for all sources
- Phase in fee increases
- Lower fee cap
- Charge a base fee by source type
- Charge a base fee plus variable fees
- Include all pollutants in tier determination

- Charge different tiered flat fees

After considering alternatives to the proposed rules' contents, as well as the goals and objectives of the authorizing statute, Ecology determined that the proposed rules represent the least-burdensome alternative of possible rule contents meeting these goals and objectives.

Regulatory Fairness Act

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.

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.

Chapter 1: Background and Introduction

1.1 Introduction

This report presents the determinations made by the Washington State Department of Ecology (Ecology) as required under Chapters 34.05 RCW and 19.85 RCW, for the proposed amendments to the Air Quality Fee Rule and General Regulations for Air Pollution Sources rule (Chapters 173-455 WAC and 173-400 WAC, respectively; the “rules”). This includes the:

- Preliminary Cost-Benefit Analysis (CBA)
- Least-Burdensome Alternative Analysis (LBA)
- Administrative Procedure Act Determinations
- Regulatory Fairness Act Compliance

The Washington Administrative Procedure Act (APA; RCW 34.05.328(1)(d)) requires Ecology to evaluate significant legislative rules to “determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the law being implemented.” Chapters 1 – 5 of this document describe that determination.

The APA also requires Ecology to “determine, after considering alternative versions of the rule...that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives” of the governing and authorizing statutes (RCW 34.05.328(1)(d)). Chapter 6 of this document describes that determination.

The APA also requires Ecology to make several other determinations (RCW 34.05.328(1)(a) – (c) and (f) – (h)) about the rule, including authorization, need, context, and coordination. Appendix A provides the documentation for these determinations.

All determinations are based on the best available information at the time of publication. Ecology encourages feedback (including specific data) that may improve the accuracy of this analysis.

The Washington Regulatory Fairness Act (RFA; Chapter 19.85 RCW) requires Ecology to evaluate the relative impact of proposed rules that impose costs on businesses in an industry. It compares the relative compliance costs to small businesses to the largest businesses affected. Chapter 7 documents that analysis, when applicable.

1.2 Summary of the proposed rule amendments

The proposed amendments make the following changes not required by other laws or rules:

- 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.

1.3 Reasons for the proposed rule amendments

1.3.1 Changing registration coverage and reporting

Current air quality fee structure does not equitably distribute fees across all sources using program resources. In order to more broadly and equitably establish this program funding base, we are proposing to expand registration to all emissions sources, including those that do not currently register or pay a fee. This would treat sources more equitably, and allow fees to better reflect use of program resources.

1.3.2 Setting a new registration fee structure and schedule for 2019, 2020 and 2021

The Washington Clean Air Act (Chapter 70.94 RCW) 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 program, 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. This makes it easier for the regulated community to find what fees they may need to pay.

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.

Existing registration program fees fund about 54 percent of the estimated cost of operating the registration program. This is not a sustainable practice, as it does not reflect actual fee-eligible costs to operate the program. Moreover, the current fee structure and schedule for the registration program do not equitably distribute fees across all registered sources.

- The proposed fee structure and schedule would recover about 95 percent of the total cost of the registration program by 2021. Ecology will recover the rest of the costs (about five percent) through programmatic changes, such as program efficiency, better tracking of staff hours, combining site visits to reduce travel, and updating data management systems. The decision to have a goal of funding 95 percent rather than 100 percent of the costs of the program was made to avoid overcharging facilities in the future, and then needing to issue refunds.

If Ecology does not amend the rules, we will continue to implement the fee structure and schedule in the current rule.

1.3.3 Establishing a process to update the registration fee schedule in 2022 and beyond

Currently, rulemaking is required to update the registration fee schedule. The proposed amendments would establish a new fee structure as well as a new public process for updating the registration fee schedule without undergoing a new rulemaking and incurring the attendant costs and delays each time the fees are changed.

The proposed amendments coordinate the posting of the draft budget, and the tier assignments and fees for each source. The rule also provides a 60-day comment period for appealing a tier assignment. Ecology would review the appeals, assign final tiers, and assign final tier-based fees. This process would ensure Ecology is able to consistently and fairly fund the expected cost of the program.

1.3.4 Updating hourly rates for managing carbon dioxide mitigation

The \$65 per hour rate in the existing rule does not reflect current hourly costs of Ecology staff handling carbon dioxide mitigation applications, plan approvals, and inspections. The proposed amendments include a \$95 hourly rate for these activities to reflect current hourly employee costs.

1.3.5 Allowing 90 days for payment of fees

The proposed amendments include an option for facility owners or operators to pay their fee within 90 days of receiving their billing statements, instead of within 30 days. This would give the owners or operators more time to budget for fees.

1.3.6 Housekeeping changes

Housekeeping changes include the following types of amendment that do not have any material impact on the meanings or requirements in the rule:

- Clarification or rewording

1.4 Document organization

The remainder of this document is organized into the following chapters:

- Baseline and the proposed rule amendments (Chapter 2): Description and comparison of the baseline (what would occur in the absence of the proposed rule amendments) and the proposed changes to rule requirements.
- Likely costs of the proposed rule amendments (Chapter 3): Analysis of the types and sizes of costs we expect impacted entities to incur as a result of the proposed rule amendments.
- Likely benefits of the proposed rule amendments (Chapter 4): Analysis of the types and size of benefits we expect to result from the proposed rule amendments.

- Cost-benefit comparison and conclusions (Chapter 5): Discussion of the complete implications of the CBA.
- Least-Burdensome Alternative Analysis (Chapter 6): Analysis of considered alternatives to the contents of the proposed rule amendments.
- Small Business Economic Impact Statement (Chapter 7, when applicable): Comparison of compliance costs for small and large businesses; mitigation; impact on jobs.
- RCW 34.05.328 determinations not discussed in Chapter 5 or 6 (Appendix A).

Chapter 2: Baseline and the Proposed Rule Amendments

2.1 Introduction

We analyzed the costs and benefits of the proposed rule amendments relative to the existing rules and all other relevant existing legal requirements (federal and state laws and rules). This context for comparison is called the baseline, and reflects the most likely regulatory circumstances that entities would face if the proposed amendments were not adopted.

2.2 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.

2.3 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.

2.3.1 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.

2.3.2 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 1: Baseline periodic registration fee table

Yearly periodic registration fee	\$450	\$700	\$1,000
Category	Small Periodic Source	Medium Periodic Source	Large Periodic Source
Air Contaminant	Emission Rates		
	Tons per year	Tons per year	Tons per year
Carbon monoxide	5 to < 15	15 to < 30	30 to < 100
Lead	0.005 to < 0.3	0.3 to < 0.45	0.45 to < 0.6
Nitrogen oxides	2.0 to < 5	5 to < 14	14 to < 40
Particulate matter (TSP or total suspended particulates)	1.25 to < 6	6 to < 12	12 to < 25
Particulate matter ₁₀	0.75 to < 3.5	3.5 to < 7	7 to < 15
Particulate matter _{2.5}	0.5 to < 2	2 to < 5	5 to < 10
Sulfur dioxide	2.0 to < 5	5 to < 14	14 to < 40
Volatile organic compounds	2.0 to < 5	5 to < 14	14 to < 40
Toxic air pollutant	> de minimis emissions (see WAC 173-460-150)	—	—

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

Air Pollutant	Emission Rate (tons per year)
Carbon monoxide	100
Lead	0.6
Fluorides	3
Nitrogen oxides	40
Particulate matter	25
Particulate matter ₁₀	15
Particulate matter _{2.5}	10
Reduced sulfur compounds (including H ₂ S)	10
Sulfur dioxide	40
Sulfuric acid mist	7
Total reduced sulfur (including H ₂ S)	10

Table 3: Baseline Annual Registration Fee Components

Component	Fee Rate
Flat fee	\$1,057 per year
Complexity	\$469 per complexity rating point
Emissions	\$16 per ton

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 (SO_x) and
- Nitrogen oxides (NO_x).

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

Tier	Annual Emissions
Tier 1	Annual Emissions ≤ 0.01 tons/year
Tier 2	0.01 tons per year < Annual Emissions ≤ 10 tons per year
Tier 3	10 tons per year < Annual Emissions ≤ 20 tons per year
Tier 4	20 tons per year < Annual Emissions ≤ 70 tons per year
Tier 5	70 tons per year < Annual Emissions
Tier 6	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).

Table 5: Proposed fees

Tier	Fee 2019	Fee 2020	Fee 2021
1	\$200	\$200	\$200
2	\$400	\$575	\$700
3	\$700	\$1,000	\$1,300
4	\$1,100	\$1,300	\$1,500
5	\$5,000	\$5,500	\$7,000
6	\$7,000	\$7,500	\$8,000

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.

2.3.3 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.

2.3.4 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 6: Baseline fees for carbon dioxide mitigation program

Activity	Fee
Application review	\$65 per hour with \$500 cap
Mitigation plan approval	
Payment to third party	\$100
Purchase of CO ₂ credits	\$65 per hour
Direct investment	\$65 per hour
Routine compliance monitoring	
Payment to third party	\$100 annually until full amount is paid
Purchase of CO ₂ credits	\$65 per hour
Applicant controlled project	\$65 per hour

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 7: Baseline fees for carbon dioxide mitigation program

Activity	Fee
Application review	\$95 per hour with \$500 cap
Mitigation plan approval	
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.

2.3.5 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.

2.3.6 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.

Chapter 3: Likely Costs of the Proposed Rule Amendments

3.1 Introduction

We estimated the likely costs to regulated facilities associated with the proposed rule amendments, as compared to the baseline. The proposed rule amendments and the baseline are discussed in detail in Chapter 2 of this document.

3.2 Cost analysis

3.2.1 Changing registration coverage and reporting

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 8: Annual registration labor costs

Employee Type	Wage ¹ (2018-dollars)	Total Cost per Source (low)	Total Cost per Source (high)	Number of Sources	Total Annual Cost (low)	Total Annual Cost (high)
Office and administrative support occupations	\$19.38	\$38.77	\$155.07	148	\$5,738	\$22,951
Industrial engineers	\$52.06	\$104.11	\$416.44	148	\$15,408	\$61,633

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 years², depending on level of expertise and experience necessary.

3.2.2 Setting a new registration schedule for 2019 – 2021 and a new fee process for years after 2021.

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

¹ US Bureau of Labor Statistics (2016). May 2016 Wages by Area and Occupation. Washington State.

² US Treasury Department (2017). Series I Savings Bond Earnings Rates Effective May 1, 2018.

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

	2019	2020	2021
Minimum	\$99	\$122	\$194
Median	\$396	\$122	\$242
Maximum	\$6,926	\$7,342	\$7,749

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.³

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

Minimum	\$2,586
Median	\$6,864
Max	\$169,755

3.2.3 Establishing a process for setting the registration fee schedule for the years after 2021

Under the baseline, covered sources (particularly those with constant attributes) can forecast their future fee burden with relative certainty. However, the combination of flat fees, complex emissions that included Toxic Air Pollutants, and complexity factors made it difficult for sources to predict their fees.

Under the proposed amendments, covered sources cannot necessarily rely on past experience to predict future fee levels. But by basing fees on emission tiers, considering only criteria

³ Ibid.

pollutants, and eliminating the potential of double-counting by removing PM 2.5, we assess that this will make fees more predictable, transparent, and fair.

3.2.4 Updating hourly rates for managing carbon mitigation

We do not expect costs to result from this proposed amendment.

3.2.5 Allowing 90 days for payment of fees

We do not expect costs to result from this proposed amendment.

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Chapter 4: Likely Benefits of the Proposed Rule Amendments

4.1 Introduction

We estimated the likely benefits to regulated facilities associated with the proposed rule amendments, as compared to the baseline (both described in Chapter 2 of this document).

4.2 Benefit analysis

4.2.1 Changing registration coverage and reporting

Under the proposed amendments, 148 additional facilities would need to register. The state would benefit through broad-based long-term funding of the registration program across all sources for which the program provides services. Including all sources in the registration program would also allow for more equitable distribution of fees and more comprehensive knowledge of air emissions for emission sources in the state.

4.2.2 Setting a new registration fee for 2019 – 2021 and a new fee process for 2022 and beyond

Under the proposed amendments, fees for some sources would decrease as compared to the baseline. We assumed 2019 – 2021 tiers for currently covered sources based on 2016 total emissions. We then compared this 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. All fees are conservatively assumed to be annual, and all calculations are in 2018 dollars.

Table 11: Distribution of fee decreases in 2019 – 2021

	2019	2020	2021
Minimum	\$49	\$122	\$242
Median	\$49	\$245	\$242
Maximum	\$3,212	\$2,982	\$2,757

When estimating the quantifiable impacts of proposed 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.⁴

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

Several facilities (we estimate 28) may experience fee reductions in all years, resulting in net 20-year present value benefits. Looking at only those 28 facilities, the 20-year present value benefits of fee reductions, compared to the baseline, were estimated to be approximately \$201 thousand.

Table 12 summarizes the distribution of 20-year present value fee decreases by facility.

⁴ US Treasury Department (2017). Series I Savings Bond Earnings Rates Effective November 1, 2017.

Table 12: 20-year present value fee decreases

Minimum	\$2,547
Median	\$3,419
Max	\$42,851

4.2.3 Establishing a process for setting the registration fee schedule

Under the proposed amendments, Ecology has more certainty in its ability to fund the registration program as authorized in statute. This means avoiding displacing funds from other Air Quality Program activities, or avoiding potential future reductions in registration program services.

The proposed amendments are intended to simplify and clarify the fee structure and facilitate compliance. Fee structure clarity can result in reduced need for repeated interactions between Ecology staff and individual businesses to determine fees in complex emissions scenarios, as well as facilitate understanding of fee component breakdowns. To the degree (if any) sources may impact what fee tier they are categorized under, a clarified fee structure also allows sources more predictable long-run control of components of their fees.

4.2.4 Updating hourly rates for managing carbon mitigation

We do not expect real benefits as a result of this proposed amendment, because no facilities have ever been required to pay these fees to Ecology, and fees to other parties are unaffected. Should a party ever be required to pay these fees to Ecology, a benefit of the proposed amendment would be that fees reflect updated costs of Ecology employee time.

4.2.5 Allowing 90 days for payment of fees

Sixty additional days would allow facilities more time to plan for fee payments. This could allow them to avoid unnecessary borrowing, or opportunity costs arising from delays to other possible expenditures

Chapter 5: Cost-Benefit Comparison and Conclusions

5.1 Cost and benefit summary

The authorizing statute and the baseline rule authorize Ecology to impose fees for the funding of the registration program. In chapters 3 and 4, we assessed the likely impacts of the proposed amendments to the fee structure.

5.1.1 Quantifiable costs and benefits

The proposed amendments are likely to result in 20-year present value fee increases for registered facilities of \$6.4 million, and 20-year present value fee decreases of \$201 thousand. This is a net increase in total 20-year present value fee costs of approximately \$6.2 million.

There is also a possible 20-year present value cost of approximately \$100 thousand to \$1 million in registration labor costs.

Currently, Washington taxpayers pay the difference between the costs of running the registration program and the income from fees imposed on registered facilities. The increased costs imposed on registered facilities by the proposed amendments would therefore otherwise be paid by Washington taxpayers. As a result, of this proposed rule, \$5.5 million in taxpayer money would be freed up to be spent for other uses.

5.1.2 Qualitative costs and benefits

The proposed amendments would increase certainty in future funding for the registration program, and improve consistency with the Legislative mandate that polluters pay for the costs of reducing pollution.⁵

Under the proposed amendments, 148 additional facilities would need to register. The state would benefit from the additional emissions information from those 148 facilities as well as through the resulting distribution of funding for the registration program across all sources for which the program provides services.

The net potential impacts of proposed amendments to the fee structure and future fee process on regulated facilities are unclear. The proposed changes may increase uncertainty about future fee levels (compared to the explicit baseline fees), resulting in borrowing or opportunity costs associated with additional precautionary funds for fees in planning. But they may also reduce the need for repeated interactions between Ecology staff and individual businesses to clarify and calculate fee amounts, as occurs under the baseline.

⁵ RCW 70.94.011: “It is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared as equitably as possible among all sources whose emissions cause air pollution.”

To the degree (if any) sources may impact what fee tier under which Ecology categorizes them, a clarified fee structure also allows sources more predictable long-run control of components of their fees.

5.2 Conclusion

The quantified costs to regulated facilities imposed by the proposed rule amendments are completely offset by the quantified benefits to Washington taxpayers from having the registration program costs paid by those emitting air pollution. The proposed rule amendments provide a number of qualitative benefits, including greater consistency with Legislative intent that polluters pay the costs of regulating air pollution. For these reasons, Ecology concludes, based on reasonable understanding of the quantified and qualitative costs and benefits likely to arise from the proposed rule amendments, that the benefits of the proposed amendments are likely greater than the costs.

Chapter 6: Least-Burdensome Alternative Analysis

6.1 Introduction

RCW 34.05.328(1)(e) requires Ecology to “determine, after considering alternative versions of the rule and the analysis required under (b), (c), and (d) of this subsection, that the rule being adopted is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated under (a) of this subsection.” The referenced subsections are:

- (a) Clearly state in detail the general goals and specific objectives of the statute that the rule implements;
- (b) Determine that the rule is needed to achieve the general goals and specific objectives stated under (a) of this subsection, and analyze alternatives to rule making and the consequences of not adopting the rule;
- (c) Provide notification in the notice of proposed rulemaking under RCW 34.05.320 that a preliminary cost-benefit analysis is available. The preliminary cost-benefit analysis must fulfill the requirements of the cost-benefit analysis under (d) of this subsection. If the agency files a supplemental notice under RCW 34.05.340, the supplemental notice must include notification that a revised preliminary cost-benefit analysis is available. A final cost-benefit analysis must be available when the rule is adopted under RCW 34.05.360;
- (d) Determine that the probable benefits of the rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented;

In other words, to be able to adopt the rule, Ecology is required to determine that the contents of the rule are the least burdensome set of requirements that achieve the goals and objectives of the authorizing statute(s).

Ecology assessed alternatives proposed rule content, and determined whether they met the goals and objectives of the authorizing statutes. Of those that would meet these goals and objectives, Ecology determined whether those chosen for the proposed rule were the least burdensome to those required to comply with them.

6.2 Goals and objectives of the authorizing statute: Chapter 70.94 RCW

The goals and objectives of the authorizing statute are as follows.

- RCW 70.94.011: provides that “[i]t is the policy of the state that the costs of protecting the air resource and operating state and local air pollution control programs shall be shared as equitably as possible among all sources whose emissions cause air pollution.”

- RCW 70.94.151: Authorizes Ecology to classify air contaminant sources that may cause or contribute to air pollution and to require these sources to register or report to Ecology. Ecology may collect fees from sources required to register or report emissions to Ecology. The fees can only be used to compensate for the costs of administering the program. RCW 70.94.151(2) defines the types of fee-eligible activities Ecology is allowed to recover costs for under the registration program.
- RCW 70.94.892: Authorizes Ecology to collect fees to cover the costs to administer the carbon dioxide mitigation plan program.
- Chapter 173-455 WAC, Air Quality Fee Rule - consolidates most of the air quality related fees into one chapter. This chapter allows the regulated community easier access to applicable fees.
- 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.

6.3 Alternatives considered and why they were not included

Ecology considered the following alternatives to the proposed rule's content.

- Keep existing fee schedule and process
- Keep existing structure and process but increase fees to fully fund program
- Apply one flat fee to all sources
- Double existing fees for all sources
- Phase in fee increases
- Lower fee cap
- Charge a base fee by source type
- Charge a base fee plus variable fees
- Include all pollutants in tier determination
- Charge different tiered flat fees

6.3.1 Keep existing fee schedule and process

This alternative does not meet the goals and objectives of the statute. Ecology determined that this alternative was not feasible because it only allows Ecology to recover 54 percent of fee eligible activities. Ecology is no longer able to use other revenue sources to make up for the shortfall in fees collected for the registration program. This alternative also fails to meet the goals and objectives of achieving a more equitable distribution of fees across sources. The fee burden will increase for some sources and decrease for others. To address this, Ecology is phasing in the fees, and adding fee caps for the largest sources.

6.3.2 Keep existing structure and process but increase fees to fully fund program

This alternative is potentially more burdensome, and does not meet the goals and objectives of the statute. The proposed rule language more accurately reflects staff time and costs associated with each source, and this alternative would not meet equitability goals as well as the proposed language. Compared to the proposed amendments, this alternative would disproportionately increase fees for small sources, not reflecting the costs associated with managing them.

6.3.3 Apply one flat fee to all sources

Ecology determined that this would be more burdensome to smaller sources and does not meet the goals and objectives of achieving a fair distribution of costs across the sources. It also offers no incentive for sources to reduce their air pollutant emissions.

6.3.4 Double existing fees for all sources

Some stakeholders suggested Ecology double the existing fees for all sources, but this would not have met the goals and objectives of the authorizing statute and the purpose of this rulemaking. This alternative would have extended existing inequities in the fee structure.

6.3.5 Charge a base fee by source type

This alternative is potentially more burdensome and does not meet goals and objectives. Ecology determined that this is not equitable and could increase the burden on certain sources. Compared to the source category, a source's emissions more accurately reflects the costs associated with registration activities.

6.3.6 Charge a base fee plus variable fees

Based on comments received from stakeholders during rule development, this alternative is potentially more burdensome to facilities, because of increased complexity in fee calculations and potential necessary assistance. There could also be increased burden in the form of added complexity in planning for future fee expenditures. Ecology acknowledged that facilities place high value on consistency and predictability in fees, as well as a clear fee structure and future fee revision process.

6.3.7 Include all pollutants in tier determination

Ecology considered including all reported pollutants in the definition of total emissions used to determine reporting fee tiers. Due to limited data, as well as potential for double-counting, further inequity was possible, if this alternative was implementable at all. Some sources or entire source categories did not have sufficient data on all pollutants, resulting in uneven distribution of fees across facilities. For example, insufficient data on toxic air pollutants would result in inflated fees for cattle feedlots. Total suspended particulate matter is a rarely reported measure of pollution, and so lacked data for the majority of facilities.

6.3.8 Charge different tiered flat fees

During rule development, Ecology considered an alternative tiered flat fee structure. This structure would have included broader fee tiers, and could have resulted in all fees being paid by less than 20 percent of registration program sources. This alternative not only failed to meet the

goal of equitable distribution of fees, but also did not offer incentive for large sources to reduce their emissions. Creating smaller tiers and adjusting fees accordingly alleviated these concerns.

6.4 Conclusion

After considering alternatives to the proposed rules' contents, as well as the goals and objectives of the authorizing statute, Ecology determined that the proposed rules represent the least-burdensome alternative of possible rule contents meeting these goals and objectives.

Chapter 7: Regulatory Fairness Act Compliance

7.1 Introduction

The Regulatory Fairness Act (RFA; RCW 19.85.070) requires Ecology to perform a set of analyses and make certain determinations regarding the proposed rule amendments.

This chapter presents the:

- 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 amendments.
- Expected net impact on jobs statewide.

A small business is defined by the RFA as having 50 or fewer employees. Estimated costs are determined as compared to the existing regulatory environment—the regulations in the absence of the proposed amendments. The RFA only applies to 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.

7.2 Quantification of Cost Ratios

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.⁶ 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

⁶ Note that employment numbers are for the highest owner/operator level of businesses. This means smaller sources may be owned by much larger businesses with large numbers of employees, even if the number of employees at a facility, or facility emissions, are relatively small. Employment data collected from multiple sources for highest ownership level available.

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

	Average Fee Decrease per Employee			Average Fee Increase per Employee		
	2019	2020	2021	2019	2020	2021
Small Businesses	\$66.19	\$119.58	\$105.32	\$149.16	\$130.57	\$173.82
Largest 10% of Businesses	~\$0.00	N/A	N/A	\$0.01	~\$0.00	\$0.01

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.

7.3 Loss of 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 (see section 7.6, below). 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.

7.4 Action Taken to Reduce Small Business Impacts

The RFA (RCW 19.85.030(2)) states that:

Based upon the extent of disproportionate impact on small business identified in the statement prepared under RCW 19.85.040, the agency shall, where legal and feasible in meeting the stated objectives of the statutes upon which the rule is based, reduce the costs imposed by the rule on small businesses. The agency must consider, without limitation, each of the following methods of reducing the impact of the proposed rule on small businesses:

- a) Reducing, modifying, or eliminating substantive regulatory requirements;
- b) Simplifying, reducing, or eliminating recordkeeping and reporting requirements;
- c) Reducing the frequency of inspections;
- d) Delaying compliance timetables;
- e) Reducing or modifying fine schedules for noncompliance; or
- f) Any other mitigation techniques including those suggested by small businesses or small business advocates.

Ecology considered all of the above options, and included the following legal and feasible elements in the proposed rule amendments that reduce costs. In addition, Ecology considered the alternative rule contents discussed in Chapter 6, and excluded those elements that would have imposed excess compliance burden on businesses.

- 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.

7.5 Small Business and Government Involvement

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.
- Registration Fees and Process Workgroup meetings on 3/21/17, 4/26/17, 5/24/17, 6/27/17, 11/20/17, 2/7/18, and 2/28/18.
- Postcards sent to approximately 535 registration program source addresses.
- Approximately 30 letters sent to tribal contacts.

Communication recipients or workgroup participants included (in addition to local air agencies and representatives from Ecology):

- Associated General Contractors of WA
- Association of Washington Business
- Building Industry Association of WA
- Cascade Auto Center
- Central Pre-Mix
- Central Washington Home Builders Association
- Green Acre Farms
- Helena Chemical Company
- Independent Business Association
- L&G Christensen Farms
- Lamb Weston - Conagra
- Mint Still
- National Frozen Foods
- Neibling Environmental Consulting
- North Central Construction
- Pomeroy Grain Growers
- Schutte Farms
- Simplot
- Tidewater Terminal Co.
- Trout Lake Farm
- WA Cattle Feeders Association
- WA Mint Growers
- Yahoo

7.6 NAICS Codes of Impacted Industries

The proposed rule amendments are likely to impact the industries, by North American Industry Classification System, listed in Table 14 below.⁷

Table 14: Likely impacted industries

NAICS	Title
1119	Other Crop Farming
2123	Nonmetallic Mineral Mining and Quarrying
2361	Residential Building Construction
2373	Highway, Street, and Bridge Construction
2381	Foundation, Structure, and Building Exterior Contractors
2389	Other Specialty Trade Contractors
3114	Fruit and Vegetable Preserving and Specialty Food Manufacturing
3118	Bakeries and Tortilla Manufacturing
3219	Other Wood Product Manufacturing
3241	Petroleum and Coal Products Manufacturing
3253	Pesticide, Fertilizer, and Other Agricultural Chemical Manufacturing
3273	Cement and concrete Product Manufacturing
3315	Foundries
3331	Agriculture, Construction, and Mining Machinery Manufacturing
3366	Ship and Boat Building
4233	Lumber and Other Construction Materials Merchant Wholesalers
4234	Professional and Commercial Equipment and Supplies Merchant Wholesalers
4238	Machinery, Equipment, and Supplies Merchant Wholesalers
4239	Miscellaneous Durable Goods Merchant Wholesalers
4245	Farm Product Raw Material Merchant Wholesalers
4246	Chemical and Allied Products Merchant Wholesalers
4249	Miscellaneous Nondurable Goods Merchant Wholesalers
4441	Building Material and Supplies Dealers
4442	Lawn and Garden Equipment and Supply Stores
4452	Specialty Food Stores
4812	Nonscheduled Air Transportation
4861	Pipeline Transportation of Crude Oil
4931	Warehousing and Storage
5173	Wired and Wireless Telecommunication Carriers
5179	Other Telecommunications
5182	Data Processing, Hosting, and Related Services
5413	Architectural, Engineering, and Related Services
5419	Other Professional, Scientific, and Technical Services
8111	Automotive Repair and Maintenance
8122	Death Care Services
8123	Drycleaning and Laundry Services

⁷ <https://www.census.gov/eos/www/naics/index.html>

7.7 Impact on Jobs

Ecology used the Washington State Office of Financial Management's 2007 Washington Input-Output Model⁸ to estimate the impact of the proposed amendments on jobs in the state. The model accounts for inter-industry impacts and spending multipliers of earned income and changes in output.

The proposed amendments will result in transfers of money within and between industries. To estimate compliance costs to private businesses for the modeling analysis, we scaled and apportioned total fee increases and decreases at all affected sources based on the proportion of identifiable private businesses (78 percent) in the representative sample, and the relative proportions of fee impacts by NAICS code grouping. Since fees are paid to the state, and the model used does not include a public sector, the funds were treated as being removed or added to economic circulation. In reality, funds paid to the state would re-enter the economy through direct program spending and employee wages not represented in this model.

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.

Additional registration labor costs would have a near-zero impact on state employment, even under highly conservative assumptions (resulting in a likely overestimate) that all registration is performed using 8 hours of engineer labor each year at all 148 newly registering sources, and even if wages earned for this labor were not re-spent in the economy.

These prospective changes in overall employment in the state are the sum of multiple small increases and decreases across all private industries in the state.

⁸ See the Washington State Office of Financial Management's site for more information on the Input-Output model. <http://www.ofm.wa.gov/economy/io/2007/default.asp>

References

- Andeavor (2017). 2016 Annual Report. <http://phx.corporate-ir.net/phoenix.zhtml?c=79122&p=irol-reportsannual>
- AT&T (2017). 4Q 2017 AT&T By the Numbers. https://www.att.com/Common/about_us/pdf/att_btn.pdf.
- Business Wire (2017). <http://www.businesswire.com>
- Charter Communications (2017). <https://newsroom.charter.com/company-profile/>
- CHS, Inc. (2017). http://www.chsinc.com/~media/chs%20inc/files/pdfs/our%20company/chsfactflyer_rev_may2016.ashx?la=en
- ConAgra Foods (2017). 2016 Annual Report. <http://www.conagrabrands.com/sites/g/files/qyyrlu371/files/2016-11/2016-annual-report.PDF>
- Forbes (2017). <https://www.forbes.com/companies/jr-simplot/>;
<https://www.forbes.com/companies/dell/>
- Granite Construction (2017). 2016 Annual Report. <https://investor.graniteconstruction.com/~media/Files/G/GraniteConstruction-IR/events-and-presentations/2016/granite-2016-annual-report.pdf>
- Hewes Craft (2017). <http://www.hewescraft.com/our-story/>
- Innovate Composite (2017). <http://www.innovativecomposite.com/about/>
- Intermountain Slurry Seal (2017). <http://www.intermountainlurryseal.com/>
- Knife River (2017). <http://www.kniferiver.com/about-us>
- LinkedIn (2017). <https://www.linkedin.com/company/oldcastle>
- Louis Dreyfus Company (2017). <http://www.ldcom.com/files/6414/9121/7174/LDC-AR-2016.pdf>
- Manta (2017). <http://www.Manta.com>
- Syngenta (2017). 2016 Annual Review. <https://www4.syngenta.com/~media/Files/S/Syngenta/ar-2016/syngenta-annual-review-2016.pdf>

Teck (2017). 2016 Annual Report. <http://www.teck.com/media/2016-Teck-Annual-Report.pdf>

US Bureau of Labor Statistics (2016). May 2016 Wages by Area and Occupation. Washington State.

US Census Bureau (2017). North American Industry Classification System.
<https://www.census.gov/eos/www/naics/index.html>

US Treasury Department (2017). Series I Savings Bond Earnings Rates Effective May 1, 2018.

WA Employment Security Department (2017). Workforce Explorer.
<https://fortress.wa.gov/esd/employmentdata/>

WA Office of Financial Management's site for more information on the Input-Output model.
<http://www.ofm.wa.gov/economy/io/2007/default.asp>

The Williams Companies, Inc. (2017). 2016 Annual Report.
http://investor.williams.com/sites/williams.investorhq.businesswire.com/files/report/file/annualreport_2016.pdf

Appendix A

Administrative Procedure Act (RCW 34.05.328)

Determinations

- A. RCW 34.05.328(1)(a) – Clearly state in detail the general goals and specific objectives of the statute that this rule implements.**

See Chapter 6.

- B. RCW 34.05.328(1)(b) –**

- 1. Determine that the rule is needed to achieve the general goals and specific objectives of the statute.**

See chapters 1 and 2.

- 2. Analyze alternatives to rulemaking and the consequences of not adopting this rule.**

Before starting the rulemaking we determined that there were no alternatives to rulemaking in this case. Ecology is authorized to recover the costs of the registration program through fees charged to registered sources (RCW 70.94.151). The fees or fee structure must be adopted in rule.

Please see the Least Burdensome Alternative Analysis, Chapter 6 of this document, for discussion of alternative rule content considered.

- C. RCW 34.05.328(1)(c) - A preliminary cost-benefit analysis was made available.**

When filing a rule proposal (CR-102 form) under RCW 34.05.320, Ecology provides notice that a preliminary cost-benefit analysis is available. At adoption (CR-103 form filing) under RCW 34.05.360, Ecology provides notice of the availability of the final cost-benefit analysis.

- D. RCW 34.05.328(1)(d) – Determine that probable benefits of this rule are greater than its probable costs, taking into account both the qualitative and quantitative benefits and costs and the specific directives of the statute being implemented.**

See Chapters 1 – 5.

- E. RCW 34.05.328 (1)(e) - Determine, after considering alternative versions of the analysis required under RCW 34.05.328 (b), (c) and (d) that the rule being adopted**

is the least burdensome alternative for those required to comply with it that will achieve the general goals and specific objectives stated in Chapter 6.

Please see Chapter 6 and record for rulemaking.

F. RCW 34.05.328(1)(f) - Determine that the rule does not require those to whom it applies to take an action that violates requirements of another federal or state law.

RCW 70.94.151 authorizes Ecology to set fees for the registration program to compensate for the costs of administering the program. There are no other federal or state laws that regulate the registration program fees.

G. RCW 34.05.328 (1)(g) - Determine that rule the does not impose more stringent performance requirements on private entities than on public entities unless required to do so by federal or state law.

YES

No

H. RCW 34.05.328 (1)(h) Determine if the rule differs from any federal regulation or statute applicable to the same activity or subject matter.

YES

NO

If yes, the difference is justified because of the following:

(i) A state statute explicitly allows Ecology to differ from federal standards. [If checked, provide the citation included quote of the language.

(ii) Substantial evidence that the difference is necessary to achieve the general goals and specific objectives stated in Chapter 6.

I. RCW 34.05.328 (1)(i) – Coordinate the rule, to the maximum extent practicable, with other federal, state, and local laws applicable to the same subject matter.

The intent of this rulemaking is to make amendments specific to sources in Ecology's jurisdiction. Ecology is providing updates on the proposed rule revision to local air authorities.