



DEPARTMENT OF
ECOLOGY
State of Washington

Concise Explanatory Statement
Chapter 173-441 WAC
Reporting of Emissions of Greenhouse
Gases

Summary of rule making and response to comments

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Concise Explanatory Statement

Chapter 173-441 WAC Reporting of Emissions of Greenhouse Gases

Air Quality Program
Washington State Department of Ecology
Olympia, Washington 98504-7600

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Introduction

The purpose of a Concise Explanatory Statement is to:

- Meet the Administrative Procedure Act (APA) requirements for agencies to prepare a Concise Explanatory Statement (RCW 34.05.325).
- Provide reasons for adopting the rule.
- Describe any differences between the proposed rule and the adopted rule.
- Provide Ecology's response to public comments.

This Concise Explanatory Statement provides information on The Washington State Department of Ecology's (Ecology) rule adoption for:

Title: Reporting of Emissions of Greenhouse Gases
WAC Chapter(s): Chapter 173-441 WAC
Adopted date: December 1, 2010
Effective date: January 1, 2011

To see more information related to this rule making or other Ecology rule makings please visit our web site: www.ecy.wa.gov/lawsandrules

Reasons for Adopting the Rule

Engrossed Second Substitute House Bill 2815 (ESSHB 2815), was passed by the 2008 Legislature as part of the Governor's Climate Change Framework and is primarily codified in Chapters 70.235 RCW and 70.94 RCW. The legislature passed Substitute Senate Bill No. 6373 (SSB 6373) in 2010 to amend ESSHB 2815 to emphasize consistency with The Environmental Protection Agency's (EPA) greenhouse gas (GHG) reporting program. One element of SSB 6373 is a requirement for persons operating large stationary sources of GHGs or supplying certain types of fuels to begin reporting emissions. The statute directs Ecology to adopt rules to develop and implement a reporting system for those entities required to report. The inventory of GHG emissions established by this reporting system will support future policy initiatives to meet the emissions reductions established in RCW 70.235.020.

This rule making proposes to adopt a mandatory GHG reporting rule for persons operating:

1. A single facility, source, or site that emits at least 10,000 metric tons of GHGs annually in the state; or
2. A supplier of liquid motor vehicle fuel, special fuel, or aircraft fuel that supplies products equivalent to at least 10,000 metric tons of carbon dioxide annually in the state.

This rule making will establish a new chapter, Chapter 173-441 WAC – Reporting of Emissions of Greenhouse Gases.

Differences Between the Proposed Rule and Adopted Rule

RCW 34.05.325(6)(b)(ii) requires Ecology to describe the differences between the text of the proposed rule as published in the *Washington State Register* and the text of the rule as adopted, other than editing changes, stating the reasons for the differences.

There are some differences between the proposed rule filed on August 26, 2010 and the adopted rule filed on December 1, 2010. Ecology made these changes for all or some of the following reasons:

- In response to comments we received.
- To ensure clarity and consistency.
- To meet the intent of the authorizing statute.

The following content describes the changes and Ecology's reasons for making them. Where a change was made solely for editing or clarification purposes, we did not include it in this section.

WAC 173-441 was updated to incorporate changes to 40 C.F.R. Part 98 made after Washington's proposed rule was drafted. This is consistent with Chapters 70.94 and 70.235 RCW and should increase data quality while reducing compliance costs for reporters. Ecology clearly announced during the stakeholder process as well as on the CR-102 form itself our intention to make these updates before adopting a final rule. We received multiple comments supporting this action. Text changes made to implement this action include: updating incorporation by reference dates throughout the rule, replacing proposed EPA protocols with final protocols for various source categories in WAC 173-441-120, and updates to provisions based on 40 C.F.R. Part 98, Subpart A.

WAC 173-441-030(2)(b)(iv) was deleted. This provision required transportation fuel suppliers to include CO₂ that is captured for transfer off-site. This provision does not apply to fuel suppliers and was unnecessary. The same provision was retained for facilities in WAC 173-441-030(1)(b)(iv). Any supplier that needs to account for off-site CO₂ transfers would still be required to do so as a facility. Language regarding CO₂ transfers for facilities was clarified throughout the rule.

The option to combine biomass emissions with non-biomass emissions for units using methodologies in 40 C.F.R. Part 75 was deleted from WAC 173-441-050(3)(d)(ii) and (iii)(A). This option is inconsistent with RCW 70.94.151(5)(a)(i) which requires biomass emissions to be reported separately. The changes were also requested in a public comment.

WAC 173-441-110(6) was changed to accommodate a stakeholder request for more time to pay reporting fees. The payment deadline was extended from 30 to 60 days and a 90 day grace period was added before late fees begin.

A final EPA protocol for carbon dioxide injection and geologic sequestration was not available in time for rule adoption. WAC 173-441-140(2)(b) was added to allow facilities to petition to use alternate calculation methods for emissions in that source category under the approval criteria for voluntary reporters until a final protocol is issued by EPA. This is designed to reduce costs and

uncertainty. Ecology retains the ability to review all petitions for alternative calculation methods, which will ensure all methods are of high quality.

Response to Comments

Description of comments:

Ecology split each comment letter into separate comments by subject matter. Those comments were then taken with as little editing as possible and arranged by rule section. Each comment is identified by commenter using the Commenter Index below. Responses are directly below each comment. If several comments were related and on the same topic, then one response was given below all of the related comments. Appendix A of this document contains all of the comments received during the public comment period in their original form, including attachments.

Commenter identification:

The table below lists the names of organizations or individuals who submitted a comment on the rule proposal and where you can find Ecology's response to the comment(s). Commenters are arranged in the order that the comments were received. Identification codes beginning with "V" were submitted orally at a public hearing. Identification codes beginning with "W" were submitted in writing. The "Responses in Section" column lists each section that contains a response to that commenter.

Commenter Index

Commenter	Identification Code	Responses In Section:
Washington Environmental Council	V-1	050(2)(b)
Weyerhaeuser	W-1	030(1)(b)(ii), 050(3)(d)(ii), 090(1), 120(1), 120(Table 120-1), 150(4)
Marion Huxtable	W-2	130(general), biomass(carbon neutrality), biomass(state inventory)
Elaine Bailey	W-3	biomass(carbon neutrality)
WaferTech	W-4	030(1)(b)(iv), 050(6)(a), 050(8)(c), 120(1), 150(general), 150(4)
Chris Lyle	W-5	climate change(general)
Climate Solutions et al	W-6	050(2)(b)
Port Townsend Paper Corporation	W-7	050(2)(b), 150(3), consistency(general)
PT AirWatchers	W-8	030(1)(b)(ii), 050(2)(b)(i), economics(small business impacts), GHG limits, biomass(carbon neutrality), climate change(general)
Hanford (Mission Support Alliance)	W-9	020(1)(b), 020(1)(f), 040(Table A-1), 050(7)(c), 050(8), 050(9), 060(general), 060(5), 110(5)
The Coalition (Ash Grove Cement, Nucor Steel, Western States Petroleum Association)	W-10	020(3), 030(1), 030(1)(b), 030(1)(b)(ii), 030(2), 030(2)(b), 030(2)(b)(ii), 030(3), 030(5)(a), 030(5)(b), 050(3), 050(3)(e)(i)(A), 050(3)(i), 050(3)(j), 050(6), 050(9), 060(5), 080(1), 090(3), consistency(general)
Northwest Pulp and Paper Association	W-11	030(general), 040(Table A-1), 050(2)(b), 120(1), 130(general), 150(general), consistency(general)
CoolMom.org	W-12	050(2)(b)
Stephen Boyd and Elaine Phillips	W-13	GHG limits, biomass(carbon neutrality)
U.S. Department of Defense	W-14	consistency(general)

Comments and responses

Ecology accepted comments between August 12, 2010 and October 14, 2010. This section provides verbatim comments arranged by rule section that we received during the public comment period and our responses. (RCW 34.05.325(6)(a)(iii))

WAC 173-441-020 Definitions.

(1)(b) "Carbon dioxide equivalents".

Comment W-9

The proposed definition of “carbon dioxide equivalents” differs from that included in 40 CFR 98.6 for the same term. It does not appear that the proposed alternate definition provides sufficient benefit to justify creating potential confusion by having two different definitions for the same term within related regulatory programs.

Revise the definition of “carbon dioxide equivalents” to match that included in 40 CFR 98.6 for the same term. Alternatively, if Ecology believes there is a benefit to using the proposed different definition, please explain why.

Ecology Response:

The definition of “carbon dioxide equivalents” is taken directly from RCW 70.235.010. Consistency with Washington’s statute takes precedence over consistency with EPA’s rules. Ecology considers the two definitions of “carbon dioxide equivalents” functionally identical, therefore consistency with EPA’s reporting program is maintained. No changes were made to the rule in response to this comment. Thank you for your comments.

(1)(f) "Facility".

Comment W-9

The definition of “Facility” includes a provision for operators of military installations to classify such installations as multiple sites for greenhouse gas emissions reporting purposes based on “distinct and independent functional groupings” within the installation. In response to informal questions previously posed to Ecology staff, it has been suggested that this provision may also be potentially applicable to other federal facilities, such as the Hanford Site.

Provide clarification and guidance concerning whether the provision for military installations is potentially applicable to other federal facilities (such as the Hanford Site). Such guidance should include specific criteria to be considered when determining if an installation or facility can be divided into multiple sites for purposes of greenhouse gas emissions reporting.

Ecology Response:

Ecology’s definition of “facility” is modeled after EPA’s definition. This is necessary to maintain consistency between the programs. EPA’s definition contains the provision for facility designation for military facilities, but it does not contain a similar provision for other federal facilities. If EPA changes their definition of “facility” or develops guidance on the topic, we will review that change

and consider moving towards consistency at that time. No changes were made to the rule in response to this comment. Thank you for your comments.

(3) Definitions from 40 C.F.R. Part 98

Comment W-10

... definitions found in 40 C.F.R. ~~Part~~98.6,...

Ecology Response:

Ecology agrees that the references to subparts of 40 C.F.R. Part 98 can be improved. We have changed how we refer to subparts of 40 C.F.R. Part 98 to “40 C.F.R. § 98.X” throughout WAC 173-441. Thank you for your comments.

WAC 173-441-030 Applicability.

General - threshold

Comment W-11

Specifically, the resolution of the following issues is important to NWPPA members:

- The yearly reporting threshold is set at 10,000 metric tons of carbon dioxide equivalent for all sources.

Ecology Response:

The 10,000 MT CO₂e reporting threshold is established in RCW 70.94.151. We applied the threshold uniformly as specified in statute. The lower threshold for fleets was no longer needed when Washington switched from fleet reporting to fuel supplier reporting for the transportation sector. The reporting threshold is slightly different for fuel suppliers since it only includes CO₂ emissions and is based on the complete combustion or oxidation of the quantity of fuel supplied instead of traditional direct emissions, but the threshold itself remains 10,000 MT CO₂e for fuel suppliers. No changes were made to the rule in response to this comment. Thank you for your comments.

(1) Facility reporting.

Comment W-10

(1) **Facility reporting.** Reporting is mandatory for an owner or operator of any facility located in Washington state that emits ten thousand metric tons CO₂e or more per calendar year from all applicable source categories listed in WAC 173-441-120.¹ ~~with total GHG emissions that exceeds the reporting threshold. GHG emissions from all applicable source categories listed in WAC 173-441-120 at the facility must be included when determining whether emissions from the facility meet the reporting threshold.~~

~~(a) **Reporting threshold.** Any facility that emits ten thousand metric tons CO₂e or more per calendar year in total GHG emissions from all applicable source categories listed in WAC 173-441-120 exceeds the reporting threshold.~~

¹ The edits proposed here are just “wordsmithing,” but the redline offers two advantages. First, our proposed language more clearly states that only emissions from listed source categories count toward the reporting threshold. Second, the key sentence of the section no longer uses a term (“the reporting threshold”) that is first defined in the following subsection.

Ecology Response:

The commenter states in the included footnote that the proposed edits are wordsmithing only. Ecology believes that the language is clear that reporting for facilities is limited to source categories listed in WAC 173-441-120. For clarity, we added text to 030(1) to explicitly define the reporting threshold using 030(1)(a). Thank you for your comments.

(1)(b) Calculating emissions for comparison to the threshold.

Comment W-10

Calculating facility emissions for comparison to the threshold.

Ecology Response:

Ecology accepted your proposed edit to make the title more informative. We also retitled (1)(a) in spirit with your comment since we did not reorganize the subsection as requested in another comment. Thank you for your comments.

(1)(b)(ii) Including emissions from biomass in the reporting threshold.

Comment W-1

The last clause directing inclusion of “all fugitive releases of GHG emissions from biomass” is a bit confusing. This could be read as an independent requirement, and not, as you explained in our October 3rd conversation, as applying only to the source categories specified in WAC 173-441-120. Making the point in a different way, it appears the agency intends that (b)(ii) is to elaborate on the regulatory direction presented in (b)(i). If so, these two sections could be restructured to confirm that intent.

This ambiguity could be resolved by rewording subsections (i) and (ii) to read:

- (i) *Calculate the total annual emission of each GHG in metric tons from all applicable source categories that are listed and defined in WAC 173-441-120. The GHG emissions must be calculated using the calculation methodologies specified in WAC 173-441-120 (including, as directed, all fugitive releases of GHG emissions from biomass), and available company records.*
- (ii) *Include emissions of all GHG that are listed in Table A-1 of WAC 173-441-040, including all GHG emissions from the combustion of biomass.*

And Comment W-10

Include emissions of all GHGs that are listed in Table A-1 of WAC 173-441-040, including all GHG emissions from the combustion of biomass and all fugitive releases of GHG emissions from biomass, calculated as provided in the calculation methods referenced in Table 120-1.

Ecology Response:

Ecology intended the requirements for facility biomass emissions reporting to be restricted to emissions with protocols in WAC 173-441-120. The “all fugitive releases of GHG emissions from biomass” statement was meant to be clear that all biomass emissions covered in section 120 count towards the reporting threshold. We have accepted the language proposed in Comment W-10 to clarify that requirement. Thank you for your comments.

Comment W-8

Source of fuel should not influence reporting requirements

In particular, biomass fuels should NOT be exempted from fully reporting GHG emissions, or subject to reduced requirements.

Companies with biomass incinerators SHOULD NOT be allowed to discount the CO2 they release. Nature doesn't care about the source of the GHGs -- cumulatively they are equally destructive regardless of source.

Emissions from industrial burning of biomass (regardless of the type of facility) should be 100% counted and 100% included the states inventory of greenhouse gases.

Ecology Response:

WAC 173-441-030(1)(b)(ii) explicitly requires reporting for greenhouse gas emissions from biomass combustion. Emissions from these sources are calculated and reported at 100% of actual at the source emissions, carbon neutrality is not applied in this program. The only special provision for biomass emissions is that they must be reported separately from other emissions. These requirements are consistent with RCW 70.235.020 and RCW 70.94.151. No changes were made to the rule in response to this comment. Thank you for your comments.

(1)(b)(iv) CO₂ transfers offsite

Comment W-4

Include in the emissions calculation any CO2 that is captured for transfer off site. WaferTech has two offsite transfers, fist the returning of PFC gases to suppliers and the recycling/disposal of heat transfer fluids that have minimal vapor pressure. Clarifications:

- i. Does this only apply to CO2 and not fluorinated green house gases?
- ii. Based on EPA's GHG reporting rule our suppliers are responsible for the PFC gases returned to them. WaferTech should not have to report the amount of PFC gas returned to our supplier.
- iii. The disposal of the heat exchanger fluid may be a low amount of emissions but require a large amount of time and money to estimate these emissions. WaferTech may want to assume all the heat transfer fluid is emitted if the amount is small.

Ecology Response:

This requirement is taken directly from 40 C.F.R. Part 98. The requirement only applies to CO₂ transfers, not transfers of other GHGs. Details on this requirement and requirements for PFC tracking are specified in the methods adopted by reference in WAC 173-441-120. No changes were made to the rule in response to this comment. Thank you for your comments.

(2) Suppliers.

Comment W-10

Reporting is mandatory for any supplier required to file periodic tax reports to DOL ~~and that reports the sale in Washington state of one or more applicable fuels listed in WAC 173-441-130(1), the complete combustion or oxidation of which would result in aggregate calendar year emissions of carbon dioxide exceeding ten thousand metric tons.~~² ~~has total carbon dioxide emissions that exceed the reporting threshold.~~

² The edits proposed here have the same goal as those suggested in subsection (1).

~~—(a) **Reporting threshold.** Any supplier that supplies applicable fuels that are reported to DOL as sold in Washington state of which the complete combustion or oxidation would result in total calendar year emissions of ten thousand metric tons or more of carbon dioxide exceeds the reporting threshold.~~

Ecology Response:

The commenter states in the included footnote that the proposed edits are wordsmithing only. Ecology believes that the language is clear that reporting for suppliers is limited to emissions listed in WAC 173-441-130. For clarity, we added text to 030(2) to explicitly define the reporting threshold using 030(2)(a). Thank you for your comments.

(2)(b) Calculating emissions for comparison to the threshold.

Comment W-10

Calculating supplier emissions for comparison to the threshold. To calculate GHG CO₂ emissions for comparison to the reporting threshold, a supplier must:

Ecology Response:

Ecology accepted your proposed edit to the title to make the title more informative. We also retitled (2)(a) in spirit with your comment since we did not reorganize the subsection as requested in another comment. We changed “GHG” to “CO₂” to be clearer that reporting requirements are limited to CO₂ for transportation fuel suppliers. Thank you for your comments.

(2)(b)(ii) Supplier emissions calculation methods.

Comment W-10

... The GHG CO₂ emissions must be calculated using the calculation methodologies specified in WAC 173-441-130 and data reported to DOL.

Ecology Response:

We changed “GHG” to “CO₂” to be clearer that reporting requirements are limited to CO₂ for transportation fuel suppliers. Thank you for your comments.

(3) Applicability over time.

Comment W-10

... Thus, persons should reevaluate the applicability ~~to~~of this chapter...

Ecology Response:

This language is taken from 40 C.F.R. Part 98. Consistency with EPA’s program outweighs the need for this edit. No changes were made to the rule in response to this comment. Thank you for your comments.

(5)(a) Reporting requirements when emissions of greenhouse gases fall below reporting thresholds – five year method.

Comment W-10

If reported emissions are less than the reporting thresholds in subsection (1) or (3)³~~ten thousand metric tons CO₂e per year~~ for five consecutive years, then the person may discontinue reporting

³ The reporting thresholds are different for suppliers and facilities, in that only CO₂ emissions count for suppliers. The proposed edits to paragraphs (a) and (b) apply the requirements of this subsection to both suppliers and facilities.

~~undereomplying with~~ this chapter provided that the person submits a notification to ecology that announces the cessation of reporting and explains the reasons for the reduction in emissions. The notification shall be submitted no later than March 31st of the year immediately following the fifth consecutive year of emissions less than ~~the applicable reporting threshold~~~~ten thousand tons CO₂e per year~~. The person must maintain the corresponding records required under WAC 173-441-050(6) for each of the five consecutive years and retain such records for three years following the year that reporting was discontinued. The person must resume reporting if annual emissions in any future calendar year increase above the thresholds in subsection (1) or ~~(2)~~(3) of this section.

Ecology Response:

This language is based on text from 40 C.F.R. Part 98. EPA’s rule has similar requirements to WAC 173-441 limiting GHG reporting requirements for transportation fuel suppliers to CO₂, so there is no Washington specific reason to alter the language. Ecology believes that WAC 173-441 is very clear that “GHG” means “CO₂” for transportation fuel suppliers and this edit is unnecessary. Although “complying with” is taken directly from 40 C.F.R. Part 98, we agree that this language does not reflect the intended meaning and is worthy of a deviation from EPA language. The language has been changed to “reporting as required by” in both (5)(a) and (5)(b). Thank you for your comments.

(5)(b) Reporting requirements when emissions of greenhouse gases fall below reporting thresholds – three year method.

Comment W-10

If reported emissions are less than 50 percent of the reporting thresholds in subsections (1) or (3)~~five thousand metric tons CO₂e per year~~ for three consecutive years, then the person may discontinue complying with this chapter provided that the person submits a notification to ecology that announces the cessation of reporting and explains the reasons for the reduction in emissions. The notification shall be submitted no later than March 31st of the year immediately following the third consecutive year of emissions less than 50 percent of the applicable reporting threshold~~five thousand tons CO₂e per year~~...

Ecology Response:

This language is based on text from 40 C.F.R. Part 98. EPA’s rule has similar requirements to WAC 173-441 regarding CO₂ being the only GHG required to be reported for transportation fuel suppliers, so there is no Washington specific reason to alter the language. Ecology believes that WAC 173-441 is very clear that “GHG” means “CO₂” for transportation fuel suppliers and this edit is unnecessary. No changes were made to the rule in response to this comment. Thank you for your comments.

WAC 173-441-040 Greenhouse gases.

Table A-1.

Comment W-11

Specifically, the resolution of the following issues is important to NWPPA members:

- The list of greenhouse gases to be reported includes gases added by Congress or included in EPA’s reporting regulation.

Ecology Response:

Table A-1 lists the GHGs subject to this Chapter and the global warming potential (GWP) for each gas. The list and GWPs were taken from 40 C.F.R. Part 98. Ecology has notified the legislature, as required by RCW 70.94.151, of our intent to add these gases to be consistent with EPA. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-9

This proposed table includes broad, undefined entries for “All other HFCs” and “All other PFCs” with no established global warming potential (GWP) values for purposes of converting emissions into CO₂e. The table indicates that Ecology should be contacted to obtain GWP values for any HFCs/PFCs that are not listed. If Ecology is aware of additional appropriate GHGs that have defined GWP values, then they should be specifically listed in the table individually. If Ecology later becomes aware of other HFCs/PFCs that warrant inclusion on the table, they can be added via a future rulemaking.

Revise Table A-1 to delete the rows for “All other HFCs” and “All other PFCs”.

Ecology Response:

RCW 70.235.010 defines all hydrofluorocarbons (HFCs) and perfluorocarbons (PFCs) as GHGs. New HFCs and PFCs are introduced into the economy on a regular basis. Omitting the rows in Table A-1 would not remove the requirement to report emissions of those HFCs and PFCs. Including the additional rows in the table only specifies how reporters can comply with the law while minimizing delays due to constant rule making. Therefore, they need to be included in Table A-1. No changes were made to the rule in response to this comment. Thank you for your comments.

WAC 173-441-050 General monitoring, reporting, recordkeeping and verification requirements.

(2)(b) Reporting requirements begin.

Comment W-6

We oppose the proposed three-year delay of the reporting program and strongly urge the Department of Ecology to revisit this issue before the rule is finalized.

Rule text inconsistent with legislative intent

Delaying the start of greenhouse gas (GHG) reporting until 2013 is inconsistent with Washington’s two laws that establish a reporting program. 2008 HB 2815 states that Ecology must write rules that “require persons report 2009 emissions starting in 2010.” SB 6373 affirms this, stating that: “the rules must require...reporting will start in 2010 for 2009 emissions.” A three-year delay in the start of the program is inconsistent with the direction given to Ecology by the Legislature and such a significant change in the law would require legislative action.

Delay in implementation is unnecessary

The three-year delay in the proposed rule is unnecessary. While there have been changes from the GHG reporting program Ecology originally planned to use due to the start of federal reporting requirements, there is still a foundation in place to start reporting in 2010. In May of 2010, the Western Climate Initiative (WCI) released its report “Proposed Harmonization of Essential Requirements for Mandatory Reporting in U.S. Jurisdictions with EPA Mandatory Reporting Rule.” This report demonstrates how WCI partner states that were preparing GHG reporting programs can harmonize their state programs with the federal EPA rule. Washington has been an active participant in the WCI and its reporting subcommittee and should be able to implement the suggestions contained in the report.

Oregon can also provide a model for our state. Like Washington, Oregon passed a law directing mandatory reporting of 2009 GHG emissions beginning in 2010. Even with the changes in federal law, Oregon is still on schedule to implement its reporting program; 2009 emissions will be reported this year and transportation fuel providers will start reporting next year. Washington should seek input from Oregon on how we can start our reporting program on time.

Delay in implementation threatens the state’s climate program

Any program to reduce GHG emissions must start with a solid understanding of where emissions come from, which is why GHG reporting is the foundation of the Washington’s climate program. Delaying reporting until 2013 suggests that the state will not move forward with GHG reduction measures until after 2013, significantly decreasing the time the state has to reduce emissions consistent with the 2020 GHG limit in RCW 70.235.050. This delay poses a real threat to the state’s entire climate program and could suggest to major emitters that the state is backing off on its commitment to reduce emissions.

We strongly urge Ecology to reconsider this proposed rule text and restore the start date to 2010 reporting of 2009 emissions, per legislative direction.

And Comment W-12

We strongly oppose the proposed three-year delay of the reporting program and urge the Department of Ecology to proceed with requirements for emissions reporting to begin in 2010, or as soon as possible thereafter, given rulemaking timelines.

The reporting rule is a critical component of Washington State’s commitments to reduce greenhouse gas emissions, as required by statute and reaffirmed by Governor Gregoire’s May 2009 Executive Order titled Washington’s Leadership on Climate Change. It is difficult to understand how state-level leadership to reduce global warming pollution can proceed without the foundation of information that emissions reporting provides.

Delaying the start of greenhouse gas (GHG) reporting until 2013 is inconsistent with Washington’s two laws that establish a reporting program. Additionally, we can’t afford to put off this critical piece to addressing emissions in our State. Our children are counting on us to do the right thing. Can you ensure that our government in Washington State does the right thing?

While we understand that there may be technical issues to sort out with the Environmental Protection Agency regarding the interface between state and federal reporting data, Oregon is on schedule to implement its reporting program this year, suggesting that such problems have been

solved in other jurisdictions. CoolMom members are counting on Washington Department of Ecology to help stand up for reduced emissions and the health our children.

And Comment V-1

But I just wanted to indicate that the environmental community in general and the Washington Environmental Council in particular is disappointed that the Department of Ecology is delaying this reporting when the initial statute was passed in 2008 that should have put everyone on notice that greenhouse gas emissions would be required to be reported. When the governor issued executive orders in both 2007 and 2009 and once again gave proper notice to emitters and others that they should start at least collecting the data and being prepared to deliver it.

It also should have given the Department of Ecology notice that they needed to start preparing to receive and deal with the data. And then in 2010 when the legislature passed engrossed second substitute Senate Bill 6373, it required that emissions reporting begin in 2010 for 2009 emissions. And it's disappointing that ecology and its submittal to the code reviser indicated that the soonest they can have an effective date for a rule was 2011.

So I strongly urge the Department of Ecology, and the environmental council strongly urges the Department of Ecology to make haste and do whatever is necessary to get their systems in place to deal with the data that needs to be received. Because it's very important that we start collecting data on emissions so that we can move forward with regulating emissions for the health of Washingtonians, especially the health of Washington's children, and for the development of the clean and efficient economy that we're constantly being promised. Ecology has a role in that and the environmental community and the Washington Environmental Council looks forward to working with ecology going forward.

And Comment W-7

We also appreciate the phased approach to reporting. This is a complex system with lots of data. Your approach should help allow for the development of a robust data collection.

And Comment W-11

Specifically, the resolution of the following issues is important to NWPPA members:

- Reporting will begin in 2013 for 2012 emissions.

Ecology Response:

Ecology takes the regulation of GHGs and the impacts of climate change very seriously. We genuinely feel that the start date established in WAC 173-441 is the soonest we can implement a GHG reporting system that will result in acquiring meaningful data.

The commenters are correct, RCW 70.94.151 states that “reporting will start in 2010 for 2009 emissions”. However, the authorizing statute also states “The department may phase in the requirement to report greenhouse gas emissions until the reporting threshold in this subsection is met, which must occur by January 1, 2012”. This explicitly gives Ecology the authority to make the requirements effective as late as January 1, 2012. Beginning the reporting program on that date is neither inconsistent with RCW 70.94.151 nor does it require additional legislative action.

Engrossed Second Substitute House Bill 2815 passed in 2008 did put Ecology on notice to begin reporting with 2009 emissions reported in 2010. Ecology began rule making to implement that

directive. Conducting the public involvement process in good faith and meeting requirements established in the Washington Administrative Procedure Act, RCW 34.05, meant that even that rule making would not be complete in time for reporters to begin collecting 2009 data using a final rule. Therefore, the draft rule from the first rule making contained significant phasing provisions.

The decision was made to fundamentally redesign Washington's mandatory GHG reporting program after EPA released their final mandatory GHG reporting rule in order to be consistent with the federal program. While the 2009 report start date remained in the new statute, Ecology was required to develop a totally new reporting program beginning in spring of 2010. Once again, adopting a rule in good faith that honored public participation and met requirements established in RCW 34.05 meant that a final rule could be adopted no earlier than late 2010 or early 2011. Ecology devoted significant resources to meet this tight deadline. Legally, requiring organizations to gather data for 2009 and 2010 emissions when a regulation would not be adopted until December 2010 all but eliminated the possibility of requiring reporting for those years. Principles of good government and the fact that Ecology had already published and withdrawn a draft rule for this program further tied our hands for 2009, 2010, and 2011 emissions. The requirements established in the 2008 statute and first rule making are fundamentally different from the requirements established in the 2010 statute and current rule making. Many preparations reporters made to comply with the 2008 requirements would not have carried over to the 2010 requirements.

Ecology has tracked the efforts of other states and regional programs, including those of WCI and Oregon. Like Washington, WCI was forced to reevaluate their program when the EPA rules came out. The content of Washington's rule was developed and published only a few months behind WCI's May 2010 report. That report only serves as a template for states to begin their rules. WCI does not have to meet Administrative Procedure Act requirements and deadlines in issuing their guidance documents. Washington would have been even further behind if we had waited for the WCI report when state specific adjustments required by Washington law and requirements of RCW 34.05 are included.

Oregon's reporting program is fundamentally different than Washington's. Oregon's program is smaller in scope, less prescriptive in detail, and not as consistent with EPA's regulations. Oregon did not revise their authorizing statute to account for the new EPA regulations and uses an older report database system. Also, administrative procedures laws differ between the states. Oregon's program is not transferable to Washington.

WAC 173-441 and 40 C.F.R. Part 98 establish a complicated reporting program requiring reporting of thousands of data elements from hundreds of facilities and suppliers. All of this information must be collected, stored, translated into a usable format, analyzed, verified, revised, screened, and published on an annual basis in a manner that minimizes costs to reporters and taxpayers, achieves maximum quality, is user friendly, and is secure. This requires complicated information technology (IT) systems that are not available off the shelf. Ecology has spent over a year working with EPA to build upon their GHG reporting system (eGRRT), but even with that collaboration WAC 173-441 will require three new Ecology developed IT systems to function.

The IT system planned for the 2008 version of the rule was made completely obsolete by the revised reporting statute. Ecology cannot begin development on the new IT system for facilities until EPA releases a complete reporting tool. As of November 2010 this has not happened. Proceeding without a complete starting point would only waste time and taxpayer's money. Reporting fees cannot be used to develop the IT systems. Current state budget and hiring

restrictions mean that it will take years for Ecology to develop the necessary IT systems once EPA provides a final version of eGRRT. Reporting without a functional IT system would be expensive for reporters, divert Ecology resources away from finding a long-term solution, invite a host of legal and data security issues, and provide no information about GHG emissions in Washington. Ecology is committed to devoting significant resources to develop quality IT systems as soon as possible that will put Washington at the leading edge of GHG reporting when the program starts in 2012, but starting before 2012 emissions reported in 2013 is logistically unrealistic.

At this point in the rule making, if Ecology revised the published draft of WAC 173-441 to begin reporting before January 1, 2012, the change would be considered substantive and the agency would be required under RCW 34.05 to refile the CR-102 proposed rule making for the rule. Even if we did not hold any public meetings and just met minimum standards established in RCW 34.05, this would delay rule adoption well into 2011. The recently announced rule moratorium in Executive Order 10-06 could further delay or completely stop a subsequent rule making. Reporters would be justifiably skeptical about beginning to collect 2011 data on January 1, 2011 with no rule in place after Ecology had withdrawn an official draft rule twice. This would make it all but impossible to begin reporting before January 1, 2012 even if we decided to revise the rule.

Instead of devoting resources to implement an expensive temporary system to collect data, Ecology is working on ways to get key data indirectly through EPA starting as early as 2010 emissions reported in spring of 2011. We will not be able to collect the detailed information available through a state rule, but emissions totals for each facility in Washington that is required to report emissions to EPA should be available. We estimate that this will get Washington basic information on the majority of facility emissions that would be reported under WAC 173-441, but at significantly reduced costs to reporters and taxpayers. This will effectively phase in the benefits of reporting.

Any program to reduce GHG emissions based on the data collected under WAC 173-441 would need legislative authority or an Executive Order before Ecology could begin rule making. Even if a directive was issued during the 2011 legislative session, Ecology streamlined the rule making process, and the rule making was exempted from Executive Order 10-06, we would not be able to have rules effective before January 1, 2012 and it would be unlikely rules would be in place before January 1, 2013. Washington should be able to get basic emissions data to help design potential future GHG reduction policies indirectly through EPA starting as soon as 2010 emissions reported in 2011. Phasing WAC 173-441 reporting requirements will not delay GHG reduction programs.

Ecology also received comments in support of phasing WAC 173-441 requirements until January 1, 2012. The phased approach significantly reduces compliance costs for many if not all reporters. These comments are in line with the majority of feedback received during the rule making. The phased approach reduced the controversy of the rule and allowed Ecology to focus on developing a higher quality rule in the long term. Reduced opposition also allowed us to move quicker through the rule making process and adopt a rule in 2010.

No changes were made to the rule in response to these comments. Thank you for your comments.

(2)(b)(i) Start date for existing facilities.

Comment W-8

Reporting requirements MUST apply to existing facilities. No grandfathering in to avoid requirements should be allowed.

Ecology Response:

Washington's reporting program does not allow grandfathering. Reporting requirements apply equally to new and existing facilities. No changes were made to the rule in response to this comment. Thank you for your comments.

(3) Content of the annual report.

Comment W-10

It would be a good idea to first list all requirements that apply to every reporting entity, then list the special reporting requirements for suppliers and facilities. It is not clear that subsections (f), (g) etc. apply to all reporters, and not just suppliers.

Ecology Response:

The rule is structured to match 40 C.F.R. Part 98 as closely as possible. Ecology believes that the structure clearly expresses intent. No changes were made to the rule in response to this comment. Thank you for your comments.

(3)(d)(ii) and (3)(d)(iii)(A): Biomass reporting for Subpart D.

Comment W-1

The separate reporting of greenhouse gases from combustion of biomass is not discretionary. Yet, proposed WAC 173-441-050(3)(d)(ii) and -050(3)(d)(iii)(A) offer that reporting biogenic CO₂ emissions is optional. Note that RCW 70.94.151(5)(a)(i) requires separate reporting of combustion/biomass emissions. There is no exception in the Washington statute for emission units/sources regulated by 40 CFR Part 75.

- (i) Emissions of greenhouse gases resulting from the combustion of fossil fuels be reported separately from emission of greenhouse gases resulting from the combustion of biomass.*

It appears the language in WAC 173-441-050 needs to be adjusted.

The reporting of biogenic CO₂ emissions is also the source of an EPA regulation modification and comment opportunity. Docket ID No. EPA-HQ-OGC-2010-0575: 75 FR 42085, July 20, 2010 provides notice of a "*Proposed Settlement Agreement, Clean Air Act Citizen Suit*" relating to the Greenhouse Gas Mandatory Reporting of Greenhouse Gases, 74 FR 56330 (Oct 30, 2009). Weyerhaeuser NR Company has submitted comments on this settlement proposal (see August 19, 2010 letter to EPA, enclosed). Weyerhaeuser cautions that the proposed EPA settlement (which proposes to aggregate all GHG reported emissions together) will create inconsistent, skewed and/or misleading data reporting of biogenic CO₂ emissions. Several alternative approaches are suggested to EPA. EPA has not taken a final action on the Proposed Settlement.

Ecology Response:

The commenter is correct, RCW 70.94.151(5)(a)(i) takes precedence over consistency with EPA. The provision has been deleted from WAC 173-441-050(3)(d)(ii) and (3)(d)(iii)(A). Thank you for your comments.

(3)(e)(i)(A) Biogenic emissions reporting requirements for fuel suppliers.

Comment W-10

~~Aggregate b~~Biogenic CO₂.

Ecology Response:

In order to protect confidential business information, Ecology intends to require transportation fuel suppliers to report only two emissions values, total GHG emissions and total GHG emissions from all biomass derived fuels. “Aggregate biogenic CO₂” reflects that intent more accurately than “Biogenic CO₂”. No changes were made to the rule in response to this comment. Thank you for your comments.

(3)(i) NAICS code reporting requirements.

Comment W-10

Subsections (i) and (j) include a series of deviations from the text of 40 CFR 98.3(10) and (11), as published in the 9/22/10 Federal Register, that change the meaning of the reporting requirements. For instance, paragraph (i)(i) of Ecology’s proposed rule states that the primary product/activity/service at a facility “provides economic profit.” This language does not come from the EPA rule, changes the meaning of the EPA rule, and is not based on SSB 6373. The Coalition urges Ecology to incorporate the language from 40 CFR 98.3(10) exactly as adopted by EPA.

Ecology Response:

WAC 173-441 has been updated to reflect changes made to 40 C.F.R. Part 98 since the CR-102 Proposed Rule Making for WAC 173-441 was filed on August 26, 2010. The changes requested in this comment were made. Thank you for your comments.

(3)(j) Legal name and address reporting requirements.

Comment W-10

Subsections (i) and (j) include a series of deviations from the text of 40 CFR 98.3(10) and (11), as published in the 9/22/10 Federal Register, that change the meaning of the reporting requirements. For instance, paragraph (i)(i) of Ecology’s proposed rule states that the primary product/activity/service at a facility “provides economic profit.” This language does not come from the EPA rule, changes the meaning of the EPA rule, and is not based on SSB 6373. The Coalition urges Ecology to incorporate the language from 40 CFR 98.3(10) exactly as adopted by EPA.

Ecology Response:

WAC 173-441 has been updated to reflect changes made to 40 C.F.R. Part 98 since the CR-102 Proposed Rule Making for WAC 173-441 was filed on August 26, 2010. The changes requested in this comment were made. Thank you for your comments.

(6) Recordkeeping.

Comment W-10

A person that reports GHGs under this chapter must keep records as specified in this subsection. For suppliers, substitute CO₂ for every reference in this subsection to GHGs...

Ecology Response:

WAC 173-441 does not require transportation fuel suppliers to report any emissions except CO₂. This change is unnecessary since recordkeeping requirements are based on reporting requirements.

Ecology believes that the language is clearer as written. No changes were made to the rule in response to this comment. Thank you for your comments.

(6)(a) Recordkeeping – list of units

Comment W-4

A list of all units, operations, processes, and activities for which GHG emission was calculated:
Recommendations: WaferTech would identify the general type or classification of equipment but not the make and model number for all of our equipment. This information is considered confidential because this would identify how we make our products.

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. Reporters must submit a unit list using the same criteria as a list submitted to EPA. A reporter may request that Ecology keep this or other non GHG emissions information confidential as proprietary information as specified in WAC 173-441-150(4). No changes were made to the rule in response to this comment. Thank you for your comments.

(7)(c) Substantive error.

Comment W-9

The proposed rule language indicates that a substantive error for purposes of determining when submittal of a revised annual GHG report is required is “an error that impacts the quantity of GHG emissions reported.” This definition is undefined and provides no *de minimis* threshold. It is unreasonable to expect that **any** difference in quantity of GHG emissions should be significant enough to warrant re-submittal of the annual report.

Revise the proposed rule language to identify a *de minimis* emissions quantity threshold that would constitute a “substantive error” triggering the need to resubmit the annual GHG emissions report.

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. Reporters must define “substantive error” using the same criteria as in EPA’s program in order to meet the requirements of RCW 70.94.151(5)(a)(ii). No changes were made to the rule in response to this comment. Thank you for your comments.

(8) Calibration and accuracy requirements.

Comment W-9

Although it is recognized the proposed rule language pertaining to calibration and accuracy requirements is taken directly from corresponding federal regulations in 40 CFR 98, such rigorous and prescriptive requirements should not be necessary for those facilities whose GHG emissions fall below the EPA reporting threshold of 25,000 metric tons CO₂e. The State of Washington’s desire to regulate smaller sources of GHG emissions should recognize the need to establish graded calibration and accuracy requirements that are more easily satisfied by smaller sources.

Revise the proposed rule language so that facilities/reporters whose GHG emissions exceed 10,000 metric tons CO₂e, but fall below the EPA reporting threshold of 25,000 metric tons CO₂e are only required to meet general industry standards or manufacturer’s specifications for calibration and accuracy.

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. EPA has agreed to allow Washington reporters to use eGRRT to report emissions even if the reporter is below the federal threshold for reporting. However, EPA will only provide this service if reports for sources below EPA's thresholds are identical to EPA reports. Using eGRRT to report will significantly reduce reporters' compliance costs, keep reporting fees lower, allow reporters to use a higher quality reporting tool, and expand available technical assistance resources compared to Ecology developing a unique tool.

To ensure quality data, calibration requirements are important for all reporters regardless of size and would need to be included in the rule. Smaller reporters will often qualify for less stringent calculation method tiers which often have simpler calibration requirements. Ecology believes that using EPA's calibration and accuracy requirements results in higher quality data at an overall lower cost than if Ecology had different standards for smaller sources. No changes were made to the rule in response to this comment. Thank you for your comments.

(8)(c) Calibration requirements for orifice, nozzle, and venture flow meters

Comment W-4

Calibrate each transmitter at a zero point and at least one upscale point. Recommendations: WaferTech does not do a two point calibration for our pressure transmitters. We confirm that the system vacuum is achieved but we do not do a high pressure confirmation. To do this would require that we compromise our high purity system and purge our GHG until ppb levels are achieved. WaferTech should only be required to perform a vacuum check and not a two point calibration.

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. Calibration requirements are important to ensure the quality of the data and need to be included in the rule. No changes were made to the rule in response to this comment. Thank you for your comments.

(9) Measurement device installation.

Comment W-9

The proposed rule language includes a reference to 40 CFR 98.3(j), which doesn't appear to exist in the federal regulations; and a separate reference to 40 CFR 98.3(d) that don't appear to be relevant to this section.

Verify that the references are accurately identified and revise the proposed rule language, as appropriate.

And Comment W-10

40 CFR 98.3(j) was first proposed in the August 11, 2010 Federal Register. It was proposed as a new subsection, not an amendment to an existing subsection (j). 40 CFR 98.3(d) consists of special reporting rules for calendar year 2010. Ecology should not adopt subsection (d).

40 C.F.R. ~~Part 98.3(j) and 40 C.F.R. Part 98.3(d)~~ as ~~effective on or~~ proposed by August 11, 2010 ~~are is~~ adopted by reference as modified in WAC 173-441-120(2).

Ecology Response:

40 CFR 98.3(j) is a new provision not included in the original version of 40 C.F.R. Part 98 that builds upon 40 C.F.R. 98.3(d). Both are necessary to implement EPA's new timing provisions for measurement device installation. The date reference has been updated to incorporate the most recent version of 40 C.F.R. Part 98 and nomenclature for referencing subparts of 40 C.F.R. Part 98 has been corrected. Thank you for your comments.

WAC 173-441-060 Authorization and responsibilities of the designated representative.

General

Comment W-9

Although it is recognized the proposed rule language pertaining to GHG report certification and the responsibilities of the Designated Representative is taken directly from corresponding federal regulations in 40 CFR 98, such rigorous and prescriptive requirements should not be necessary for those facilities whose GHG emissions fall below the EPA reporting threshold of 25,000 metric tons CO₂e. The State of Washington's desire to regulate smaller sources of GHG emissions should recognize the need to establish graded reporting and certification requirements that are more easily satisfied by smaller sources.

Revise the proposed rule language to impose less rigorous report certification requirements for those facilities/reporters whose GHG emissions exceed 10,000 metric tons CO₂e, but fall below the EPA reporting threshold of 25,000 metric tons CO₂e. Examples of less rigorous certification programs that could be used for comparison are those found in WAC 173-401-520 (Air Operating Permits) or WAC 173-303-810 (Dangerous Waste Permits).

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. EPA has agreed to allow Washington reporters to use eGRRT to report emissions even if the reporter is below the federal threshold for reporting. However, EPA will only provide this service if reports and certification for sources below EPA's thresholds are identical to EPA reports. Using eGRRT to report will significantly reduce reporters' compliance costs, keep reporting fees lower, allow reporters to use a higher quality reporting tool, and expand available technical assistance resources compared to Ecology developing a unique tool.

To ensure legal accountability, report certification and the duties of the Designated Representative are important for all reporters regardless of size and would need to be included in the rule. The use of an electronic reporting tool would necessitate a similar certification system if Washington developed an independent system. Ecology believes that using EPA's requirements results in clearly defined responsibilities and overall lower costs than if Ecology had different standards for smaller sources. No changes were made to the rule in response to this comment. Thank you for your comments.

(5) Certification of the GHG emissions report.

Comment W-9

The proposed rule language includes the text "as published on July 1, 2009" with respect to the requirements in 40 CFR 3.10. Review of the referenced federal regulations does not indicate any

significance to the July 1, 2009 date that is relevant to this proposed Ecology rule. In addition, the July 1, 2009 date does not match the August 1, 2010 date used throughout the proposed rule with respect to incorporating federal regulations by reference.

Verify that the July 1, 2009 “incorporation by reference” dated reflected in the proposed text is accurate, and revise the proposed rule language, as appropriate.

Comment W-10

... in accordance with this section and 40 C.F.R. ~~Part~~ 3.10 as ~~adopted~~published on July 1, 2009. |

Ecology Response:

The reference has been updated to October 13, 2005, the adoption date of 40 C.F.R. 3.10. “Part” was removed when referencing subparts of federal rules throughout WAC 173-441. Thank you for your comments.

WAC 173-441-080 Standardized methods and conversion factors incorporated by reference.

(1) Incorporation by reference from EPA.

Comment W-10

The materials incorporated by reference by EPA in 40 C.F.R. ~~Part~~98.7, including the amendments to § 98.7 proposed at 75 Fed.Reg. 48786-7 (August 11, 2010)as effective on or proposed by August 1, 2010, are incorporated by reference in this chapter for use in the sections of this chapter that correspond to the sections of 40 C.F.R. Part 98 referenced here.

Ecology Response:

The reference has been updated to “adopted or proposed by December 1, 2010”, which includes the update requested by this commenter. “Part” was removed when referencing subparts of federal rules throughout WAC 173-441. Thank you for your comments.

WAC 173-441-090 Compliance and enforcement.

(1) Violations.

Comment W-1

WAC 173-441-090 *Compliance and enforcement* – As with other regulations authorized by the Washington Clean Air Act, it would be sufficient for -090 to simply state the first sentence.⁴

Any violations of any requirement of this chapter shall be a violation of chapter 70.94 RCW and subject to enforcement as provided in that chapter.

The listing of seven examples of violation types is unnecessary and should be deleted.

⁴ Note, for example WAC 173-407 *Carbon Dioxide Mitigation Program for Fossil-Fueled Thermal Electric Generating Facilities*; WAC 173-400 *General Regulation for Air Pollution Sources*; WAC 173-460 *Controls for New Sources of Toxic Air Pollutants*

The potential problem occurs if the language used in these examples is applied literally. For example, the proposed rule language says that “failure to report accurately” constitutes a violation. Note the proposed WAC 173-441 and EPA’s reporting regulation at 40 CFR 98 do not require perfection in process data collection, application of calculation methods, retention of records, etc. Rather, the rules correctly recognize there will be some imperfection in metering, measuring, “missed data computations,” incomplete or lost process data, calibration deviations, computation methods, etc., such that these deviations will result in a reasonable approximation of GHG emissions, but not an “accurate” value. Similar comments could be made about “failure to continuously monitor.” It will not be reasonable to expect “continuous monitoring.”

A concept drawn from the Title V permitting program (40 CFR Part 70) could be considered. Ecology could expect that “deviations” from literal monitoring record-keeping, reporting obligations would be reported, but that these are not Clean Air Act “violations” subject to enforcement.

Ecology Response:

Ecology disagrees, this is a new program and examples can be helpful and informative. We do not feel that the examples limit our enforcement discretion or add requirements not otherwise present in WAC 173-441. No changes were made to the rule in response to this comment. Thank you for your comments.

New subsection (3) Title V Applicable Requirements.

Comment W-10

Title V Applicable Requirements. The requirements of this chapter are not “applicable requirements” for purposes of the Title V operating permit program established in WAC ch. 173-401.⁵

Ecology Response:

EPA was able to exclude GHG reporting rule requirements from the Title V program because EPA did not derive authority for the GHG reporting program from the Clean Air Act. Washington’s GHG reporting program derives authority from the Washington Clean Air Act, Chapter 70.94 RCW. WAC 173-401 requires that Title V operating permits require all Clean Air Act requirements. Therefore, Washington cannot exempt WAC 173-441 requirements from the Title V program. No changes were made to the rule in response to this comment. Thank you for your comments.

WAC 173-441-110 Fees.

(5) Fee Schedule.

Comment W-9

The proposed rule language specifies that fee payment must be made within 30 days of receiving Ecology’s billing statement. This timeframe is unreasonably short and the rule includes no provisions for a grace period before late fees may be invoked. The fee payment requirement should be more consistent with that imposed under the air operating permit program in WAC 173-

⁵ EPA so ruled in the preamble to the final GHG reporting rule, 74 Fed. Reg. 56287-88 (October 30, 2009). This clarification would be valuable to permitting authorities and to the regulated community, as most Clean Air Act requirements must be included as applicable requirements in Title V permits.

401, which provides approximately 120 days for payment (invoice billing by October 31 with payment due by February 28) and a 90 day grace period before penalties begin accruing.

Revise the proposed rule language to specify a more reasonable timeframe for required payment of fees under the greenhouse gas reporting program and to provide for an established grace period before being subject to potential late fees.

Ecology Response:

The time allowed for fee payment was extended from 30 to 60 days. The 90 day grace period language from WAC 173-401 was also adopted. Thank you for your comments.

WAC 173-441-120 Calculation methods incorporated by reference from 40 C.F.R. Part 98 for facilities.

(1): Source categories and calculation methods for facilities.

Comment W-4

WaferTech is opposed to the Department of Ecology's proposal to require semiconductor manufacturers in Washington to comply with a proposed federal rule which is still being debated within the federal rulemaking process for the following reasons:

- 1) We estimate the proposed federal rule would cost WaferTech over \$100,000 per year to comply with, and compliance would put us at a significant competitive disadvantage to other US, not to mention international, semiconductor manufacturers.
- 2) The additional cost would result in minimal improvement in the accuracy of the data provided.
- 3) WaferTech should be allowed to use our proposed GHG monitoring plan until any Federal rule for the electronic industry is finalized.

I. Background:

As you know, WaferTech is a committed environmental leader in Washington State. We are ISO14001 certified, members of the US EPA Climate Leaders program, and a past member of the former US EPA Performance Track organization. We are the largest semiconductor manufacturer in Washington State, providing over one thousand high tech jobs in Clark County. WaferTech is the only semiconductor company in Washington State participating in the rule development process.

Nationally, the semiconductor industry emits 0.07% of the total US greenhouse gas emissions. In Washington State, WaferTech calculates emissions to be about 0.1% of the State totals.

WaferTech has two projects to reduce GHG emissions: one project is to reduce PFC emissions and the second is a partnership with Bonneville Power Administration and Clark PUD to reduce our electricity usage.

II. Concerns

A. Semiconductor Industry of America (SIA) Comments:

Attached is SIA's June 11, 2010 comment to EPA's proposed rule which has been attached for your review (see **Attachment A**). The major points of the SIA's comments are summarized below:

- 1) The proposed "refined method" grows out of a deeply flawed uncertainty analysis.
- 2) The proposed "refined method" would result in significant capital expenditures and ongoing compliance costs.
- 3) An alternative refined method (endorsed by the SIA) would achieve greater data accuracy as compared with EPA's proposed refined method, and should also avoid undue burden.

B. Technical issues

The following are technical issues associated with adopting the proposed federal GHG reporting rule for the electronic industry:

- 1) The scales we use to estimate our gas usage are not designed to do a two point calibration. We set a baseline periodically (zero) and use the gas production weight each time to set the upper span. The scale automatically subtracts the empty cylinder weight from our online measurement. This is not a classical two point scale calibration.
- 2) The pressure transducers we use to estimate our usage are directly measuring our gas pressure. We confirm vacuum conditions when we change each cylinder. To perform the proposed two-point calibration would require us to break the high purity lines, calibrate using a secondary gas and purge our lines for a long period of time to confirm below ppb level of contamination. This will result in an increase in our GHG emissions to meet that calibration requirement.
- 3) WaferTech has 600-900 heat exchangers that require material balance to confirm compliance with this rule. A majority of the heat transfer fluids have low vapor pressure and thus low emissions, and measuring the GHG gases these fluids will be challenging for most third party testing facilities. Measuring the trace amounts of fluorinated compound in our waste stream will be very expensive.
- 4) EPA is proposing developing new emissions factors for equipment that is normally not tested. The emissions from these new processes are less than 10% of our emissions. We assert that it is reasonable to limit the development of emissions factors for processes that are a significant amount of our emissions.
- 5) WaferTech uses over 90% of our GHG gas brought on site. Less than 10% of the gas is returned to our suppliers, 1-150 lbs per cylinder. This rule requires a large amount of effort for a small quantity of emissions.

C. Cost concerns

We estimate that using the proposed federal rule as a state rule would cost WaferTech over \$12,000 in capital cost and an annual cost of over \$60,000 (non-man-hours), with over 3,000 man-hours per year to maintain totaling around \$100,000 per year. Just the reporting obligation would be about \$1 per MT CO₂ emissions per year. This amount of money could better be spent on emissions reductions and not reporting requirements. The State should account for this cost as part of the rule package until the federal rule is final.

Calculation methods incorporated by reference from 40 CFR Part 998 for facilities: Neil indicated to Scott Inloes in a telephone call on 9/29/10 that if the Semiconductor rule is not final they would meet with WaferTech in the end of October to come up with an option that works for both parties.

Recommendations: Drop the requirement for WaferTech to compile with EPA’s proposed rule (Subpart I – 40 CFR Part 98) because the rule is not final. WaferTech would propose that we could report to Ecology as in our GHG monitoring plan until a time when EPA has a final rule.

Ecology Response:

Ecology replaced the proposed EPA protocols with final EPA protocols for the electronics manufacturing sector and all other source categories with final EPA protocols signed by the EPA Administrator by November 8, 2010. Reporting protocols are now identical between the programs. This is the lowest cost solution and meets the compatibility requirements established in RCW 70.94.151. Washington’s program begins January 1, 2012, a year after federal requirements begin for these source categories. The additional year should give reporters time to use the petitioning process in WAC 173-441-140 if EPA revises the final methods before 2012. Ecology maintains an open door policy and is always willing to meet with stakeholders to discuss the GHG reporting program.

The EPA protocol for Carbon Dioxide Injection and Geologic Sequestration was not finalized in time for adoption in this rule making. WAC 173-441-120 retains the proposed EPA protocol for that source category. The petition process in WAC 173-441-140 was expanded to allow sources with Carbon Dioxide Injection and Geologic Sequestration emissions to petition to use alternate calculation methods for those emissions based on criteria established for voluntary reporters until a final EPA protocol is adopted. Thank you for your comments.

Comment W-11

Wastewater Treatment Systems

This issue is also in flux at the federal level. NWPPA would like the opportunity to review this issue with you if appropriate at a later date.

Ecology Response:

Ecology maintains an open door policy and is always willing to meet with stakeholders to discuss the GHG reporting program. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-11

Specifically, the resolution of the following issues is important to NWPPA members:

- Emitters are only required to report direct emissions from certain stationary source categories such as combustion, electricity generation, landfills, and various industrial operations.

Ecology Response:

Reporters are only required to report emissions with protocols in WAC 173-441-120 or WAC 173-441-130. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-1

The last sentence in this subsection starting with “Owners or operators are not required to report facility GHG emissions...” is confusing. Could that sentence be rewritten to more clearly define Ecology’s intent?

Ecology Response:

The language is intended to mean that requirements to calculate and report emissions from 40 C.F.R. Part 98 Subpart PP, Suppliers of Carbon Dioxide, are limited to CO₂ collected and transferred off site as required by WAC 173-441-030(1)(b)(iv). Subpart PP is referenced in other protocols adopted in Table 120-1, but WAC 173-441 only contains requirements for CO₂ collected and transferred off site as required by WAC 173-441-030(1)(b)(iv). Ecology rewrote WAC 173-120 to make the requirement more clear and specify that Subpart PP must be used to calculate and report emissions under WAC 173-441-030(1)(b)(iv). Thank you for your comments.

Table 120-1: Source Categories and Calculation Methods Incorporated by Reference from 40 C.F.R. Part 98 for Facilities

Comment W-1

Table 120-1 footnote reading “Unless otherwise noted, all calculation methods are from 40 CFR Part 98, as effective on August 1, 2010.” Note that EPA proposed significant additions and modifications to the Greenhouse Gas Mandatory Reporting Rule on August 11, 2010.⁶ These modifications have not been finalized. Ecology should be prepared to modify WAC 173-441 as needed to stay current with EPA’s reporting rule. Unless the state regulation is synched with 40 CFR Part 98, Washington GHG reporters will be forced, by rule, to produce two versions of the emissions report.

Ecology Response:

The reference has been updated to “adopted or proposed by December 1, 2010”, which includes the update requested by this commenter and all other final EPA protocols signed by the EPA Administrator by November 8, 2010. Reporting protocols are now identical between the programs. This is the lowest cost solution and meets the compatibility requirements established in RCW 70.94.151. Washington’s program begins January 1, 2012, one to two years after federal requirements begin for these source categories. The additional time should give reporters time to use the petitioning process in WAC 173-441-140 if EPA revises the final methods in the near future. Thank you for your comments.

WAC 173-441-130 Calculation methods for suppliers.

General

Comment W-11

Specifically, the resolution of the following issues is important to NWPPA members:

- Fuel suppliers and importers will report emissions from transportation fuels. They will use the same information provided to the state Department of Licensing instead of reporting by individual vehicle fleets. This gives a much more complete measurement of the state’s transportation emissions, which account for nearly half of Washington’s total greenhouse gas emissions.

⁶ Federal Register [FR 75 (154) 48744-48814], August 11, 2010

Ecology Response:

RCW 70.94.151 establishes a reporting program for the transportation sector based on upstream fuel suppliers instead of fleet operations as specified by RCW 70.94.151. Applicable fuels are limited to fuels already reported to the Department of Licensing. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-2

Are suppliers who must file tax reports the only ones who must report greenhouse gas emissions from liquid fuel? I believe that tax reports are only filed at the terminal rack. This makes it possible for the State to obtain accurate greenhouse gas emissions from liquid fuel sold in the State, but not the counties. There seems to be no method of accurately counting greenhouse gas emissions from liquid fuel sold at the county level. Many counties (including Jefferson County where I live) do count greenhouse gas emissions, but have no direct way of counting emissions from liquid fuel, because no tax reports are filed at the county level. Alternative methods (such as estimates based on vehicle miles traveled) are used to estimate greenhouse gases from transportation (the main use of liquid fuels) at the county level. This is not such an accurate method as a calculation based on what is sold. I do not know if there is a solution to this. So my question is whether it is possible for the State to provide data to each county about the amount of liquid fuel sold in the county.

Ecology Response:

RCW 70.94.151 establishes a reporting program for the transportation sector based on upstream fuel suppliers instead of fleet operations. The statute limits the data that Ecology can collect for this program to data already reported to the Department of Licensing. Due to limitations in the available data and the fact that these fuels are inherently mobile, it is impossible for the transportation fuel GHG reporting program to accurately function at the county level. Interested parties could, if desired, use the total statewide GHG transportation emissions reported under this program to approximate county level emissions using a variety of methods, including prorating emissions using the ratio of vehicle miles traveled at a county level to statewide vehicle miles traveled. No changes were made to the rule in response to this comment. Thank you for your comments.

WAC 173-441-150 Confidentiality.

General

Comment W-4

The rule requires WaferTech to publicly identify each tool and the amount of each type of gas used would give our competitors information on how we make our product.

WaferTech is a foundry which means that we manufacture semiconductors to our customers' designs and specifications. The way we manufacture our products for our customers is a critical competitive advantage for us and our parent company. The release of this information related to the tools, recipes, detailed process-specific gas consumption and emissions, and abatement equipment used is considered confidential information because inferences can be made by a knowledgeable person as to our production processes. Presently we are working with EPA to identify what information will be reported to EPA in their reporting rule and expect the State to respect these critical business needs.

WaferTech, as part of the EPA's Climate Leaders program, has reported greenhouse gas emissions as total PFCs, SF₆, NF₃, N₂O, Methane, and CO₂. During the onsite visit by the Climate Leader program contactor, we reviewed all the data and procedures used to determine emissions using Semiconductor Tier 2b methods. Confidential business information was not taken off site during the visit or included in any written reports

Ecology Response:

This text is directly from 40 C.F.R. Part 98 and necessary to maintain consistency with the federal program. Ecology does not plan to publish detailed process information, but all information submitted to Ecology is subject to public disclosure under the Washington Public Records Act (chapter 42.56 RCW). WAC 173-441-150(4) provides a method that complies with Washington's Public Records Act that allows reporters to petition to make non emissions data exempt from public disclosure. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-11

NWPPA supports the following language in the proposed rules:

WAC 173-441-150 Confidentiality. (1) Emissions data submitted to ecology under this chapter are public information and must not be designated as confidential.

(2) Any proprietary or confidential information exempt from disclosure when reported to DOL that ecology obtains directly from DOL remains exempt from disclosure.

(3) Information considered confidential by EPA is not considered confidential by ecology unless it also meets the conditions established in subsection (2) or (4) of this section.

(4) Any person submitting information to ecology under this chapter may request that ecology keep information that is not emissions data confidential as proprietary information under RCW 70.94.205 or because it is otherwise exempt from public disclosure under the Washington Public Records Act (chapter 42.56 RCW). All such requests for confidentiality must meet the requirements of RCW 70.94.205.

(5) Ecology's determinations of the verification status of each report are public information.

All confidential data used in the verification process will remain confidential.

NWPPA wishes to call to Ecology's attention that issues of protection of business confidential information, including information used to verify emissions is important to our industry. We believe the proposed rule language in section (5) quoted above is intended to protect as confidential business information data used in verifying emissions data if so requested by the reporting party. However, some aspects of this issue remain unresolved at the federal level.

EPA proposed rules (the Disclosure Rule) published in the Federal Register on July 7, 2010, (see 75 *Fed.Reg.*39094) would establish the conditions for disclosing information reported to EPA under the Agency's mandatory Greenhouse Gas Reporting Rule (74 *Fed. Reg.* 56260 Oct. 30, 2009). EPA's proposed rules would change traditional protection of confidential business information as we know it under the Clean Air Act.

The Clean Air Act (CAA) requires EPA to disclose "emission data" reported to it and forbids the disclosure of confidential business or trade secret information (collectively, "CBI"). Historically, EPA has balanced these two factors by honoring company CBI claims until a specific disclosure demand was made, and then reaching a case-by-case decision. This proposed Disclosure Rule takes a radically different approach. Under it, EPA would make a generic decision to classify as "emission data" (and thus authorized to disclose) not just information that identifies individual sources and their emissions, but all information used to verify those emission calculations. In many

and perhaps all cases, this verification data would otherwise qualify as CBI. In particular, GHG reporting may be based on fuel process information in a much more direct way than reporting of other types of air emissions.

NWPPA is attaching for the record, comments prepared by the American Forest and Paper Association dated September 7, 2010 that provide more information on this issue.

Comment:

NWPPA urges Ecology to retain the proposed rule language in section (5) quoted above and retain traditional protection of confidential business information under the Clean Air Act.

In addition, NWPPA urges Ecology to establish internal procedures that safeguard confidential business information in the context of GHG reporting.

Ecology Response:

Subsection (5) states that confidential data used in the verification process will not become publicly available just because it is used for verification. It also states that the verification status (pass, fail, or still under review) of a report will always be public information. Subsection (5) does not make any data confidential, it only continues to protect data made confidential by another process. This language was designed with the transportation fuel supplier sector in mind, but also applies to facility emissions.

Washington law prohibits Ecology from adopting a confidentiality system similar to EPA's GHG reporting confidentiality process. We did not adopt EPA's confidentiality rule makings. In Washington, confidentiality will be based on traditional methods used in other Washington Clean Air Act programs. Ecology will work with EPA to make the systems as compatible as possible, but confidentiality status in one program has no direct impact on confidentiality status in the other program.

Ecology does not plan to publish detailed process information, but all information submitted to Ecology is subject to public disclosure under the Washington Public Records Act (chapter 42.56 RCW). WAC 173-441-150(4) provides a method that complies with Washington's Public Records Act that allows reporters to petition to make non emissions data exempt from public disclosure. Subsection (4) provides the traditional protection of confidential business information reporters are familiar with, not subsection (5).

Ecology plans to keep confidentiality in mind when designing and using reporting data handling systems.

No changes were made to the rule in response to this comment. Thank you for your comments.

(3) Data considered CBI by EPA is not necessarily considered CBI by Washington

Comment W-7

Our greatest concern with this proposed rule is in the protection of Confidential Business Information. Some of the requested data has long been considered sensitive information in sourcing fuel and remaining competitive. My understanding is that EPA is working on a system that would allow for CBI information to be entered into the e-GGRT system and remain confidential. I have been told that WA State would expect to receive all the information (including CBI) from EPA. Furthermore, I have been told that at the state level all the information would be available to the public. This situation defeats all the work being done at the Federal level to

address legitimate CBI concerns. We request that Ecology address the issue of CBI in a manner that preserves the safeguards put into place at the federal level.

Ecology Response:

Washington law prohibits Ecology from adopting a confidentiality system similar to EPA’s GHG reporting confidentiality process. We did not adopt EPA’s confidentiality rule makings. In Washington, confidentiality will be based on traditional methods used in other Washington Clean Air Act programs. Ecology will work with EPA to make the systems as compatible as possible, but confidentiality status in one program has no direct impact on confidentiality status in the other program.

Ecology does not plan to publish detailed process information, but all information submitted to Ecology is subject to public disclosure under the Washington Public Records Act (chapter 42.56 RCW). WAC 173-441-150(4) provides a method that complies with Washington’s Public Records Act that allows reporters to petition to make non emissions data exempt from public disclosure. Subsection (4) provides the traditional protection of confidential business information reporters are familiar with, but will require reporters to submit an additional confidentiality request to Ecology. Subsection (2) protects any proprietary or confidential information associated with transportation fuel suppliers exempt from disclosure when reported to DOL that ecology obtains directly from DOL remains exempt from disclosure as specified in RCW 70.94.151(5)(a)(iii).

Ecology plans to keep confidentiality in mind when designing and using reporting data handling systems.

No changes were made to the rule in response to this comment. Thank you for your comments.

(4) RCW 70.94.205 confidentiality requests.

Comment W-1

This section effectively says that EPA’s confidentiality determination on data required to comply with 40 CFR 98 *Greenhouse Gas Reporting* is not relevant under Washington law. Rather, any claim for confidentiality of records and information must satisfy criteria in RCW 70.94.205. The actionable decision criteria in the statute can be paraphrased as:

- *Whenever records or other information*
 - *relate to processes or production unique to the owner or operator, or*
 - *is likely to affect adversely the competitive position of such owner or operator if released to the public or to a competitor, and*
 - *the owner or operator of such processes or production so certifies,*

Such records of information shall be only for the confidential use of the department or board.

This language creates a mandatory obligation to grant a confidentiality claim should an owner/operator assert/certify that a competitive position will be adversely affected. Weyerhaeuser will intend to claim the following categories of information as confidential:

- Production/throughput data that are not inputs to emission equations,

- Raw materials consumed that are not inputs to emission equations,
- Process-specific and vendor data submitted in Best Available Monitoring Methods extension requests.

Weyerhaeuser has made this identical comment on EPA’s proposed regulation addressing information confidentiality procedures⁷,

Ecology Response:

Ecology does not plan to publish detailed process information, but all information submitted to Ecology is subject to public disclosure under the Washington Public Records Act (chapter 42.56 RCW). WAC 173-441-150(4) provides a method that complies with Washington’s Public Records Act that allows reporters to petition to make non emissions data exempt from public disclosure. Subsection (4) provides the traditional protection of confidential business information reporters are familiar with, but will require reporters to submit an additional confidentiality request to Ecology. Ecology will address confidentiality requests in conformance with RCW 70.94.205. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-4

Recommendations: WaferTech will work with Ecology regarding confidential information once the rule is final.

Ecology Response:

Subsection (4) is designed to facilitate that goal. Ecology will work with reporters as needed through the confidentiality request process to protect confidential business information within the limitations of Washington law. No changes were made to the rule in response to this comment. Thank you for your comments.

Consistency with EPA’s mandatory GHG reporting program.

General

Comment W-7

Port Townsend Paper Corporation will be subject to these requirements and sincerely appreciates Ecology’s efforts to coordinate with EPA on reporting mechanisms. Multiple reporting systems with a variety of differences would create confusion and waste limited resources while trying to track GHG.

And Comment W-10

We very much appreciate Ecology's efforts to structure Washington's reporting rule and deadlines to maintain consistency with EPA's GHG reporting rule. Your efforts will minimize the burden of having to report GHG emissions under two independent reporting schemes.

⁷ “Proposed Confidentiality Determinations for Data Required Under the Mandatory Greenhouse Gas Reporting Rule and Proposed Amendment to Special Rules Governing Certain Information Obtained Under the Clean Air Act; Proposed Rule,” July 7, 2010; and “Supplemental Proposal,” July 27, 2010. (Copy of Weyerhaeuser comment letter enclosed.)

And Comment W-14

We appreciate that our comments previously submitted on 16 June 2009 and 12 November 2009 have been incorporated by the Department of Ecology in the current proposed rule making and we support their inclusion in the final rule.

And Comment W-11

All of NWPPA's members have facilities that trigger the thresholds for reporting greenhouse gas (GHG) emissions in both Ecology's proposed rule and rules adopted by the Environmental Protection Agency. Many of NWPPA's members also have facilities in other states. One of our primary concerns has been that greenhouse gas reporting requirements be as consistent as possible with EPA rules. NWPPA appreciates and thanks Ecology for setting aside an earlier proposal for GHG emission reporting that was based on different concepts than the EPA rules and developing rules that now align as closely as possible with EPA rules.

...Specifically, the resolution of the following issues is important to NWPPA members:

- Ecology is adopting EPA calculation and reporting methods.
- Facility-based reporting will be used instead of entity-wide reporting. This ensures that Ecology receives the same emissions data reported to EPA from those who will report to both.
- The earlier proposal for third party verification of reported data was eliminated.

Ecology Response:

Ecology designed WAC 173-441 to meet the consistency directives established in RCW 70.94.151. Ecology recognizes the importance of keeping Washington's GHG reporting program as consistent as possible with EPA's program. Consistency reduces reporting costs while maximizing the ability to accurately compare state data to federal data. EPA's protocols are also the national standard based on significant research and public comment, which increases report quality. No changes were made to the rule in response to this comment. Thank you for your comments

Economic analysis.

Small business impacts.

Comment W-8

The proposed rule seems to benefit small businesses. 20 jobs across the state is less than seasonal ebb and flow, and can be reabsorbed into other endeavors. Yet the benefit of increased greenhouse gas reporting will accrue to the entire population and environment.

Truly small businesses need support. In the future, as technologies develop to reduce their actual GHG emissions, it would be well to provide incentives to encourage their adoption by small businesses.

Ecology Response:

Ecology agrees, the expected impact of this rule on small businesses should be minimal. The 10,000 metric tons CO₂e reporting threshold and quantifying transportation emissions using fuel suppliers instead of fleets should mean few small businesses will be required to report. WAC 173-441 is only a reporting program, no reductions are required. In general, Ecology agrees that

helping small businesses reduce their GHG emissions is a good thing. No changes were made to the rule in response to this comment. Thank you for your comments.

GHG emissions limits.

GHG emissions limits are needed.

Comment W-8

Commercial trucks and transport vehicles need to limit emissions whether through this or other mechanisms.

Consequences should be set for the volumes of emissions

Stepped penalties should be implemented

Not offsets or credit trading -- GHG emissions cause immediate, long term and local harm, so should be remedied at the source.

Ecology Response:

WAC 173-441 is only a reporting program, no reductions are required. This scope was established by the legislature in RCW 70.94.151. RCW 70.235.020 contains general GHG reduction requirements, but those requirements would need to be adopted in a separate rule. No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-13

The proposed biomass cogeneration plant at the Port Townsend Paper Mill, close to a dense population and critical facilities, is unfortunate.

This biomass plan would be sustained with “corporate welfare” and not otherwise feasible. And, as the proposed plant is a profit driven enterprise, its primary responsibility would be to shareholders – not neighbors. This is a classic instance of a profit focus that would harm people.

In addition, “fugitive emissions” resulting from delivery and handling of wood and ash have proven to be a serious problem at similar plants.

Ecology Response:

WAC 173-441 is only a reporting program, no reductions are required. This scope was established by the legislature in RCW 70.94.151. RCW 70.235.020 contains general GHG reduction requirements, but those requirements would need to be adopted in a separate rule.

Process modifications or reduction requirements for the proposed biomass cogeneration project at the Port Townsend Paper Mill are outside the scope of this rule making. GHG emissions from the mill and this modification must be reported under WAC 173-441 because the facility’s emissions with protocols established in WAC 173-441-120 are over the reporting threshold. Biomass GHG emissions must be reported and count towards the reporting threshold.

Ecology is currently adopting new federal rules that will for the first time include GHG emissions in air quality permits. Those new requirements will not be in place in time to apply to this project. Even if the federally established start dates were in time for this project, the proposed modification would likely be below the program threshold. Ecology did look at other air quality emissions,

including fugitive emissions, when reviewing this permit application and included those findings in the permit.

Your comments were forwarded to the Ecology staff working on this specific project. No changes were made to the rule in response to this comment. Thank you for your comments.

Biomass Combustion.

Carbon neutrality.

Comment W-3

The regulation of GHG with the exclusion of Biomass incineration is a huge mistake. The science is still out on “carbon neutral” and is actually a misinterpretation of the IPCC accounting for CO₂. Burning was never in the accounting. There have been many studies to show that increased CO₂ in the atmosphere will continue to speed up the acidification of our oceans and the Puget Sound area. We are all faced with difficult decisions regarding this issue. It should be noted that a large part of the industries that have pushed for biomass exclusion are those that would profit from this.

Studies have been done that show Forest recovery cannot re-sequester sufficient carbon from multiple sources operating 24/7 year round. That it will take 100’s of years for forests to actually create a net 0 accounting.

“Climate change represents one of the most significant challenges to public health in the 21st century,” Christopher Portier, the director of the C.D.C.’s National Center for Environmental Health, said in a statement announcing the program. “These projects will lead the way in anticipating and preparing for those extreme weather events and their impact and reducing the burden on the health of our communities.”

There are also many studies indicating the adverse effects on soil structure and its ability to sustain healthy forests with excessive slash removal. Even the argument that this will mitigate forest fire has science that questions this assumption.

Too much is at stake for the environments of Washington State to create a blanket statement excluding Biomass from GHG accounting.

BIOMASS COMBUSTION IS NOT CARBON NEUTRAL

To be considered carbon neutral in the context of being a solution for climate change, any type of electrical power generation cannot emit more than minimal amounts of carbon dioxide.

For years biomass combustion has been “assumed” to be carbon neutral by EPA and IPCC. In a FOIA request by EcoLaw for all documents, e-mail, papers, meeting transcripts and data to substantiate this assumption, in 1.5 GB of material EPA only provided documents which repeatedly used the words assumed or assumption without appropriate scientific documentation, e.g.

“combustion of biomass emits greenhouse gases....[but] the CO₂ emissions from these activities are not included in the national emissions totals. It is assumed that the C released during the consumption of biomass ...causes no net addition of CO₂ to the atmosphere.”

Current science provides evidence that the assumption is not valid:
Searchinger, et. al. write the following:

“However, exempting emissions from bio-energy use is improper for greenhouse gas regulations. Replacing fossil fuels with bio- energy does not by itself reduce carbon emissions, because the CO 2 released by tail- pipes and smokestacks is roughly the same per unit of energy regardless of the source ”

“Thus, maintaining the exemption for CO 2 emitted by bioenergy use under the protocol (IPCC) wrongly treats bioenergy from all biomass sources as carbon neutral. For example, the clearing of long-established forests to burn wood or to grow energy crops is counted as a 100% reduction in energy emissions despite causing large releases of carbon.”

“However, harvesting existing forests for electricity adds net carbon to the air. That remains true even if limited harvest rates leave the carbon stocks of regrowing forests unchanged, because those stocks would otherwise increase and contribute to the terrestrial carbon sink.”

“The potential consequences were downplayed in the carbon-neutrality hypothesis.”

I urge you to reconsider Biomass in the accounting for GHG.

And Comment W-2

It appears that we have a short window in which to slow global climate change. The next few years are crucial for avoiding runaway change. Although carbon dioxide released from burning wood is part of a cycle of carbon dioxide converting back to biomass and oxygen, it does not happen immediately. The EPA has warned about the length of the cycle. Although the cycle for wood is shorter than for peat or coal, it seems not to be short enough to sequester the carbon dioxide in a safe time span. The harvest cycle of Douglas firs in Washington State is 60 years, I believe. Wood remaining from construction can continue to sequester carbon for decades if re-used rather than by being burned.

Accounting for carbon dioxide through wood burning is apparently to be accounted for by inventorying land use change and forestry (LUCF). Although recognizing that accounting for changes in carbon dioxide in the atmosphere through burning wood is a very complex question, it seems to me that it is more direct to use the data for carbon dioxide from biomass burning that the Department of Ecology will be collecting through the new reporting rule. There can still be separate rules for maintaining carbon sinks in forestry, and rules can be worked out so that debits and credits are only counted once.

And Comment W-8

Although biomass is renewable, the carbon dioxide released through incineration goes into the air quickly yet takes a long time to be re-sequestered by live trees. The CO₂ is exactly the same CO₂ that is released from fossil fuel and both take decades to be sequestered. Further the CO₂ release by industrial burning is continuous and ongoing.

The time for growing trees to replace carbon sequestration lost by those cut spans decades, so carbon neutral arguments fall short and lead us down a damaging path.

Both cutting the trees AND burning them are separate operations that EACH contribute to the problem of CO2 and GHG.

Live trees are carbon sinks, sequester carbon and produce oxygen.

Standing OR felled trees that are not burned store carbon.

Felling trees creates a carbon dioxide pulse due to the loss of active carbon sequestration, a loss that lasts for 20 or more years while young trees grow to replace those felled.

More CO2 is released at the time of burning.

Combined proposed and existing biomass facilities on the Olympic Peninsula alone stand to emit in the ballpark of 2.75 to 5 MILLION tons of CO2 PER YEAR, as well as proportional amounts of other greenhouse gases. Please see attached flyer Competition for Forest Resources for an indication of combined and cumulative effects. The "circles" idea was expanded from a smaller map by the DNR. Whether are accounted for or not, the individual and cumulative effects of GHG emissions from these facilities will exert significant harm to the air and contribute to ocean acidification that already threatens our delicate shellfish populations.

And Comment W-13

As at least a half-dozen of these plants are slated for the Olympic Peninsula there is, of course, a concern that there's not enough wood "waste" to sustain these burners. "Carbon neutral" is a myth — once wood is burnt, a portion lingers in the breathable atmosphere for decades, even centuries. Indeed, Henry Ford's Model T emissions are still being inhaled!

Ecology Response:

The legislature very clearly established how carbon neutrality for GHG emissions from woody biomass must be handled in state law RCW 70.235.020(3) which reads: "Except for purposes of reporting, emissions of carbon dioxide from industrial combustion of biomass in the form of fuel wood, wood waste, wood by-products, and wood residuals shall not be considered a greenhouse gas as long as the region's silvicultural sequestration capacity is maintained or increased."

The GHG reporting program established in WAC 173-441 requires reporters to report GHG emissions from biomass and count those emissions towards the reporting threshold. This requirement is stricter than EPA's program. RCW 70.94.151(5)(a)(i) explicitly requires GHG emissions from biomass to be reported separately from other GHG emissions, but that requirement is the only special provision for biomass emissions in WAC 173-441. This will allow stakeholders with an interest in biomass derived GHG emissions to quickly focus on those emissions when reviewing reports.

All other state policies and regulations are outside the scope of this rule making and subject to RCW 70.235.020(3). This means that GHG emissions from the combustion of woody biomass are not included in the state inventory and would be exempt by law from other future regulations. This exemption does not extend to other air quality pollutants, which Ecology acknowledges are a significant concern. Ecology continues to study the GHG emissions and other environmental impacts from the combustion of woody biomass and work towards reducing harmful impacts as much as possible using the resources available to the agency.

No changes were made to the rule in response to this comment. Thank you for your comments.

State Inventory.

Comment W-2

Although the reporting rule is only intended for the reporting of greenhouse gases, I wish to also comment on including the carbon dioxide from biomass incineration in the States greenhouse gas inventory, since I believe that the Department of Ecology will be involved in advising about this.

The National Commission on Energy Policy called for reductions in Greenhouse gases of 2 to 3% per year. We are also told that the only safe level for carbon dioxide in the atmosphere is 350 ppm. We already have 390 ppm of carbon dioxide and it is rising rapidly. Although climate experts continue to warn about the danger of increasing the carbon dioxide in the atmosphere, and in particular about the dangers of climate change to Washington State, efforts in Washington State are inadequate.

It appears that we have a short window in which to slow global climate change. The next few years are crucial for avoiding runaway change. Although carbon dioxide released from burning wood is part of a cycle of carbon dioxide converting back to biomass and oxygen, it does not happen immediately. The EPA has warned about the length of the cycle. Although the cycle for wood is shorter than for peat or coal, it seems not to be short enough to sequester the carbon dioxide in a safe time span. The harvest cycle of Douglas firs in Washington State is 60 years, I believe. Wood remaining from construction can continue to sequester carbon for decades if re-used rather than by being burned.

Accounting for carbon dioxide through wood burning is apparently to be accounted for by inventorying land use change and forestry (LUCF). Although recognizing that accounting for changes in carbon dioxide in the atmosphere through burning wood is a very complex question, it seems to me that it is more direct to use the data for carbon dioxide from biomass burning that the Department of Ecology will be collecting through the new reporting rule. There can still be separate rules for maintaining carbon sinks in forestry, and rules can be worked out so that debits and credits are only counted once.

My concern is that the new biomass incinerators that are planned for Washington State will release enormous amounts of carbon dioxide that over the short term will accelerate the increase in atmospheric carbon dioxide. As an example I am attaching here a calculation of the amount of carbon dioxide that will be released from the new project planned for Port Townsend Paper Corporation. I used one of the EPAs methods¹ to calculate the carbon dioxide. As you can see, the amount released will dwarf the emissions from the rest of Jefferson County. Under current Washington State rules, the carbon dioxide from PTPCs project will be discounted in the States inventory. However, it will add to the carbon dioxide in the atmosphere and contribute to climate change over the next few years, regardless of Washington States laws on the subject.

1. <http://www.epa.gov/climatechange/emissions/downloads09/GHG-MRR-FinalRule.pdf>

Ecology Response:

The legislature very clearly established how carbon neutrality for GHG emissions from woody biomass must be handled in state law RCW 70.235.020(3) which reads: "Except for purposes of reporting, emissions of carbon dioxide from industrial combustion of biomass in the form of fuel wood, wood waste, wood by-products, and wood residuals shall not be considered a greenhouse gas as long as the region's silvicultural sequestration capacity is maintained or increased."

The state GHG inventory is outside the scope of this rule making and subject to RCW 70.235.020(3). This means that GHG emissions from the combustion of woody biomass are not included in the state inventory and would be exempt by law from other future regulations.

Ecology continues to study the GHG emissions from the combustion of woody biomass and work towards reducing harmful impacts as much as possible using the resources available to the agency.

No changes were made to the rule in response to this comment. Thank you for your comments.

Climate change science and policy

General

Comment W-5

Anthropogenic Global Warming (AGW) is named for the hypothesis that human activity related to burning fossil fuel causes an increase in atmospheric CO₂ concentration leading to a general increase in earth's temperature since the beginning of the industrial age around 1850. This hypothesis leads to the perception that civilization needs to reduce our carbon footprint in order to save the world according to CO₂ alarmists.

What percent of the earth's atmosphere consists of carbon dioxide (CO₂)? This question is important because burning fossil fuel releases CO₂ into the atmosphere. This is the focal point of blame for global warming. The concentration of CO₂ in the atmosphere today is a miniscule point zero three eight percent (.038%), also stated as 380ppmv. How can such an infinitesimally small fraction of earth's atmosphere be the cause of so much alarm? This is where the great global warming debate begins.

The foundation of this debate is based on complex algorithmic computer models written to forecast future climate scenarios. These models attempt to extrapolate historical temperature records going back hundreds and thousands of years based on various temperature proxies. Two primary types of temperature proxies are tree rings and ice cores. Some scientists think they can determine temperature history based on tree ring width.

This begs the following question. How do you unravel and extract verifiable temperature data from a tree ring or ice core? Tree ring characteristics are determined by sunlight; rainfall moisture; soil nutrients: N-P-K; plus a little CO₂. These elemental factors are combined through the process of photosynthesis into wood cells that form tree rings. Temperature plays a part, but is it really possible to ferret out a temperature measurement from all these other factors playing such a key role in the construction of tree ring growth?

The width of a tree ring has more to do with the function of rainfall moisture and soil nutrients. Growing conditions can range from warm-wet to warm-dry, from cool-wet to cool-dry. Soil nutrient characteristics can range from rich to poor. You have different possible environmental combinations and none of them reveal a temperature standard that can be objectively measured. Extracting a temperature reading is simply impossible because you have no way of knowing whether growing conditions were wet or dry in relation to nutrient rich or poor soil conditions during the growing season. It is simply impossible to ferret out a temperature reading once the cellular structure of wood has been created.

Science does not know whether there was an above or below average number of sunny days during the growing season. A narrow tree ring could have been created by a high number of cold cloudy days with below average rainfall as it could have been created by warm dry clear sunny days. A cold dry growing season could easily create the same type of tree ring characteristics as a warm dry growing season. Tree rings do not maintain a uniform width around their circumference.

How do you tell which part of the uneven cross section of a tree represents an accurate temperature proxy? It is simply impossible to sort the constituent factors back out into their original characteristics in such a way that a temperature reference could accurately be determined. There really is no way to unravel the yarn once a tree ring is created.

The same line of questioning applies to ice cores.

The Vostock ice core in Antarctica and the Greenland ice cores are the two primary sources of ice core data used to measure earth's early atmospheric CO₂ content. Generally two data source points are not a large enough sample size to be considered 'statistically significant'.

There are other problems with the ice core record. It takes years for air to be trapped in ice so the question must be asked, "What is actually being contained and measured"? How can researchers be sure that when the snow fell and was subsequently compressed into ice that an accurate representative sample of CO₂ was stored in the ice? It is simply impossible to rule out the possibility of contamination from melt water and bacteria. Given such a small sample population, ice core studies don't meet standard requirements for statistical significance. Converting a CO₂ sample stored inside a tiny bubble held within an ice crystal into a representative temperature measurement that is accurate seems highly problematic?

Suggested reading for further information on the subject of ice core records:

1.

Measurement of Pre-Industrial CO₂ Levels

By Dr Timothy Ball

11/2008

<http://friendsofscience.org/assets/documents/FoS%20Pre-industrial%20CO2.pdf>

2.

Climate Change: Incorrect information on pre-industrial CO₂

Statement written for the Hearing before the US Senate Committee
on Commerce, Science, and Transportation

March 19, 2004

Statement of Prof. Zbigniew Jaworowski

Chairman, Scientific Council of Central Laboratory for Radiological Protection

<http://www.mitosyfraudes.org/Calen5/JawoCO2-Eng.html>

3.

Ancient Ice

Sean D. Pitman M.D.

© December, 2006

<http://naturalselection.0catch.com/Files/ancientice.html>

The next question I have deals with nomenclature. Why is CO₂ called a "greenhouse gas"? Aren't greenhouses a human invention intended for good purposes like growing warm season plant life in cold climates? The fact is greenhouses are enclosed atmospheric systems intended to trap heat generated from sunlight passing through a glass pane. On the other hand the earth's atmosphere is an open system. The vast majority of the heat created as sunlight passes through the atmosphere, warms the earth's surface and is reflected back out into space.

The rate of heat lost back into space varies throughout day and night. The rate of heat loss back into space is affected primarily by the amount of water vapor in the atmosphere. The rate of heat loss is affected by the degree to which water vapor has condensed and formed clouds. During the day clouds reflect heat back out into space and cool the surface. During the night clouds reflect heat back to the earth's surface causing a warming affect. Using the words "greenhouse gas" as a metaphor describing the affect that CO₂ has on earth's atmosphere is simply an inaccurate paradigm for characterizing climate change.

Another major point of contention among climate modelers is the question of how to accurately characterize the role played by clouds, water vapor, humidity and precipitation. Measuring thermodynamic affects these factors have and converting the results into computer models remains a complex guessing game. Perceptions for modeling dynamic relationships boil down to a debate over "climate sensitivity". This is described by Wikipedia's characterization reached in the IPCC Fourth Assessment Report: "In Intergovernmental Panel on Climate Change (IPCC) reports, equilibrium climate sensitivity refers to the equilibrium change in global mean near surface air temperature that would result from a sustained doubling of the atmospheric (equivalent) CO₂ concentration (ΔT_{x2}). This value is estimated, by the IPCC Fourth Assessment Report (AR4) as likely to be in the range 2°C to 4.5°C with a best estimate of about 3°C, and is very unlikely to be less than 1.5°C." (Search Wikipedia: climate sensitivity)

Translation: If atmospheric concentration of CO₂ doubles from present day 380 ppmv to 760 ppmv then mean climate temperature will increase by a best guess estimate of 3°C (equal to 5.4°F). The potential time period for this increase is uncertain, but can be estimated based on the most recent rate of CO₂ increase which is 2 ppmv per year (http://www.esrl.noaa.gov/gmd/ccgg/trends/co2_data_mlo.html). At this rate of increase it would take one hundred ninety years for CO₂ to double to 760 ppmv. In other words it will take approximately 190 years for the mean global near surface air temperature to increase by 5.4°F. This figure is well within the parameters of the Medieval Warming Period around a thousand years ago.

Climate science is not 'settled'. Revelations from the November 2009 'climategate' e-mail scandal show us that politics has infected science. Climate Research Unit proponents of AGW theory created a computer model rigged to support their hypothesis then try to hide the fact that the model they created doesn't work when back tested on historical temperature records.

The IPCC is exposed for publishing anecdotal forecasts about receding Himalayan glaciers. Indian glaciologist Syed Hasnain was originally interviewed by New Science Magazine. In 1999 New Science Magazine published his claim that Himalayan glaciers are set to disappear by 2035. Later in 2005, World Wildlife Federation published a reference to Mr. Hasnain's comments from his New Science Magazine interview without scrutinizing the facts. The IPCC then published the bogus WWF reference in their Fourth Assessment Report without bothering to conduct a verifiable peer review of the information.

Manipulation of NASA – GISS (Goddard Institute for Space Studies) and NASA – NCDC (National Climate Data Center) data sets reveal that cold climate reporting sites have been compromised. NASA – GISS and NASA – NCDC deleted actual temperature records from thousands of locations throughout the world as it changed to a system of global grid points. Each grid point is now determined by averaging the temperatures of two or more adjacent weather observation stations. Now the NCDC grid map contains only averaged, not real temperatures,

leading to significant doubt that the result is a valid representation of Earth temperatures. The number of actual weather observation points used as a starting point for world average temperatures was reduced from about 6,000 in the 1970s to about 1,000 now leaving much of the world unaccounted for. There was a clear bias toward removing higher-latitude, high-altitude and rural locations. The sad fact is that the public can no longer take scientists at their own word.

During 2003, under President George W. Bush's administration, the EPA made two determinations with respect to the Clean Air Act:

1. The EPA lacked authority under the Clean Air Act to regulate carbon dioxide and other greenhouse gases (GHGs).
2. Even if the EPA did have such authority, it would decline to exercise it.

http://en.wikipedia.org/wiki/Massachusetts_v._Environmental_Protection_Agency

EPA reasoned that carbon dioxide did not constitute an "air pollutant" within the meaning of the federal Clean Air Act.

Soon after, a laundry list of plaintiffs, beginning with the Commonwealth of Massachusetts, filed suit against EPA pressing to reverse EPA's determination. Eventually the case made it to the U.S. Supreme Court.

The U.S. Supreme Court ruled against EPA on April 2, 2007. The Court found that greenhouse gases are air pollutants covered by the Clean Air Act. The Court found that the EPA has the authority to regulate carbon dioxide (CO₂) and other greenhouse gases. The Court held that the EPA Administrator must determine whether or not emissions of greenhouse gases from new motor vehicles cause or contribute to air pollution which may reasonably be anticipated to endanger public health or welfare, or whether the science is too uncertain to make a reasoned decision. In making these decisions, the EPA Administrator is required to follow the language of section 202(a) of the Clean Air Act.

Massachusetts v. Environmental Protection Agency

<http://www.supremecourtus.gov/opinions/06pdf/05-1120.pdf>

As a result of this ruling on December 7, 2009, the EPA Administrator signed two distinct findings regarding greenhouse gases under section 202(a) of the Clean Air Act:

>Endangerment Finding: The Administrator finds that the current and projected concentrations of the six key well-mixed greenhouse gases--carbon dioxide (CO₂), methane (CH₄), nitrous oxide (N₂O), hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), and sulfur hexafluoride (SF₆)--in the atmosphere threaten the public health and welfare of current and future generations.

>Cause or Contribute Finding: The Administrator finds that the combined emissions of these well-mixed greenhouse gases from new motor vehicles and new motor vehicle engines contribute to the greenhouse gas pollution which threatens public health and welfare.

These findings do not themselves impose any requirements on industry or other entities. However, this action is a prerequisite to finalizing the EPA's proposed greenhouse gas emission standards for light-duty vehicles, which were jointly proposed by EPA and the Department of Transportation's National Highway Safety Administration on September 15, 2009.

These findings were signed by the Administrator on December 7, 2009. On December 15, 2009, the final findings were published in the Federal Register (www.regulations.gov) under Docket ID No. EPA-HQ-OAR-2009-0171. The final rule is effective January 14, 2010.

Source:

Endangerment and Cause or Contribute Findings for Greenhouse Gases under the Clean Air Act
<http://www.epa.gov/climatechange/endangerment.html>

The major error in judgment of this Supreme Court ruling and in the subsequent finding by the current EPA Administrator lies in the fatally flawed perception that the science is settled. If the Supreme Court and EPA had known everything we know today about 'climategate' they might have reached a different conclusion. The Supreme Court and the EPA relied heavily on the corrupt analysis published by the IPCC and the Hadley Climate Research Unit. These studies were generated through a peer review process by related scientists with preconceived intentions friendly to the philosophy of AGW.

If the Court and EPA had done the math they might have understood that the amount of CO₂ resulting from human activity is statistically insignificant compared to natural sources. The fact that CO₂ plays a vital role in the respiration of plant life and that CO₂ resulting from combustion of fossil fuel is indistinguishable from naturally occurring CO₂ should have weighed heavily against ruling that CO₂ is a pollutant.

If the Supreme Court had examined some of the alternative hypothesis regarding climate change mentioned above they might have given more deference towards EPA's decision making authority. Instead they bought in to the scare tactics. CO₂ is not a pollutant that directly endangers human health. The Court set the bar way too low in terms of determining 'toxicity' of CO₂. The idea that CO₂ is an indirect danger to human health via global warming is unreasonable given the miniscule percent of total CO₂ in the atmosphere and the even smaller percent of CO₂ added to the atmosphere on annual basis from human activity. The idea that reducing the human quotient of CO₂ output will result in less global warming is absurd.

The Court needs to consider reversing it's ruling based on the revelation that what was once considered 'sound science' has now been revealed as scientific malpractice and malfeasance. The science used to justify this ruling was contaminated as evidenced by the emails released via a whistleblower at the Hadley CRU. Arbitrary and capricious studies by scientists holding personal political agendas as evidenced by the 'climategate' emails should not stand as the basis for Supreme Court decisions.

EPA needs to reconsider their endangerment determination. The list of reasons for reconsideration is long. The EPA suppressed an internal report that was skeptical of claims about global warming, including whether carbon dioxide must be strictly regulated by the federal government. The clearest explanation is for readers to go to these websites in the following order.

EPA Endangerment Finding for CO₂
<http://www.heartland.org/suites/environment/endangerment.html>

Suppressed Text of EPA Staffer's Skeptical Assessment of 'Endangerment' Finding
Alan Carlin - June 29, 2009
http://www.heartland.org/full/25560/Suppressed_Text_of_EPA_Staffers_Skeptical_Assessment_of_Endangerment_Finding.html

CEI re Alan Carlan EPA skeptic

http://cei.org/cei_files/fm/active/0/Endangerment%20Comments%206-23-09.pdf

Alan Carlan

Comments on Draft TED for Endangerment Analysis for GHG Emissions under CAA

http://www.heartland.org/custom/semod_policybot/pdf/25560.pdf

The fact that EPA ignored skeptics within their own ranks serves as evidence that EPA needs to reconsider their endangerment determination. This argument is fully supported by the written testimony of Steve McIntyre.

http://scienceandpublicpolicy.org/images/stories/papers/reprint/sub_on_epa.pdf

Regulating human output of carbon dioxide is a total waste of taxpayer revenue. Rulemaking regarding reporting of greenhouse gases by Washington state businesses is unnecessary. Further rulemaking efforts by Ecology should be put on hold pending Legislative review.

Ecology Response:

The legislature specifically directed Ecology to develop a rule to require GHG reporting in RCW 70.94.151 and RCW 70.235.020. These statutes define what constitutes a GHG and outline the requirements incorporated into WAC 173-441. This rule making only requires GHG reporting, no emissions reductions are required under this rule.

Ecology does not have the authority to ignore legislative direction. Ecology is also unable to alter federal laws, regulations, and court decisions. Ecology disagrees with this commenter and believes there is strong scientific evidence of anthropogenic climate change and plans to continue to work towards the GHG reduction limits established by state law in RCW 70.235.020(1)(a). No changes were made to the rule in response to this comment. Thank you for your comments.

Comment W-8

Generally we support that decisions should be based on the harms and benefits to the environment - both locally and cumulatively over distance and time. They should be based on credible evidence, of which there is plenty, especially taking into account real world examples. Answers should be science based, but rather than wasting taxpayer dollars splitting hairs in yet another study if there are already real world examples of environmental or health harms due to Greenhouse Gases, then look to them.

Ecology Response:

Ecology acknowledges that the field of GHG reporting is still in development. We remain committed to tracking and responding to new science, technologies, and policies. Ecology supported Substitute Senate Bill 6373 which updated Washington's reporting statute to incorporate the new EPA framework. Ecology has consistently updated the protocols in WAC 173-441 during the rule making to keep up-to-date with new developments. A petitioning process to use updated methods was also included in the rule to account for future developments. All of this allows Washington to use established protocols vetted through a public comment process instead of spending resources to invent a new state specific system.

Ecology agrees with this commenter and believes there is strong scientific evidence of anthropogenic climate change and that climate change has significant negative impacts on the

citizens of Washington. We plan to continue to evaluate new information as we work towards developing other GHG programs. No changes were made to the rule in response to this comment. Thank you for your comments.