DEPARTMENT OF ECOLOGY
State of Washington

# Small Business Economic Impact Statement

*Chapter 173-430 WAC - Agricultural Burning*

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# Small Business Economic Impact Statement

## Chapter 173-430 WAC
## Agricultural Burning

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**Note:** Due to size limitations relating to the filing of documents with the Code Reviser, the SBEIS does not contain a fully detailed explanation of Ecology's analysis. The Cost-Benefit Analysis (Ecology publication #10-02-014) contains full details of the analysis, including additional contextual information and methodology.


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## Executive Summary

In this rulemaking, Ecology is proposing updates to Chapter 173-430 WAC to:

- Adjust the field burning fee to cover the costs of administering and enforcing the permit programs.
- Change the pile burning fee to a per-ton fee rather than a per-acre fee.
- Address the finding in *Ted Rasmussen Farms, LLC v. State of Washington, Department of Ecology*, Docket # 22989-1-III (*Rasmussen v. Ecology*), by removing a section of the existing rule that is beyond Ecology's regulatory scope.
- Make housekeeping changes for consistency with the authorizing statute.

The rulemaking was authorized by both existing law and by Substitute Senate Bill 6556 (passed in 2010). The Legislature authorizes ongoing agricultural burning fee increases until the fee reaches the $3.75 cap per acre for field burning, and the $1 cap per ton for pile burning. RCW 70.94.6528(6)(b) directs the Task Force to determine fees at a level to, "cover the cost of administering and enforcing the programs" and provide research funds.

Ecology calculated cost-to-employment ratios to examine the relative impacts of the proposed rule on small versus large businesses overall and in each industry likely affected. Other measures of business ability to cope with compliance costs (sales, hours of labor) were not sufficiently available for the representative set of permittees.

Median ratios of total cost to employment ranged from $0.11 per employee for the largest businesses, to $15.29 for small business. **It is clear from these ratios that the proposed rule creates a disproportionate impact on small business**, as based on employment rolls. This means Ecology must make reasonable effort to mitigate these disproportionate impacts.

Ecology had limited scope in reducing the disproportionate impact of the proposed rule on small businesses. Fees were determined by the Task Force, and could thus not be reallocated or adjusted for small versus large businesses. Ecology was not able to include additional actions to reduce small business impacts in the proposed rule. Ecology did, however, include multiple representatives of small business in the Task Force decision process (see Section 5).

Ecology extensively involved businesses in the development of the proposed rule, including small businesses. **Ecology involved the business community, and especially those businesses that the rule might disproportionately affect, because they provide unique input into the views of the regulated community.**

In particular, several members of the Task Force represent farmers, a diverse set of primarily small businesses. The Wheat Growers, Alfalfa Growers, and Tree Fruit Growers associations have representatives on the Task Force.

Ecology estimated that the proposed rule could result in the **loss of 3 jobs each year** in the Washington State economy.

# Section 1: Introduction and Background

Based on research and analysis required by the Regulatory Fairness Act – RCW 19.85.070 – Ecology has determined that the proposed rule amendments (Chapter 173-430 WAC) have a disproportionate impact on small business. Therefore, Ecology included cost-minimizing features in the rule where it is legal and feasible to do so.

This document presents the background for the analysis of impacts on small business relative to other businesses, the results of the analysis, and cost-mitigating action taken by Ecology. It is intended to be read with the associated Cost-Benefit Analysis (Ecology publication #10-02-014), which contains more in-depth discussion of the analyses.

A small business is defined as having 50 or fewer employees.

## History

The Clean Air Washington Act of 1991 (Chapter 70.94 RCW) regulates multiple air quality standards and practices in Washington. Among these is outdoor burning – including agricultural burning. Chapter 173-430 WAC (Agricultural Burning) implements the clean air act. It defines fees, best management practices, fee use and research, delegation authority, and permit conditions and procedures.

### Regulatory Baseline

The regulatory baseline is the way agricultural burning would be done if the proposed rule is not adopted – that is, the existing laws and rules at various jurisdictional levels that determine how agricultural burning is regulated and performed now. The baseline does not include, however, guidance and common practices that, while they are commonly used in agricultural burning, are not technically a legal requirement.

Under the current law and its implementing rule (Chapter 70.94 RCW and Chapter 173-430 WAC, respectively) entities such as, but not limited to, businesses, individuals, governments, and other organizations must have an agricultural burning permit to do any agricultural burning.

While it is legal to burn for approved agronomic reasons with a permit, it is not legal to allow smoke to impact others. The agricultural burning of field crop residue and orchard tear out residue can directly impact the safety and health of citizens breathing the smoke-filled air. See Chapter 2 for further discussion of the avoided health costs that result from regulation of agricultural burning and smoke.

To help reduce smoke-related environmental and health concerns, the Department of Ecology's Eastern and Central Washington Burn Teams make a daily burn/no-burn decision called the "burn call" for agricultural burning permit holders. The burn call provides daily current and forecasted air quality conditions and burn decisions to the public and business. This information is available online, by phone, or through listserv.

## Agricultural Burning Practices and Research Task Force

The Agricultural Burning Practices and Research Task Force ("Task Force") is established by RCW 70.94.6528 of the Washington State Clean Air Act. The goal of the Task Force is to work toward a reduction in air pollution emissions from agricultural burning. The Task Force, which is chaired by the Department of Ecology, includes representatives from many different interests. The representatives include:

- Eastern Washington local air authorities.
- The agricultural community.
- The Department of Agriculture.
- Local universities or colleges.
- Public health.
- Conservation districts.

The Task Force is empowered by the Clean Air Act to develop Best Management Practices (BMP's) to reduce air emissions from agricultural activities, determine the level of permit fees, and identify research opportunities.

## Agricultural Burn Permits

Ecology requires a permit for all types of agricultural burning, with the exception of:

- Orchard prunings.
- Organic debris along fence lines or irrigation or drainage ditches.
- Organic debris blown by the wind.

Burn permits are issued at the local level by Ecology, local air authority, or a delegated permitting authority (e.g., a county or conservation district). Ecology provides access to burn zone maps outlining these areas.

Only complete applications are processed by the relevant permitting agency. Incomplete applications are denied. Complete applications include all of the following:

- A completed permit application.
- A map of the area to be burned.
- A fee payment.

Agricultural burn permits in Asotin, Garfield, Columbia, Walla Walla, Franklin, Adams, Grant, or Whitman counties are processed through local conservation districts:

- Adams Conservation District.
- Asotin Conservation District.
- Columbia Conservation District.
- Franklin Conservation Dept.
- Garfield; Pomeroy Conservation District.
- Grant Conservation District.
- Othello Conservation District.
- Walla Walla Conservation District.

- Palouse Conservation District.
- Palouse Rock Lake Conservation District.
- Pine Creek Conservation District.
- Whitman Conservation District.

Agricultural burn permits in western Washington, or in Benton, Yakima, or Spokane counties are processed by local air agencies:

- Benton Clean Air Agency.
- Northwest Clean Air Agency.
- Olympic Region Clean Air Agency.
- Puget Sound Clean Air Agency.
- Southwest Clean Air Agency.
- Spokane Regional Clean Air Agency.
- Yakima Regional Clean Air Agency.

Agricultural burn permits for land on Indian reservations are processed through tribal governments. Burning in all other areas is processed directly through Ecology.

There are separate permit applications for field burning, pile burning, spot burning, and bale burning.

## Best Management Practices

Applicants must use best management practices (BMPs) as identified by the state's agricultural burning practices and research task force ("Task Force") to complete their application. Agricultural burning is allowed when it is reasonably necessary to carry out the enterprise. A permit applicant can show burning is reasonably necessary when it meets the criteria of the BMPs and no practical alternative exists. BMPs are one of the ways to demonstrate the need to burn. Permit applicants not using BMPs must establish that their proposed burn is reasonably necessary and that no practical alternative is available. The burden of proof is on the grower, and the demonstration must satisfy the local air authority with jurisdiction or the Department of Ecology and the local delegated permitting authority, if there is a local permitting authority.

## Permit Fees

The existing rule lists fees for different types of agricultural burning. Fees are determined by the type of burning, as well as the size of the permitted burn area. Under the baseline, agricultural burning fees are:

- Field burn permits are a minimum of $25, or $2.25 per acre, whichever is more.
- Spot burn permits are a flat fee of $25 (minimum field burn fee).
- Bale burn permits are a flat fee of $25 (minimum field burn fee).
- Orchard burn permits are a minimum of $50, or $2.25 per acre, whichever is more.

Permit fees fund program activities, including administration and smoke management, as well as research in the field of agricultural burning.

## Changes under the Proposed Rule

In this rulemaking, Ecology is proposing updates to Chapter 173-430 WAC to:

- Adjust the field burning fee to cover more of the costs of administering and enforcing the permit programs.
- Change the pile burning fee to a per-ton fee rather than a per-acre fee.
- Address the finding in *Ted Rasmussen Farms, LLC v. State of Washington, Department of Ecology*, Docket # 22989-1-III (*Rasmussen v. Ecology*), by removing a section of the existing rule that is beyond Ecology's regulatory scope.
- Make housekeeping changes for consistency with the authorizing statute.

The rulemaking was authorized by both existing law and by Substitute Senate Bill 6556 (passed in 2010). The Legislature authorizes ongoing agricultural burning fee increases until the fee reaches the $3.75 cap per acre for field burning, and the $1 cap per ton for pile burning. RCW 70.94.6528(6)(b) directs the Task Force to determine fees at a level to, "cover the cost of administering and enforcing the programs" and provide research funds.

### Proposed Fees and Changes to Pile Burning (mostly orchard tear-out)

Current fees cover only about 25% of costs, according to internal review of budget records. Increasing fees would bring the program closer to cost recovery. Since the State's General Fund deficit could limit the amount of money available to subsidize the program, an agricultural burning permit program that pays for itself may prevent cuts to the program, and limit resulting cuts to services provided to farms, businesses, and the public – especially in terms of allowable burn days.

Additionally, Substitute Senate Bill 6556 introduced a per-ton fee for pile burns to replace the per-acre fee. The volume of piled material burned exceeds the volume of crop residue from a field of the same size. A per-ton fee structure provides a closer link between the size of the fee and the amount of material burned.

The proposed fee schedule is:

- Field burn permits are a minimum of $30 for the first 10 acres, plus $3 per additional acre.
- Spot burn permits are a flat fee of $30 for up to 10 acres.
- Pile burn permits are a minimum of $80 for the first 100 tons, plus 50 cents per additional ton.

This rulemaking evaluated the options for setting the fees in 2012 and later, and determined that the preferred process (as proposed in the rule) is regular review and public input to fee setting. Ecology chose this option over inclusion of a set fee structure or tying of fees to an index measure of growth, such as an inflation index.

### Rasmussen v. Ecology

*Rasmussen v. Ecology*[1] requires Ecology to remove language from the existing rule that the court found to be outside of Ecology's regulatory authority. The proposed rule eliminates the identified language.

### Housekeeping and Clarification

Finally, the proposed rule clarifies language and the structure of the rule to facilitate understanding of the requirements, and in turn, compliance with the rule.

### Analytical Scope Comments

Ecology is proposing raising fees to a level determined by the Task Force. While the level of fees determined for each type of agricultural burning is technically exogenous to the proposed rule (determined by the Task Force; not determined independently by Ecology), Ecology is the chair of the Task Force, and has chosen to propose the higher fees determined by the Task Force in rule.

Ecology is only required to analyze rule amendments in which Ecology had discretion. Because the proposed fees were determined by the Task Force, it is somewhat ambiguous the extent to which Task Force decisions are within Ecology's discretion. Ecology is the entity amending the rule and officially proposing the fees, but they were not determined by Ecology alone, but rather by the Task Force. Despite this minor ambiguity, Ecology believes that it will benefit readers of this document to include the impacts of the overall rule changes.

## Section 2: Compliance Costs for Washington Businesses

The primary compliance cost to Washington businesses arising from the proposed rule is an increase in agricultural burn permit fees for some permit holders. Ecology estimated fees for existing permittees under both the baseline (existing) fee schedule, and the proposed fee schedule in the proposed rule.

This generated a range of impacts between a five-dollar increase in fees and an increase of approximately $2,400. The largest increases occurred for field burning permits with the largest acreage, those permittees with multiple permits, and for large orchards that would pay by the ton rather than by acreage under the proposed rule.

Calculations for fees for each permittee were based on data from existing permits on the type of permitted burn and the associated acreage. Ecology used a conservatively large measure of 20 tons per acre of orchard burning, based on professional expertise and experience. For each permittee, where an associated business was apparent, Ecology assigned an identifier of industry using the North American Industry Classification System (NAICS). For those permittees without an apparent associated business, Ecology conservatively assumed that the distribution of

[1] *Ted Rasmussen Farms, LLC v. State of Washington, Department of Ecology*, Docket # 22989-1-III (*Rasmussen v. Ecology*)

industries across those permittees was the same as the distribution of industries across known businesses with agricultural burn permits.

Each industry is associated with a distribution of business sizes, based on data from the Washington State Employment Security Department. These employer sizes were then used to calculate the ratios of costs (fee increase) to number of employees for each industry. The results were evaluated comparing small businesses for each industry to the largest 10 percent of businesses.

## Section 3: Quantification of Costs and Ratios

Ecology quantified all costs for which reliable data and analytic methods were available. Changes in compliance costs arising from increased permit fees for some permittees ranged from zero to nearly $2,400 at the individual permit level. Across all likely impacted permittees represented, Ecology estimated the total cost to be approximately $119 thousand.

### Total Cost-to-Employment Ratios

Ecology calculated cost-to-employment ratios to examine the relative impacts of the proposed rule on small versus large businesses overall and in each industry likely affected. Other measures of business ability to cope with compliance costs (sales, hours of labor) were not sufficiently available for the representative set of permittees.

Median ratios of total cost to employment ranged from $0.11 per employee for the largest businesses, to $15.29 for small business. It is clear from these ratios that the proposed rule creates a disproportionate impact on small business, as based on employment rolls. This means Ecology must make reasonable effort to mitigate these disproportionate impacts. Table 1 shows the distribution of cost per employee at the median employment level across industries.

**TABLE 1: Cost per Employee by Industry (annual)**

| NAICS GROUP | AVERAGE EMPLOYMENT -- SMALL | AVERAGE EMPLOYEMENT – LARGEST 10% | AVERAGE IMPACT -- SMALL | AVERAGE IMPACT – LARGEST 10% |
|---|---|---|---|---|
| 111 | 5 | 503 | $12.60 | $0.12 |
| 112 | 6 | 78 | $10.44 | $0.75 |
| 113 | 4 | 64 | $14.62 | $0.92 |
| 115 | 5 | 526 | $10.75 | $0.11 |
| 238 | 4 | 321 | $13.05 | $0.18 |
| 311 | 15 | 451 | $3.85 | $0.13 |
| 339 | 7 | 357 | $8.90 | $0.16 |
| 424 | 8 | 392 | $7.45 | $0.15 |
| 451 | 9 | 96 | $6.78 | $0.61 |
| 453 | 6 | 217 | $9.61 | $0.27 |
| 531 | 4 | 373 | $15.29 | $0.16 |

| | | | | |
|---|---|---|---|---|
| 532 | 7 | 146 | $8.24 | $0.40 |
| 721 | 10 | 343 | $5.96 | $0.17 |
| 811 | 5 | 156 | $11.47 | $0.38 |
| 812 | 5 | 138 | $11.42 | $0.43 |

At the industry level, and overall across all industries, Ecology determined that the proposed rule is likely to have disproportionate impacts on small versus large businesses. Therefore, Ecology must include elements in the rule that reduce this disproportional impact, within the range of what is legal and feasible.

## Section 4: Action Taken to Reduce Small Business Impacts

Ecology had limited scope in reducing the disproportionate impact of the proposed rule on small businesses. Fees were determined by the Task Force, and could thus not be reallocated or adjusted for small versus large businesses. Ecology was not able to include additional actions to reduce small business impacts in the proposed rule. Ecology did, however, include multiple representatives of small business in the Task Force decision process (see Section 5).

## Section 5: Small Business Involvement

Ecology extensively involved businesses in the development of the proposed rule, including small businesses. Ecology involved the business community, and especially those businesses that the rule might disproportionately affect, because they provide unique input into the views of the regulated community.

In particular, several members of the Task Force represent farmers, a diverse set of primarily small businesses. The Wheat Growers, Alfalfa Growers, and Tree Fruit Growers associations have representatives on the Task Force.

## Section 6: NAICS Codes of Impacted Industries

This section lists NAICS codes for industries Ecology expects to be impacted by the proposed rule.[2] The list does not include public entities such as state and local agencies that may also be impacted by the proposed rule, as these are not private businesses.

- 111
- 112
- 113
- 115

[2] North American Industry Classification System (NAICS) codes have largely taken the place of Standard Industry Classification (SIC) codes in the categorization of industries.

- 238
- 311
- 339
- 424
- 451
- 453
- 531
- 532
- 721
- 811
- 812

## Section 7: Impact on Jobs

Ecology used the Washington State Office of Financial Management's 2002 Washington Input-Output Model (OFM-IO) to estimate the proposed rule's first-round impact on jobs across the state. This methodology estimates the impact as reductions or increases in spending in certain sectors of the state economy flow through to purchases, suppliers, and demand for other goods. Ecology used a sample of 1/5 of permitted acreage with identifiable industry with moderate confidence to model the proposed rule's impact on jobs.

The OFM-IO results indicated a loss of nearly 0.5 jobs resulting each year from the impacts of the proposed rule in the sample of approximately 20 percent of permitted agricultural burning acreage. This result assumes that money paid to the public sector is not re-spent in the economy. Table 2 shows the estimated employment impacts across multiple industries.

**TABLE 2: Estimated Economy-wide Employment Impacts as Estimated By OFM Input-Output Model**

| NAICS | Employment Impact | NAICS | Employment Impact |
|---|---|---|---|
| 111 | -0.158 | 337 | 0.000 |
| 112 | -0.012 | 316, 326, 339 | -0.001 |
| 113 | 0.000 | 423 | -0.036 |
| 114 | 0.000 | 441, 442, 443, 444 | -0.029 |
| 21 | 0.000 | 481 | -0.001 |
| 2211 | -0.001 | 483 | 0.000 |
| 2212 | 0.000 | 484 | -0.002 |
| 2213 | -0.002 | 482, 485, 486, 487, 491, 492 | -0.005 |
| 23 | -0.010 | 488, 493 | -0.001 |
| 311, 312 | -0.003 | 5112, 518 | 0.000 |
| 313, 314, 315 | 0.000 | 517 | -0.002 |
| 321 | -0.001 | 5111, 512, 515, 516, 519 | -0.002 |
| 322 | 0.000 | 521, 522 | -0.013 |
| 323 | -0.001 | 523, 524, 525 | -0.005 |

| | | | |
|---|---|---|---|
| 324 | 0.000 | 53 | -0.016 |
| 325 | 0.000 | 5411, 5412, 5416, 5418, 5419, 55 | -0.006 |
| 327 | 0.000 | 5413, 5414, 5415, 5417 | -0.001 |
| 331 | 0.000 | 61 | -0.004 |
| 332 | 0.000 | 621 | -0.009 |
| 333 | 0.000 | 622 | -0.006 |
| 334 | 0.000 | 623, 624 | -0.010 |
| 335 | 0.000 | 71, 721 | -0.055 |
| 3364 | 0.000 | 722 | -0.017 |
| 3366 | 0.000 | 561 | -0.012 |
| 3361, 3362, 3363, 3365, 3369 | 0.000 | 562, 81, 115 | -0.052 |

Ecology then multiplied these employment impact results to match the total permitted acreage in the state. This resulted in nearly 3 jobs lost each year as a likely result of the proposed rule's compliance costs.