



SMALL BUSINESS ECONOMIC IMPACT ANALYSIS

for Proposed

Chapters 173-218 WAC-- Underground Injection Control Program

Chapter 173-216 WAC -- State Waste Discharge Permit Program

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Executive Summary

When proposing a new administrative rule for consideration, Washington State Department of Ecology (Ecology) is required by RCW 19.85.030 to determine whether the rule will impose a disproportionate impact on small business. This document fulfills this requirement for the proposed amendments of Chapter 173-218 WAC -- Underground Injection Control Program, and Chapter 173-216 WAC--State Waste Discharge Permit Program.

The proposed rule amendments can be expected to affect municipalities, industry, and commerce. This small business economic impact analysis quantifies the rule impacts on both small and large businesses, and concludes that there is a disproportionate impact on small businesses.

Small Business Economic Impact Analysis for Proposed

Chapter 173-218 WAC -- Underground Injection Control Program
Chapter 173-216 WAC--State Waste Discharge Permit Program

1. BACKGROUND

Washington State Department of Ecology (Ecology) is proposing adoption of rule amendments for Chapter 173-218 WAC -- Underground Injection Control (UIC) Program, and Chapter 173-216 WAC--State waste discharge permit program. The statutes authorizing Ecology to adopt the proposed rule amendments are RCW 43.21A.445, RCW 90.48.035, and RCW90.48.080. The rule amendments are due to revisions of the federal UIC rule in 1999. The federal revision included definition changes and the nation-wide ban of two types of UIC wells. Ecology needs to incorporate the federal amendments in the UIC regulation to make it current with the federal requirements. The proposed rule amendments will also bring consistency between the federal and state rules.

The Underground Injection Control (UIC) Program regulates fluids, such as stormwater, that go to ground through UIC wells. UIC wells include dry wells, catch basins, large on-site septic systems, and other infiltration devices. The proposed rule amendments include:

1. Revising the UIC rule language to make Chapter 173-218 WAC consistent with new federal rule changes and to better clarify the requirements for new and existing UIC wells.
2. Allowing UIC wells to be included in a state waste discharge permit, if necessary.
3. Clarifying language in the rules.

As required by RCW 19.85.030, Ecology is developing and issuing this Small Business Economic Impact Statement (SBEIS) as part of this rule adoption process. The objective of this SBEIS is to identify and evaluate the various requirements and costs that the proposed rule amendments might impose on business. In particular, the SBEIS examines whether the costs on business that might be imposed by the proposed rule amendments impose a disproportionate impact on the State's small businesses. This is consistent with the legislative purpose of the Regulatory Fairness Act (RCW 19.85) and is set out in RCW 19.85.011:

“The legislature finds that administrative rules adopted by state agencies can have a disproportionate impact on the state's small businesses because of the size of those businesses. This disproportionate impact reduces competition, innovation, employment and new employment opportunities, and threatens the very existence of some small businesses.”

The specific purpose and required contents of the SBEIS is contained in RCW 19.85.040.

(1) A small business economic impact statement must include a brief description of the reporting, recordkeeping, and other compliance requirements of the proposed rule, and the kinds of professional services that a small business is likely to need in order to comply with such requirements. It shall analyze the costs of compliance for businesses required to comply with the proposed rule adopted pursuant to RCW [34.05.320](#), including costs of equipment, supplies, labor, and increased administrative costs. It shall consider, based on input received, whether compliance with the rule will cause businesses to lose sales or revenue. To determine whether the proposed rule will have a disproportionate impact on small businesses, the impact statement must compare the cost of compliance for small business with the cost of compliance for the ten percent of businesses that are the largest businesses required to comply with the proposed rules using one or more of the following as a basis for comparing costs:

- (a) Cost per employee;*
- (b) Cost per hour of labor; or*
- (c) Cost per one hundred dollars of sales.*

(2) A small business economic impact statement must also include:

- (a) A statement of the steps taken by the agency to reduce the costs of the rule on small businesses as required by RCW [19.85.030](#)(3), or reasonable justification for not doing so, addressing the options listed in RCW [19.85.030](#)(3);*
- (b) A description of how the agency will involve small businesses in the development of the rule; and*
- (c) A list of industries that will be required to comply with the rule. However, this subsection (2)(c) shall not be construed to preclude application of the rule to any business or industry to which it would otherwise apply.*

For purposes of an SBEIS, the terms “small business,” and “industry” are defined by RCW 19.85.020.

“Small business” means any business entity, including a sole proprietorship, corporation, partnership, or other legal entity, that is owned and operated independently from all other businesses, that has the purpose of making a profit, and that has fifty or fewer employees. “Industry” means all of the businesses in this state in any one four-digit standard industrial classification as published by the United States Department of Commerce.

The proposed UIC well rule amendments developed by Ecology as part of this rulemaking process will be evaluated in the following sections of this document. Specifically, the following sections contain the information required by the Regulatory Fairness Act—RCW 19.85.

2. ANALYSIS OF COMPLIANCE COSTS FOR WASHINGTON BUSINESSES

The SBEIS is intended to analyze the difference between the situation “without the proposed rule amendments” and the expected situation “with the proposed rule amendments”. In order to accomplish this comparison, a baseline scenario, which describes the current situation, must be

defined. The baseline used in this analysis is the current situation under the federal and state regulations. The reason is that without the proposed rule amendments, the UIC well owners or operators must comply with both the federal regulations and the state regulations.

In the proposed rule amendments, some changes originated from the federal requirement, some are clarifications of the existing rule with no real change, and some create consistency with other regulations. All of these make no real change from the baseline, and will not have cost impacts on those to comply, so they are not analyzed in detail in this SBEIS. This analysis will only analyze the changes from the baseline that would result in additional costs.

2.0 Classes of UIC wells

Each UIC well can be classified into one of the five classes (Class I, II, III, IV, and V UIC wells) defined in the proposed WAC 173-218-040. These definitions are almost the same as the definitions in the federal regulations, and are slightly different from the definitions in the existing rule. However, these small changes of definition would not be expected to impose additional costs to businesses.

2.1 Impacts on Class I, II, III, and IV UIC Wells

For Class I, II, III, and IV UIC wells, the comparison of the three rules (the existing UIC rule, the proposed UIC rule, and the federal regulations) is listed in table 2.1. From the table, one can conclude that the proposed rule amendments will have no cost impacts on Class I, II, III, and IV UIC wells in Washington.

Table 2.1 Comparison of the rules and regulations for Class I—IV UIC wells

| Wells | Existing WAC 173-218 | New WAC 173-218 | Federal UIC Regulations | Comments | Additional Benefits or Costs |
|-------------------|--|--|---|---|------------------------------|
| Class I | New: Prohibited Existing: Approval by Department | Both new and existing are Prohibited | Authorized by rule under certain requirements | 1. None in Washington. 2. Definition change. | None |
| Class II(a) | 1. Notification 2. Review, evaluation, and approval by the State. | 1. Notification 2. Review, evaluation, and approval by the State. | Authorized by rule under certain requirements | 2. Role changes of state agencies | None |
| Class II (b), (c) | Not authorized | 1. Notification 2. Review, evaluation, and approval by the State. | Authorized by rule under certain requirements | None in Washington | None |
| Class III | Not authorized | Not authorized | Authorized by rule under certain requirements | None in Washington | None |
| Class IV | Prohibited | Prohibited, except re-injecting treated water back into the same formation.. | Authorized by rule under certain requirements | | Benefit |

2.2 Impacts on Class V UIC Wells

The majority of UIC wells in Washington are Class V UIC wells, which include all injection wells not included in Class I, II, III, or IV. Class V wells are usually shallow injection wells that inject fluids above the upper most ground water aquifer. Some examples are dry wells, French drains and drain fields used to manage stormwater.

The requirements of Class V UIC wells under the existing UIC rule are:

- (1) All new Class V injection wells that inject industrial, municipal, or commercial waste fluids into or above an USDW are prohibited.
- (2) All persons operating an existing Class V injection well, that inject industrial, commercial, or municipal waste fluids into or above an USDW, must apply to the department for approval to operate
.....
- (3) All other Class V injection well owners and operators must notify the department.....

The definition of waste fluid in the existing rule is:

“Waste fluid” means any discarded, abandoned, unwanted, or unrecovered fluid(s), except the following are not waste fluids for the purposes of this chapter:

- (a) Discharges into the ground or ground water of return flow, unaltered except for temperature, from a groundwater heat pump used for space heating or cooling:
Provided, That such discharges do not have significant potential, either individually or collectively, to affect groundwater quality or beneficial uses;*
- (b) Discharges of storm water that are not contaminated or potentially contaminated by industrial or commercial sources.*

As such, the definition of “waste fluid” is broad in the existing rule. Not only “contaminated”, but also “potentially contaminated” stormwater is treated as “waste fluids”. The Class V UIC wells built after 2/29/1984 that inject “waste fluids” into ground water are prohibited, while the wells built before that time need to be approved by Ecology. Therefore the prohibited Class V wells in the proposed WAC 173-218-040 (5) (b) are also prohibited under the existing rule. Thus, no additional costs will be generated.

For the injection wells allowed in the proposed WAC 173-218-040 (5)(a), only some drainage wells and septic system wells are used to inject the waste or effluent. Other wells would not inject “waste fluids” into the ground water and can be approved under the existing rule. Therefore, there will be no additional costs to the well owners from the rule change.

Most of the Class V UIC wells in Washington are drainage wells for discharging storm water. The existing UIC rule did not allow most of the drainage wells because the discharge was contaminated, or potentially contaminated, by industrial or commercial sources. Without the proposed rule amendments, all of the UIC wells receiving contaminated or potentially contaminated discharges would need to be closed, and the owners would need to develop other methods or facilities to manage and/or treat their storm water. With the proposed rule amendments, most of these wells can meet the requirements for “rule authorized”. The well owners or operators will not need to develop alternatives to treat storm water. This will result in savings of corresponding capital investment and other resources. These savings are not additional costs.

For those UIC wells that need a permit under both the proposed and existing UIC rules, Ecology does not expect there will be any real changes, thus no additional costs.

2.3 Decommissioning

WAC 173-218-120 addresses the decommissioning standards and record keeping requirements for UIC wells. The decommissioning standards in the proposed rule amendments are more specific than those in the federal regulation (40 CFR 146.10 (c))¹. However, the standards are almost the same, thus there may be slight additional costs that are not expected to be significant.

¹ 40 CFR 146.10 (c) Requirements for Class V wells.

The decommissioning record keeping under the proposed rule amendments requires an update on the wells that have been decommissioned. This requirement would be a minor additional one-time cost (less than \$10) in the lifetime of a Class V well.

2.4 Retrofit

“Retrofit” means taking actions to reduce the pollutant load from a UIC well to meet the statutory requirements of 40 CFR 144.12 and RCW 90.48.010. The UIC wells that need retrofitting under the proposed UIC rule amendments are the wells that must be closed in the current UIC rule. Under current regulations, the UIC wells that cannot meet the statutory requirements would have no choice but closure, and the well owners have to find other methods and facilities to treat their polluted water. The proposed rule amendments would allow UIC well owners to choose retrofitting instead of closure. If the well owners believe retrofitting is a big burden to them, they can still close their UIC wells without retrofitting under the proposed rule amendments. Retrofitting a well is an additional choice provided by the proposed UIC rule, and cannot be a cost to the UIC well owners.

2.5 Registration

Registration is required by the federal regulation. The proposed UIC rule must reflect this requirement. The existing rule also requires the UIC well owners to notify Ecology on an approved form. The UIC wells that have been registered with Ecology are not required to register again. Registration is not considered to be an additional cost to the well owners or operators.

2.6 Well Assessment

“**Well assessment**” means an evaluation of the potential risks to ground water from the use of UIC wells. A well assessment includes information such as the land use around the well which may affect the quality of the discharge, the local geology, depth of the ground water in relation to the UIC well, and if the UIC well is located in a ground water protection area.

Well assessment is explicitly required by the proposed rule amendments but is not explicitly required under the baseline. This will be a cost to the well owners.

3. QUANTIFICATION OF COSTS AND RATIOS

The largest cost generated by the proposed rule amendments is the cost of the well assessment, although there may be some other minor costs. The well assessment requirements offer flexibility to the well owner. The owner may decide when, and how, to conduct the assessment

(1) Prior to abandoning a Class V well, the owner or operator shall close the well in a manner that prevents the movement of fluid containing any contaminant into an underground source of drinking water, if the presence of that contaminant may cause a violation of any primary drinking water regulation under 40 CFR part 141 or may otherwise adversely affect the health of persons.

(2) The owner or operator shall dispose of or otherwise manage any soil, gravel, sludge, liquids, or other materials removed from or adjacent to the well in accordance with all applicable federal, state, and local regulations and requirements.

within a 5-7 year period. If Ecology assumes the owner will hire a technician to do the well assessment, and estimates that, on average, it will take the technician 2-5 hours² to finish the assessment and the loaded hourly wage rate is 60 dollars³, the cost of well assessment for each UIC drainage well will be \$120 to \$300.

In this SBEIS, the names of business are taken from Ecology's UIC well database, and then are matched to Washington Department of Employment Security's database to find out the corresponding employee numbers. For an average small business that has UIC wells, its employee number is 10.2 and it has 6.3 UIC wells. For an average top ten percent business, its employee number is 10,733, and it has 4.7 UIC wells (Large employee number is due to the big impact of a large company).

Therefore, the cost per employee ratio for small business is from \$73.73 to \$184.31 per employee, and is from \$0.05 to \$0.13 per employee for the top ten percent largest business. Therefore, the proposed rule amendments have a disproportionate impact on small business⁴.

4. ACTIONS TAKEN TO REDUCE THE IMPACT OF THE RULE ON SMALL BUSINESS

This SBEIS concludes that the proposed rule amendments will disproportionately impact small business. RCW 19.85.030 (2) requires:

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.

To comply with above requirements, the proposed rule amendments provide some cost saving measures to mitigate the impacts to small business, which can be summarized as follows:

(a) Reducing, modifying, or eliminating substantive regulatory requirements;

Registration is not required for those that have registered before.

An on-line registration is being developed for the majority of UIC well uses so that the registrations process is streamlined and easy to use.

Industrial facilities that have already developed a Stormwater Pollution Prevention Plan (SWPPP) to meet National Pollution Discharge Elimination System (NPDES) requirements can also use the SWPPP to meet the requirements of a well assessment (see WAC 173-218-090(2)(c)(ii)).

² *Stormwater Management for Eastern Washington—Model Municipal Stormwater Program for Eastern Washington*. Washington State Department of Ecology, Publication Number 03-10-076.

³ The same data source as above.

⁴ On average, the more UIC wells a business has, the more costs and the more benefits.

A new section of the rule has been added (WAC 173-218-100) to identify certain UIC wells that automatically meet the non-endangerment standard. The types of wells listed in this section are considered rule-authorized after they are registered, which means that the owner does not need to provide a well assessment.

(b) Simplifying, reducing, or eliminating record keeping and reporting requirements;

Registration is not required for those that have registered before.

An on-line registration is being developed for the majority of UIC well uses so that the registrations process is streamlined and easy to use.

Ecology also plans to provide an on-line, read-only access to the UIC well database so that the public and interested parties can quickly query the database for registration information.

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(c) Reducing the frequency of inspections;

No inspection is required by the proposed rule amendments.

(d) Delaying compliance timetables;

Businesses have 3-5 years to register their UIC wells, and have 5 to 7 years to complete a well assessment.

(e) Reducing or modifying fine schedules for noncompliance;

The enforcement relies on the Water Pollution Control Act, Chapter 90.48 RCW, which is impossible for Ecology to change in this rule-making process.

(f) Any other mitigation techniques.

The proposed rule amendments provide two approaches, a presumptive approach and a demonstrative approach, which give businesses the flexibility to comply with the non-endangerment requirement, and reduce their costs. Well owners can retrofit their non-compliance wells instead of closing them, which is also a cost saving measure.

5. THE INVOLVEMENT OF SMALL BUSINESS IN THE DEVELOPMENT OF THE PROPOSED RULE AMENDMENTS

In the rule-making process, Ecology set up the UIC Rule Advisory Committee. Various businesses, including small businesses, were invited to participate in the committee and give comments on the proposed rule amendments. The committee held six meetings and received

comments from some small businesses. Ecology also posted a draft version of the rule language out for public review on its UIC web site. All these measures provide opportunity for small businesses to be involved in developing the proposed rule amendments.

6. THE SIC CODES OF IMPACTED INDUSTRIES

From the UIC well database, Ecology concludes that the businesses associated with the SIC codes listed in Table 6.1 will be impacted by the proposed rule amendments. However, the affected SIC codes are only derived from the existing database. Obviously the UIC wells are associated with the property, and businesses in any SIC code can potentially own property. Therefore, it is reasonable to assume that more businesses with other SIC codes can potentially be impacted, because many businesses can possibly have/need UIC wells.

Table 6.1 SIC code of impacted businesses

| | | | | | | | |
|------|------|------|------|------|------|------|------|
| 1721 | 2421 | 2495 | 2813 | 3273 | 3334 | 3571 | 4911 |
| 5033 | 5172 | 5191 | 5431 | 5541 | 5812 | 5962 | 6512 |
| 6531 | 6552 | 6792 | 8711 | 8221 | 8731 | 8741 | 8748 |