

# SEPA Environmental Checklist – Clean Air Rule

## A. Background

### 1. Name of proposed project, if applicable:

Ecology proposes to adopt a new rule – Clean Air Rule (CAR), Chapter 173-442 WAC – and amend an existing rule – Reporting of Emissions of Greenhouse Gases, Chapter 173-441 WAC – to coordinate with the new rule. The CAR establishes greenhouse gas (GHG) emissions standards for certain stationary sources, petroleum fuel producers or importers, and distributors of natural gas in Washington.

### 2. Name of applicant:

Air Quality Program, Ecology

### 3. Address and phone number of applicant and contact person:

Air Quality Program  
Department of Ecology  
P.O. Box 7600  
Olympia, WA 98504-7600  
Contact: Nancy Pritchett (360) 407-6823

### 4. Date checklist prepared:

December 14, 2015

### 5. Agency requesting checklist:

Department of Ecology

### 6. Proposed timing or schedule (including phasing, if applicable):

The timing of environmental review for rulemaking for this adoption follows WAC 197-11-055(3).

#### **General Timeline (2015)**

July – August	Governor directs Ecology to conduct rulemaking
August – September	Scope conceptual rule language
September 18	Press announcement of beginning of Clean Air Rule process
September 21	Officially begin rulemaking action (file CR 101 form)
September 22-23	Public webinars
October 8	Seattle public outreach meeting
October 13	Spokane public outreach meeting
November 18	Public webinar on rule concepts
January 5	File proposed rule documents (file CR 102 form): proposed rule, cost benefit analysis, small business economic impact statement and SEPA documents

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January 5, 2016 to  
April 8, 2016                      Public comment period

### General Timeline (2016)

March 22	Webinar public hearing (daytime)
March 23	Spokane public hearing (evening)
March 29	Webinar public hearing (evening)
March 31	Seattle public hearing (evening)
April 8	Public comment period ends
June 1	Anticipated rule adoption; finalize rule, cost benefit analysis and SEPA documents
July 4	Deadline to adopt rule

7. Do you have any plans for future additions, expansion, or further activity related to or connected with this proposal? If yes, explain.

Ecology will work with energy-intense and trade-expose facilities during the next three years while they are exempt from the program to review issues specific to this sector.

8. List any environmental information you know about that has been prepared, or will be prepared, directly related to this proposal.

See Appendix C: Bibliography (attached).

9. Do you know whether applications are pending for governmental approvals of other proposals directly affecting the property covered by your proposal? If yes, explain.

No pending applications are known from parties covered by this proposal.

10. List any government approvals or permits that will be needed for your proposal, if known.

Ecology must adopt the rule as required under the Administrative Procedures Act, Chapter 34.05 RCW and the Regulatory Fairness Act, Chapter 19.85 RCW. As part of the rulemaking process, Ecology must prepare a preliminary cost-benefit economic impact analysis and a small business economic impact statement on the proposed new rule and amendments. A final cost-benefit analysis must be prepared on the adopted rule(s).

11. Give brief, complete description of your proposal, including the proposed uses and the size of the project and site. There are several questions later in this checklist that ask you to describe certain aspects of your proposal. You do not need to repeat those answers on this page. (Lead agencies may modify this form to include additional specific information on project description.)

### *2015 –Governor’s Directive to Ecology*

Despite Washington’s significant progress in reducing GHG emissions and establishing policies to generate future emission reductions, greater reductions are needed consistent with Washington’s statewide statutory emission reduction limits. Even with the significant contributions of existing

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state and federal policies, separate groups and task forces formed to evaluate progress toward meeting the statutory reductions predict that Washington will fall short of meeting those reductions if it proceeds using the “business as usual” model. During the 2015 Legislative Session, the Governor, in consultation with Ecology and other agencies, took a comprehensive suite of bills to the legislature addressing climate change. The 2015 legislature failed to adopt any of these bills, including the central bill, the *2015 Carbon Pollution Accountability Act*, which proposed reducing greenhouse gas emissions under a cap-and-trade market mechanism. Governor Inslee directed Ecology to use its existing authority under the Washington Clean Air Act to develop a rule setting a cap on carbon emissions in Washington to achieve substantive reductions in carbon emissions.

### *Clean Air Rule (CAR)*

The Clean Air Rule would set Washington’s first-ever limit on carbon pollution to help slow climate change. Greenhouse gases, generally referred to as carbon pollution, are the primary cause of climate change. The proposed rulemaking limits GHG emissions from certain sources, and allows various compliance options to meet those limitations. It also includes reporting and verification of compliance.

The proposed rule establishes GHG emissions standards for:

- Stationary sources
- Petroleum fuel producers or importers
- Distributors of natural gas in Washington state

Stationary sources represent around 25 percent of the emissions associated with this program. The latter two categories represent around 75 percent.

These parties have a compliance obligation to limit and reduce GHG emissions over time when they meet or exceed GHG emissions thresholds. The proposed threshold begins at 100 thousand metric tons (MT) of carbon-dioxide equivalent emissions (CO<sub>2</sub>e) in 2017, and fall by 5 percent every three years until 2035 when the threshold is 70,000 MT. Carbon dioxide equivalent is a measure used to compare the emissions from various greenhouse gases based upon their global warming potential.

Parties with a compliance obligation must:

- Reduce their GHG emissions by five percent every three years
- Submit a compliance report every three years (compliance obligation determination)
- Use a third-party to verify their compliance

Ways to meet a compliance obligation include any combination of the following.

- Reduce your covered GHG emissions
- Acquire emissions reductions from –
  - Other covered parties
  - GHG emissions reductions projects in Washington
  - External emissions market programs identified in the proposed rule: Regional Greenhouse Gas Initiative, Quebec’s cap-and-trade program, and California’s cap-and-trade program

12. Location of the proposal. Give sufficient information for a person to understand the precise location of your proposed project, including a street address, if any, and section, township, and range, if known. If a proposal would occur over a range of area, provide

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the range or boundaries of the site(s). Provide a legal description, site plan, vicinity map, and topographic map, if reasonably available. While you should submit any plans required by the agency, you are not required to duplicate maps or detailed plans submitted with any permit applications related to this checklist.

This is a statewide rule. The types of businesses affected by this rule include:

- Pulp and paper mills
- Mineral processing plants
- Power plants
- Metal manufacturers
- Food processors
- Landfills, waste facilities
- Natural gas distributors (carbon dioxide only) – combustion of natural gas provided to parties not already covered under this rule (residential, commercial, small industrial sources not covered by rule)
- Petroleum fuel producers and importers (carbon dioxide only) – fuels used in Washington, whether produced or imported into Washington. The rule excludes aviation and maritime fuels.
- Petroleum refineries (carbon dioxide only) – Fuels produced and used in Washington.

These business types are located across the state, in varying environments, urban and rural, upland and waterfront.

The affected environment is described as all areas, environmental landscapes and elements where GHG emissions may occur and where projects to offset greenhouse gas emissions may be approved.

### C. Signature

The above answers are true and complete to the best of my knowledge. I understand that the lead agency is relying on them to make its decision.

Signature: 

Name of signee Nancy Pritchett

Position and Agency/Organization Policy and Planning Section Manager

Date Submitted: 12/16/15

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## D. Supplemental Sheet for Non-Project Actions

Because these questions are very general, it may be helpful to read them in conjunction with the list of the elements of the environment. When answering these questions, be aware of the extent the proposal, or the types of activities likely to result from the proposal, would affect the item at a greater intensity or at a faster rate than if the proposal were not implemented. Respond briefly and in general terms.

This analysis of the rule implementation provides a good-faith effort to evaluate the potential for significant impacts and/or adverse effects associated with the reasonably foreseeable compliance responses that appear most likely to occur, without being speculative. The scope of analysis is intended to help focus public review and to inform the Responsible Official.

While the types of foreseeable compliance responses are laid out in the rule, the specific location, design, and setting of the actions cannot feasibly be known at this time, and therefore, this analysis can address only broadly defined types of impacts, rather than any specific project or location, potential facility, or site-specific environmental characteristics. Therefore, the non-project impact analysis applies generally across a broad geography, rather than to any particular site or project-specific locations. If a later activity would have environmental effects that are not examined within this review, the agency regulating the later activity would need to conduct additional environmental review, as necessary.

For further analysis, see Appendix A: NonProject Review Form.

1. How would the proposal be likely to increase:
  - discharge to water;
  - emissions to air;
  - production, storage, or release of toxic or hazardous substances; or
  - production of noise?

Ecology designed the Clean Air Rule to reduce GHG emissions from parties emitting over 100,000 metric tons annually. This rule covers 60 percent of these GHG emissions in Washington. Some of the compliance options developed for the covered parties may result in site-specific changes not reasonably foreseeable at this time.

It is possible that some projects to reduce GHGs may result in the increase of conventional pollutants. A project to collect fugitive emissions of methane (from a landfill or treating wastes in an anaerobic digester) and make beneficial use of the collected methane will also result in a decrease of GHGs but an increase in emissions of conventional pollutants. The number and location of such projects is unknown and will be governed by decisions made by the affected companies on how to comply with the proposed regulation. Any potential emission increases of conventional pollutants resulting from the control of greenhouse gases will be subject to review and permitting under the Washington Clean Air Act.

Some of the potential projects may result in an increase or change in location of the discharge of wastewater. If any of the offset projects require a National Pollutant Discharge Elimination System (NPDES) permit revision, or a new NPDES permit, this triggers SEPA for the project. It is more likely that new discharges will be associated with new, industrial scale projects rather than at the covered facilities. As with the air emissions, the number and

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location of such projects is unknown and will be governed by decisions made by the affected companies on how to comply with the proposed rule.

It is reasonable to expect that some of the potential options to reduce GHG emissions may result in commonly expected effects associated with the construction of industrial size projects (i.e., as with the case of large cogeneration facilities). Potential impacts include removal or disposal of fill, excavation, discharges to water or release of hazardous substances, and potential for uncovering contaminated soil during excavation activities. All of these potential impacts are covered or addressed by state issued permits, or local government land use and building permit requirements.

Any new commercial or industrial facility has the potential to produce a new noise (even one complying with the state noise regulation) or odor that could be offensive to neighbors. Such impacts can be minimized and are addressed through the local government permitting procedures.

Ecology does not have any information that would suggest that there will be significant adverse environmental impacts as a result of the proposed rule.

For further analysis, see Appendix A: NonProject Review Form (attached).

2. How would the proposal be likely to affect plants, animals, fish, or marine life?  
Proposed measures to protect or conserve plants, animals, fish, or marine life are:

Implementation of the proposed rule will reduce the emissions of carbon dioxide to the atmosphere. The reduced emissions will help control acidification of the ocean, reducing the difficulty of young mollusks in making and maintaining their first shells. In the terrestrial environment, the reduction on GHG emissions will aid in slowing down the rate of change for plants needing to migrate to cope with the temperature effects caused by climate change. Similarly slowing the rate of increase in water temperatures will enable cold-water fish species and their supporting ecosystems a greater opportunity to migrate to cooler waters.

Compliance options that require construction of new facilities or alteration of existing facilities may result in environmental impacts depending on the size and location of the project. As with any project, the siting and construction of new facilities may convert natural land or disturb biologically sensitive resources, or areas that have not been surveyed for historic buildings or cultural resources. Disturbance of existing upland and/or riparian vegetation may occur and wetlands may be disturbed or reduced in function. Disturbance may affect adjacent wildlife in adjacent habitats or may permanently displace species and their habitats.

The SEPA lead entities would be required to contact the appropriate agencies and departments to ensure that potential impacts to sensitive species would be avoided, minimized or mitigated as appropriate. Any potential impact to habitat, sensitive or listed plants, animals, fish or marine life, will be subject to a separate local, state and/or federal regulatory review. Project-level SEPA or NEPA review may also be triggered. Ecology does not have any information that would suggest that there will be significant adverse environmental impacts as a result of the proposed rule.

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Per WAC 197-11-080, Ecology considered conducting a worst case analysis but concluded that the information available to conduct such an analysis does not exist at this time. The details and extent of new construction that may occur as a result of this rule are not known. Under the rule, regulated parties have several compliance options, some of which do not require new construction.

For further analysis, see Appendix A: NonProject Review Form (attached).

### 3. How would the proposal be likely to deplete energy or natural resources?

Ecology does not believe the proposal would be likely to deplete energy or natural resources.

The proposal would not deplete energy or natural resources at rates higher than they have been depleted in the past. The CAR and rule amendments encourage energy efficiency as an option to reduce GHG emissions. The proposed regulation may also encourage projects, programs or emission reduction activities that use different sources of energy, such as those derived from waste or switching from high GHG emitting sources to lower GHG emitting sources. Ecology does not foresee this resulting in any depletion of any current energy source.

For those energy sources derived from wastes (such as anaerobic digestion of agricultural wastes, food production, animal wastes, and human food wastes), a Washington State University and Department of Ecology analysis (Washington State University and Ecology, 2005) indicates there is a significant untapped source in the state. The pressure to provide additional biomass feedstock from other waste streams such as forest residue will also increase.

One potential outcome of the rule will be a decrease in fossil energy as support improves for energy efficiency and residential home weatherization programs. Weatherization programs reduce the need for energy (fossil or otherwise) and therefore any associated direct or indirect GHG emissions.

To the extent the rule will transition sources from a reliance on fossil energy to electricity, current state policies<sup>1</sup> regarding the preferred sources of new electrical generation will tend to reduce the quantity of GHGs emitted from generation of electricity.

For further analysis, see Appendix A: NonProject Review Form (attached).

### 4. How would the proposal be likely to use or affect environmentally sensitive areas or areas designated (or eligible or under study) for governmental protection; such as parks, wilderness, wild and scenic rivers, threatened or endangered species habitat, historic or cultural sites, wetlands, floodplains, or prime farmlands?

Based upon siting, some of the options stationary sources choose could result in site-specific effects. As mentioned above, determining where parties may locate new projects is not feasible at this time, and if a later activity has any environmental effects not examined under

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<sup>1</sup> See Chapters 19.280, 19.285, 80.70 and 80.80 RCW for examples.

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this review, the agency with the authority over that project-specific activity will conduct additional environmental review, as necessary.

For further analysis, see Appendix A: NonProject Review Form (attached).

5. How would the proposal be likely to affect land and shoreline use, including whether it would allow or encourage land or shoreline uses incompatible with existing plans?

This rule does not propose or encourage any uses that are incompatible with land or shoreline areas. At this time, none of the compliance options, as reviewed appear to conflict with or adversely affect land or shoreline use.

6. How would the proposal be likely to increase demands on transportation or public services and utilities?

The proposal may increase demands on transportation or public services to the extent that the proposal encourages increased use of the transportation sector to generate emission reduction units. For example, reducing the number of drive-alone vehicles commuting to a worksite (workplace commute trip reduction) may increase demands. However, continuing and new efficiency programs may offset or supply this demand. Infrastructure upgrades may be necessary in order for some upgrades to occur.

To the extent that the rule encourages the use of electric vehicles, infrastructure changes include the likely need to address a rise in demand for electricity to charge vehicle-charging stations. Continuing and new electrical demand reduction programs may be able to supply this additional electricity.

Any need for specific projects to expand the ability to supply electricity would be subject to public review processes by the utilities and would be subject to project specific SEPA. Ecology does not have any information that would suggest that there will be significant adverse environmental impacts as a result of the proposed rule.

For further analysis, see Appendix A: NonProject Review Form (attached).

7. Identify, if possible, whether the proposal may conflict with local, state, or federal laws or requirements for the protection of the environment.

No conflicts with local, state, or federal laws are expected.

### Attachments:

Appendix A: Non-project review form

Appendix B: Proposed rule

Appendix C: Bibliography

**Appendix A**  
**Staff Report – SEPA Non-Project Review Form**  
**Proposed Clean Air Rule**

December 2015

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# Appendix A: Staff Report Clean Air Rule – Non-Project Review Form

## Part I - Framework

### Introduction

Ecology is preparing this staff report to aid in understanding the impacts from the proposed rule to regulate emissions of greenhouse gases. The goal of this document is to provide analysis to support the SEPA threshold determination and environmental checklist for the proposed rule.

### 1) Background

- a) Name of proposal, if any, and brief description.

Ecology proposes to adopt a new rule – Clean Air Rule (CAR), Chapter 173-442 WAC – and amend – Reporting of Emissions of Greenhouse Gases, Chapter 173-441 WAC – as necessary to coordinate with the new rule. The CAR establishes greenhouse gas (GHG) emission reduction limits for certain stationary sources, petroleum fuel producers or importers, and distributors of natural gas in Washington.

See SEPA Checklist, Question 11 – *Complete description of your proposal*, for more detail.

- b) Agency and contact name, address, telephone, fax, email

Air Quality Program  
Washington State Department of Ecology  
P.O. Box 7600  
Olympia, WA 98504-7600  
Contact: Nancy Pritchett (360) 407-6823

- c) Designated responsible official

Stu Clark, Air Quality Program Director

- d) Describe the planning process schedule/timeline

See SEPA Checklist, Section A, Question 6 – *Proposed Timing and Schedule* – for more detail.

- e) Location - Describe the jurisdiction or area where the proposal is applicable.

The proposed rule(s) apply across the state (area). The jurisdiction is statewide. The CAR also allows covered parties to use emission reduction units generated outside the state through approved existing GHG emission reduction credit programs, registries or other exchanges in the US or Canada to meet their compliance obligation. See SEPA Checklist, Section A, Question 12 – *Location of the Proposal*, for more detail.

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f) What is the legal authority for the proposal?

The Washington Clean Air Act, Chapter 70.94 RCW, provides authority for this proposal, including:

- RCW 70.94.010 Definitions.
- RCW 70.94.331 Powers and duties of the department.
- RCW 70.94.151 Classification of air contaminant sources – Registration fees – Registration program defined – Adoption of rules requiring persons to report emissions of greenhouse gases.

g) Identify any other future non-project actions believed necessary to achieve the objectives of this action.

None.

### 2) Need and objectives

a) *Describe the need for the action. (Whenever possible this should identify the broad or fundamental problem or opportunity that is to be addressed, rather than a legislative or other directive.)*

The purpose of this rulemaking is to reduce GHG emissions to protect human health and the environment. GHG emissions as a result of human activities have increased to unprecedented levels, warming the climate. Washington has experienced long-term climate change impacts consistent with those expected from climate change. Washington faces serious economic and environmental disruption from the effects of these long-term changes.

b) *Describe the objective(s) of the proposal, including any secondary objectives which may be used to shape or choose among alternatives.*

The primary objective of this rulemaking is to reduce GHG emissions from parties with the greatest emissions in Washington to reduce the effects of climate change.

Other secondary objectives include:

- Increasing energy efficiency
- Producing cleaner energy
- Lower energy costs from greater efficiency
- Reducing dependence on foreign oil
- Creating an environment attractive to alternate energy
- Reducing conventional pollution

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- c) *Identify any assumptions or constraints, including legal mandates, which limit the approach or strategy to be taken in pursuing the objective(s).*

The approach developed in the proposed rule is consistent with Ecology's statutory authority in the Washington Clean Air Act. The rule is limited to registered GHG emitters that emit the largest amount of GHGs.

- d) *If there is no legislative or other mandate that requires a particular approach, describe what approaches could reasonably achieve the objective(s).*

This is a proposal to adopt a new rule to regulate GHG emissions and amend the existing GHG reporting rule. This approach reasonably achieves the primary and secondary objectives listed above.

### 3) Environmental overview

*Describe in broad terms how achieving the objective(s) would direct or encourage physical changes to the environment. Include the type and degree of likely changes such as the likely changes in development and/or infrastructure, or changes to how an area will be managed.*

Reductions in GHG in Washington, coupled with those outside Washington, are expected to mitigate the impacts of climate change in Washington. Achieving the objectives will have a significant effect on the amount of climate change that occurs in the Pacific Northwest after mid-century. Achieving the objectives would slow or alter impacts from:

- Declining water supply for drinking, agriculture, wildlife, and recreation.
- An increase in tree die-off and forest mortality because of increasing wildfires, insect outbreaks, and tree diseases.
- The loss of coastal lands because of sea level rise.
- An increase in ocean temperature and ocean acidification.
- An increase in disease and mortality in freshwater fish (salmon, steelhead, and trout), because of warmer water temperatures in the summer and more fluctuation of water levels (river flooding and an increase of water flow in winter while summer flows decrease).
- The heat stress to field crops and tree fruit will be more prevalent because of an increase in temperatures and a decline in irrigation water.

For more information on why reducing carbon pollution matters see the Ecology website:

Why reducing carbon pollution matters  
(<http://www.ecy.wa.gov/climatechange/whyreducecarbon.htm>)

### 4) Regulatory framework

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a) *Describe the existing regulatory/planning framework as it may influence or direct the proposal.*

In 2008, Washington’s Legislature required specific statewide greenhouse gas reductions (RCW 70.235.020):

- By 2020, reduce overall emissions of greenhouse gases in the state to 1990 levels
- By 2035, reduce overall emissions of greenhouse gases in the state to 25 percent below 1990 levels
- By 2050, reduce overall emissions of greenhouse gases in the state to 50 percent below 1990 levels or 70 percent below the state’s expected emissions that year

Consistent with the Legislature’s intent to reduce greenhouse gas emissions, Ecology is using its existing authority under the Washington Clean Air Act (Chapter 70.94 RCW) to adopt a rule that limits emissions of greenhouse gases.

Ecology’s existing GHG reporting program covers certain large facilities and transportation fuel suppliers through Chapter 173-441 WAC (Reporting of Emissions of Greenhouse Gases). The requirements in the GHG reporting program must correspond to and facilitate requirements and compliance in the proposed rule.

b) *Identify any potential impacts from the proposal that have been previously designated as acceptable under the Growth Management Act (GMA), chapter 36.70A RCW.*

The regulation of GHGs proposed by the CAR is consistent with the broad goals of the Growth Management Act. Cities and counties are also the local entities responsible for SEPA planning and decision-making, and they will be in charge of any project level SEPA decision that come from the CAR.

### 5) Related documentation

a) *Briefly describe any existing regulation, policy or plan that is expected to be replaced or amended as a result of the proposal. (Adequate descriptions in section 4.a may be referenced here, rather than repeated.)*

Ecology is also proposing amendments to Chapter 173-441 WAC (Reporting of Emissions of Greenhouse Gases). These amendments correspond to and facilitate requirements and compliance in the proposed rule. They include:

- Updating adoption by reference dates and citations as required by statute
- Adding corresponding definitions
- Adding GHG reporting requirements for petroleum fuel producers, importers and distributors, and natural gas distributors
- Adding corresponding third-party verification to GHG reporting requirements for covered parties subject to Chapter 173-442 WAC

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- Adding a procedure for Ecology to assign a GHG emissions level to covered parties that have not met their reporting requirements
- Reallocation of fees between facilities and transportation fuel suppliers
  - The existing GHG emissions reporting rule requires 75 percent of the reporting program’s budget be paid for through facility reporter fees, and 25 percent to be paid for through transportation fuel supplier reporter fees.
  - The proposed rule reallocates fees based on 90 percent of the budget being paid for through facility reporter fees, and 10 percent being paid for through transportation fuel supplier reporter fees.

b) *List any environmental documents (SEPA or NEPA) that have been prepared for items listed in 4.a. or that provide analysis relevant to this proposal.*

*Note: Impacts with previous adequate analysis need not be re-analyzed, but should be adopted or incorporated by reference into the NPRF. Identify the:*

1. Type of document
2. Lead agency and issue date
3. Where copies can be viewed or obtained
4. The portions of the document applicable to the current proposal and briefly explain relevancy. Summarize the relevant impact assessment or, provide reference to discussion(s) in Part II that includes this information.

Environmental documents that provide analysis relevant to probable<sup>1</sup> impacts<sup>2</sup>, as defined under WAC 197-11-752 and 197-11-782, include but are not limited to:

### *Non-Project and Project Level SEPA/NEPA/CEQA Actions – Air Quality Port of Seattle – Northwest Ports Clean Air Strategy Update*

- SEPA Non Project Action Checklist and subsequent addendum
- April 1, 2013
- Copy on file, Ecology, Lacey Office, Washington and online
- Question 11, Project description
- Part B, Environmental Elements
- Part D, Supplemental Sheet for Non-Project Actions

### *City of Port Angeles & Nippon Paper Industries USA Co., Ltd. -Biomass Cogeneration Facility Project*

- Final SEPA Environmental Impact Statement
- September 3, 2010
- Copy on file, Ecology, Lacey Office, Washington
- Chapter 2, Proposed Action

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<sup>1</sup> WAC 197-11-782 Probable - "Probable" means likely or reasonably likely to occur, as in "a reasonable probability of more than a moderate effect on the quality of the environment" (see WAC [197-11-794](#)). Probable is used to distinguish likely impacts from those that merely have a possibility of occurring, but are remote or speculative. This is not meant as a strict statistical probability test.

<sup>2</sup> WAC 197-11-752 Impacts - "Impacts" are the effects or consequences of actions. Environmental impacts are effects upon the elements of the environment listed in WAC [197-11-444](#).

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- Chapter 4, Project Impacts and Potential Mitigation Measures

*Energy Facility Site Evaluation Council & Bonneville Power Administration -BP Cherry Point Cogeneration Project, Volume 1*

- Draft Environmental Impact Statement, DOE/EIS-0349
- September 5, 2003
- Copy on File, Ecology, Lacey Office, Washington
- Chapter 1, Issues to be Resolved
- Chapter 2, Proposed Action and Alternatives
- Chapter 3, Existing Conditions, Impacts and Mitigation Measures

c) *List other relevant environmental documents/studies/models, which have been identified as necessary to support decision making for this proposal.*

Carbon Emissions Reduction Taskforce. 2014. Report to the Washington State Governor's Office. November 14, 2014. Available at;

[http://www.governor.wa.gov/sites/default/files/documents/CERT\\_Final\\_Report.pdf](http://www.governor.wa.gov/sites/default/files/documents/CERT_Final_Report.pdf)

Hard copy on file. Washington Department of Ecology Lacey, WA.

This report provides considerations and recommendations for the design and implementation of a market mechanism in Washington. While the CAR is not creating a centralized carbon market, these recommendations are still considered where relevant to the GHG emission reduction program under the proposed rule. Key issues and perspectives considered include implementation and competitive impacts, compliance flexibility, carbon pricing, protection of low-impact communities from rising energy costs, and reducing the public health risk associated with carbon pollution.

Leidos. 2013. Evaluation of Approaches to Reduce Greenhouse Gas Emissions in Washington State – Final Report. 2013. Prepared for State of Washington Climate Legislative and Executive Workgroup (CLEW). October 14, 2013. Hard copy on file. Washington Department of Ecology Lacey, WA.

This report evaluated a number of approaches to reduce GHG emissions in order to achieve the State's emission reductions set in statute under RCW 70.235. The report examined the electricity, transportation and the residential/commercial/industrial sectors. The report found that with current state and federal policies, that state could not meet any of the emission reductions. The report states that if new policies were implemented, a possibility existed to meet the 2020 levels. The report also found that the policies would need to be flexible enough to adapt, and change, in order to meet the 2035 and 2050 reductions. Approaches examined and compared include:

- Cap and Trade
- Carbon Tax
- Low Carbon Fuel Standard
- Zero Emissions Vehicle Mandate

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- 5% Renewable Fuel Standard
- Public Benefit Fund
- Property Assessed Clean Energy
- Appliance Standards
- Feed-in-Tariff, 375 MW Cap

Also consult Appendix C: Bibliography.

### 6) Public involvement

- a) *Identify agencies with jurisdiction or expertise, affected tribes, and other known stakeholder groups whose input is likely to be specifically solicited in the development of this proposal.*

Ecology offered a series of opportunities for public involvement in the development of the proposed rule. Ecology held three educational webinars, four in-person public meetings/forums, and one webinar to present details on the Clean Air Rule. Attendees and on-line participants included multiple representatives of business interests, environmental groups, local governments and small businesses (directly or as part of associations), as well as legislators representing the local and business interests of their constituencies. Below is a list of attendees of these events, as well as participants in smaller meetings held with Ecology or the Governor’s Office.

#### **Entities Represented or Representing at Ecology workshops, webinars, and forums:**

- Access Institute of Research
- AEQUUS Corp.
- AGC of WA
- Agrium US Inc.
- Alcantar & Kahl
- Alcoa
- Ameresco
- American Carbon Registry
- American Fuel & Petrochemical Manufacturers
- American Lung Association
- Arbaugh & Associates, Inc.
- Ardargh Glass Inc
- Argus Media
- Ash Grove Cement
- Assoc. WA Business
- ATI
- Avista Corp
- Barr Engineering Co.
- Benton Clean Air Agency
- Benton PUD
- BHAS
- BlueGreen Alliance
- BNSF Railway
- Boeing
- Boise Cascade Wood Products, LLC
- Boise Paper
- Bonneville Power Administration
- BP
- Bridgewater Group Inc.
- Canadian Consulate General
- Capitol Strategies
- Carney Badley Spellman, PS
- Cascade Government Affairs
- Cascade Natural Gas Corporation, a Div. of MDU Resources Group
- Cascadia Law Group PLLC
- CH2M
- Chelan County PUD
- Chevron Corporation
- CITY OF EVERETT
- City of Spokane
- City of Walla Walla
- Clark Public Utilities
- Clean Energy
- Climate Action Reserve
- Climate Change for Families
- Climate Solutions
- Coalition For Renewable Natural Gas, Inc.
- Communico
- Community Transit
- ConAgra Foods
- Concrete Nor'West
- Cowlitz County Public Works
- Cowlitz PUD
- Coyne, Jesernig, LLC
- Cyan Strategies
- Dave Bradley
- Davis Wright Tremaine LLP
- Davison Van Cleve PC
- Del Monte Foods Inc.
- Department of Commerce
- Department of Corrections
- Diane L. Dick
- DNR

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- EES Consulting
- Emerald Kalama Chemical, LLC
- Energy Northwest
- Energy Strategies LLC
- Environmental Energy
- Environmental Entrepreneurs
- Enwave Seattle
- ERA Environmental Management Solutions
- ERM
- Evergreen Carbon
- ExxonMobil
- Fairchild AFB
- Federal Government (Air Force)
- Flint Hills Resources, LP
- Fluor Corporation
- Forterra
- Friends of Toppenish Creek
- Frito Lay
- Georgia-Pacific
- GHG Management Institute
- Go Green Tri-Cities
- Gordon Thomas Honeywell Governmental Affairs
- Government of British Columbia
- Grant County Economic Development Council
- Grant County PUD
- Grant County Solid Waste
- Graymont
- Grays Harbor Energy
- Grays Harbor PUD
- Hammerschlag & Co. LLC
- Hampton Affiliates
- HDR Engineering
- House of Representatives
- House Republican Caucus
- ICIS
- Intalco Aluminum Corporation
- Interfor
- Invenergy LLC
- James Lester Adcock
- Janicki Bioenergy
- JR Simplot Company
- Julia Robinson
- Kaiser Aluminum
- King County
- King County Solid Waste
- King County Solid Waste Division
- Kinross
- KUOW News Radio
- Lamb Weston
- LCSC
- League of Women Voters
- Linde
- Linear Technology
- Local2020
- LWVWA
- MFSA
- Naval Base Kitsap Bangor
- NAVFAC Northwest
- NAVFAC NW
- NCASI
- NextEra Energy
- Nippon Paper Industries
- Noble Americas Gas & Power
- Northwest Clean Air Agency
- Northwest Food Processors Assn
- Northwest Gas Association
- Northwest Pulp & Paper Assn.
- NRDC
- Nucor Steel Seattle, Inc.
- NW Energy Coalition
- NW Natural
- NW Power and Conservation Council/WA Dept. of Commerce, Energy Office
- NW Seaport Alliance
- NWFPA
- OFM
- ONRC- SEFS U of W
- Olympic Region Clean Air Agency
- Oregon DEQ
- Pacific Power
- PacifiCorp
- Parametrix
- Perkins Coie
- Phillips 66
- PIRA Energy Group
- Plug In America
- Ponderay Newsprint Co
- Port of Seattle
- PPRC
- PT AirWatchers
- Puget Sound Clean Air Agency
- Puget Sound Energy
- Puget Sound Regional Council
- Rainier Veneer, Inc.
- Ramboll Environ
- ravel
- RE Sources for Sustainable Communities
- REC Silicon
- REG
- Renewable Northwest
- Republic Services
- RNG Coalition
- Ross Strategic
- Rowley Properties, Inc.
- S2 Sustainability Consultants
- Saltchuk
- Schwabe, Williamson & Wyatt
- Schweitzer Engineering Laboratories
- SCS Engineers
- Seattle Aquarium
- Seattle City Light
- Seattle Public Utilities
- SEH America, Inc.
- SEI-US
- Senate
- Senate Committee Services
- SGL Automotive Carbon Fibers
- Shell
- Shuttle Express
- Sierra Club
- Sightline
- Snohomish County
- Snohomish County Public Works
- Snohomish PUD
- Sonoco
- Sound Transit
- Southshore Environmental, Inc.
- Southwest Clean Air Agency
- Spectrum Glass
- Spokane Audubon Society
- Spokane Regional Clean Air Agency
- Spring Environmental, Inc.
- State Representative Derek Kilmer
- Ste. Michelle Wine Estates
- Stockholm Environment Institute

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- Stoel Rives
- Strategies 360
- Tacoma Power
- Terre-Source LLC
- Tesoro
- The Climate Trust
- The Evergreen State College
- The News Tribune
- The Northwest Seaport Alliance
- The TSB Group
- Thompson Consulting Group
- Tidewater Barge Lines
- TransAlta
- TransCanada
- Transportation Choices
- Trinity Consultants
- True North Public Affairs
- Tyson Foods, Inc.
- U.S. Department of Energy
- Union of Concerned Scientists
- United Steelworkers Local 338
- University of Washington
- Valero
- Van Ness Feldman, LLP
- Vitrol Inc.
- WA Food Industry Assn.
- WA House of Representatives
- WA Oil Marketers Assn.
- WA PUD Association
- WA State Senate
- WA State Senate Committee Services
- WaferTech, LLC
- Washington Environmental Council
- Washington Oil Marketers Association
- Washington Senate
- Washington State House Republican Caucus
- Washington State Legislature
- Washington State Senate
- Washington State University
- Washington Trucking Associations
- Waste Connections
- Waterside Energy
- WCV
- Western Pneumatic Tube Co. LLC
- Western Power Trading Forum
- Western States Petroleum Association
- Western Washington University
- WestRock
- Weyerhaeuser
- WFPA
- William H. Wilson, P.E. - Engineering Consulting
- Williams
- Williams, Northwest Pipeline LLC
- WSU
- WSU Energy Program
- WSU Extension
- WY
- Yakima Regional Clean Air Agency

### Individual or Group Stakeholder Meetings with:

- Alaska Airlines
- Alcoa
- Alliance (Labor, Health, environmental advocates, social equality advocates)
- Ashgrove Cement
- Association of Washington Business (AWB)
- Avista
- BNSF Railway
- California Air Resources Board
- Clean Tech Alliance
- Climate Solutions
- Coyne, Jesernig, LLC (representing the Natural Gas Users Association)
- Coyne, Jesernig, LLC
- Green Diamond
- Industrial Customer of Northwest Utilities (ICNU)
- Kaiser Aluminum
- King County Council
- State Representative Richard DeBolt

b) *Briefly describe the processes used or expected to be used for soliciting input from those listed. [Examples: ad hoc committees, tribal consultations, interagency meetings, public workshops or hearings, newsletters, etc.]*

This is a non-project SEPA action that will be incorporated concurrently into the public outreach process already occurring as part of the larger rule development. See SEPA Checklist, Section A, Question 6 – *Proposed Timing and Schedule* – for more detail.

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## Part II – Impact analysis and alternatives

### 7) Affected environment

*Generally describe the existing environmental landscapes or elements (e.g., character and quality of ecosystem, existing trends, infrastructure, service levels, etc.) likely to be affected if the proposal is implemented. Include a description of the existing built and natural environment where future “on the ground” activities would occur that would be influenced by the non-project proposal.*

The affected environment is described as all areas, environmental landscapes and elements where greenhouse gas emissions may occur and where projects to offset greenhouse gas emissions may be approved. This is a statewide rule.

Human-caused greenhouse gas emissions are the main cause of 21<sup>st</sup> century climate change. The International Panel on Climate Change (IPCC) considers human-caused climate change as well as other factors that contribute to climate change when modeling climate change scenarios. Whether using a “low emissions” or a “medium emissions” scenario to model how climate change may shape Washington’s future, the consensus is that the climate of the 21<sup>st</sup> century in Washington State will very likely be quite different than what has been the norm in the past (Littell, J.S., et. al., eds. Climate Impact Group, 2009.).

GHGs, and in particular carbon dioxide, are emitted by a vast number of sources, both natural and anthropogenic, in amounts ranging from trivial to massive. These emissions mix rapidly and uniformly in the atmosphere. They contribute equally to global concentrations no matter where they are emitted. A ton of CO<sub>2</sub> emitted from Seattle has the same effect on global concentrations as a ton emitted in Clarkston (Idaho). Unlike many conventional air pollutants, local concentrations of GHGs are not greater near large sources than they are in areas far away.

Human-released CO<sub>2</sub> is also being absorbed by the oceans. This causes changes to ocean chemistry that lead to increased acidity in the oceans. Washington’s oceans are particularly susceptible to acidification, which may already be affecting Hood Canal, Willapa Bay, and Grays Harbor. More acidic ocean water may harm marine organisms, mainly those that form shells. Some of these threatened marine creatures are an important component of the food web, supporting larger species such as herring, salmon, and whales. Ocean acidification also poses a threat to Washington’s commercial shellfish industry (Adelsman, H. and L. Whitely Binder, eds. 2012).

If GHG emissions continue unchecked, changes in Washington’s temperature, water availability, and sea-level will exacerbate current environmental problems and create new ones. According to *The Washington Climate Change Impacts Assessment* (Littell, J.S., et. al., eds 2009), Washington can expect its average temperature to increase 3.2 degrees by 2040. The temperature increase will cause many changes, including:

- Significant decrease in spring snowpack in the Cascades leading to changes in the timing of stream-flow in sensitive watersheds, like the Yakima River.

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- Increased sea-level in Puget Sound will threaten the Ports of Seattle and Tacoma, as well as other low-lying areas.
- Warmer and dryer summer weather will double or triple the average annual area burned by forest fires.
- Increases in stream temperature will likely reduce the quality of salmon habitat, stressing an already endangered species.

The next two sections address, at a high level, the key issues and potential impacts from the Clean Air Rule.

To limit the continued increase of GHG emissions that cause climate change, the Clean Air Rule targets GHG emissions, specifically:

- CO<sub>2</sub> – Carbon dioxide and N<sub>2</sub>O – nitrous oxide, both the result of fuel combustion
- Methane (CH<sub>4</sub>) from sources like landfills
- Fluorinated gases including hydrofluorocarbons (HFCs), perfluorocarbons (PFCs), nitrogen trifluoride (NF<sub>3</sub>) and sulfur hexafluoride (SF<sub>6</sub>). Fluorinated gases are found in refrigerants, solvents, anesthetics, electronics and industrial applications

### 8) Key Issue Assessment

*List the identified key issues or areas of controversy or concern and include a brief statement of why each is a key issue.*

The following is a list of key issues encountered as the rule language was developed.

#### **Breadth of coverage**

A key issue is how broadly the rule should apply to different parties' GHG emissions. Broader coverage should result in greater GHG emission reductions.

#### **Threshold**

A key issue is where to set the threshold for being subject to the Clean Air Rule. The issue is important because a lower threshold increases the number of covered entities and emissions.

#### **Emission baseline-determination range**

A key issue is whether to use a greater number of years to calculate the baseline for reducing GHG emissions. This issue is important because a multi-year baseline helps ensure that covered parties with variable emissions reduce emissions from an accurate representation of their current levels and treats each covered party equally.

#### **Emissions offsetting**

A key issue is how much and what kinds of emission offsetting should be allowed offsite. Offsetting means that emission reductions do not have to be made at the stationary source or from the fuels or gas sold in Washington. Some covered parties cannot reduce their own emissions. However, without reductions at the stationary sources covered by the

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program, communities nearby will not realize the co-benefits of reductions in conventional air pollution that may result.

### **Linkage with other market programs**

A key issue is whether the Washington program should link with established GHG market programs. This is important because other programs provide emission reductions that could be used to generate units in the Washington program. Linking would allow Washington units to be used in those other similar programs.

### **Intensity-based emissions standards**

A key issue is whether the standard should set maximum GHG emissions per unit of product (or some other measure). This is important because there would be no upper limit on total emissions if an intensity-based standard is chosen.

### **Excluding fuel importers**

A key issue is whether to include petroleum fuel importers in the program. This is important because including fuel imports removes incentives to move production out of state, or to export and re-import fuels to avoid coverage under the proposed rule.

### **Energy-intensive and trade-exposed (EITI) businesses**

A key issue is whether and how to include EITI businesses in the program. This is important because including these businesses may expose certain covered entities to reduced competitiveness in their markets, and create incentives to move production out of the state.

## **9) Proposed Non-project Action**

*Describe the preferred alternative that will meet the objective(s).*

See SEPA Checklist, Question 11 and Staff Report, Question 8 – *Key Issue Assessment* – for more detail.

This rule will work to limit the amount of GHGs attributable to stationary sources, petroleum fuel producers and importers, and natural gas distributors. The rule establishes a cap that gradually lowers over time. Ecology will verify that emission reductions actually occur.

All covered parties that are responsible each year for over 25,000 metric tons of carbon or carbon dioxide equivalent (CO<sub>2</sub>e) must currently report under the existing GHG reporting rule. Under the new rule, covered parties responsible for 100,000 metric tons (MT) of CO<sub>2</sub>e must reduce their emissions by five percent every 3 years. This threshold defines who reports under the new standard. About 60 to 65 percent of Washington's GHG emissions will be eventually included in the program.

All facilities that emit over 100,000 MT CO<sub>2</sub>e GHG each year or suppliers of fuel that sell or distribute products which are equal to that amount in CO<sub>2</sub> emissions will have a declining cap for emissions based on historical reporting data that they cannot exceed.

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Under this proposal, the options for compliance are:

1. Reduce emissions below cap at the facility or source using a variety of options – becoming more efficient, changing the product mix and/or installing emission reduction technology.
2. Acquire emission reduction units:
  - a. Generated inside of Washington: a project located within Washington. Item 3 provides examples of possible emission reduction measures.
  - b. Generated outside of Washington: an emissions market instrument on an approved carbon trading market
3. Invest in emission reduction measures using Ecology approved methods, such as a protocol (e.g., offset protocol), verified by a third party, and monitored over time as appropriate to show carbon reductions. This can involve emission reduction measures in sectors of the economy not covered by this rule.
  - a. Examples include agricultural projects, such as dairy digesters
  - b. Transportation projects, such as bicycle, pedestrian, or transit projects
  - c. Energy projects, such as energy efficiency and renewable energy projects
  - d. Projects in other sectors or involving other types of sources
4. Any of these options may result in the ability to generate emission reduction units, and in turn, sell them to other covered parties through a direct exchange.

Whatever choice is taken, the criteria for emission reductions are the same:

- Real – specific, identifiable, quantifiable reduction
- Permanent – Not reversible, or if so, an insurance mechanism is in place
- Enforceable – Washington has jurisdiction over the emission reduction, or there is an external instrument that allows for Washington to enforce limits on usage
- Verifiable – Third-party verification
- Additional – Above and beyond existing requirements, with specific exceptions. Generally speaking, the project must not represent Business As Usual. That is, the project would not have occurred but for this program.

*If this alternative were fully implemented (including full build-out development, redevelopment, changes in land use, density of uses, management practices, etc.), describe where and how it would direct or encourage demand on or changes within elements of the human or built environment, as well as the likely effects on the natural environment. Identify where the change or effect or increased demand constitutes a likely adverse impact, and describe any further or additional adverse impacts that are likely to occur as a result of those changes and affects.*

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### *Compliance Option Scenarios – Ways to Reduce Emissions*

This analysis of the rule evaluates the potential for significant impacts and/or adverse effects associated with the reasonably foreseeable compliance responses. The analysis draws upon prior environmental review of similar actions (California Air Resources Board, 2014) and contains as much information as is currently available without being speculative. The scope of analysis is intended to help focus public review and to inform the Responsible Official.

While the types of foreseeable compliance responses are identified in the rule, the specific location, design, and location of the actions cannot feasibly be known at this time, and therefore, this analysis can address only broadly defined types of impacts, rather than any specific project or location, potential facility, or site-specific environmental characteristics. Therefore, the non-project impact analysis applies generally across a broad geography, rather than any particular site or project-specific locations. If a later activity would have environmental effects that are not examined within this review, the agency with authority over the later activity would conduct additional environmental review, as necessary. The following discusses the foreseeable compliance responses and their anticipated impacts if any.

All GHG emission reduction projects must comply with all applicable state, local and federal requirements for all media. General permitting requirements may include:

- Air quality. Any potential emission increases of conventional pollutants resulting from the control of greenhouse gases will be subject to review and permitting under the Washington Clean Air Act.
- Waste management plans.
- Water quality. A large facility may require an NPDES permit while a smaller source may need a state water discharge permit.

#### **Direct emissions reduction**

This would include on-site projects that reduce GHG emissions. Example projects could include installation of technology to reduce emissions from venting, leaks, and process equipment, as well as changing methods of operations. Reducing GHG emissions may have a secondary benefit of reducing conventional pollutants. See also the discussion under the industrial sector measures.

*No adverse environmental impacts anticipated.*

#### **Purchase instruments from external carbon markets**

This rule allows a covered party to meet their compliance obligation by purchasing instruments (allowances) from external cap-and-trade systems (California, Quebec, The Regional Greenhouse Gas Initiative), or purchasing offset credits (California cap-and-trade system, specifically Livestock Projects, Mine Methane Capture Projects, and Ozone Depleting Substance (ODS) Projects.

*No adverse environmental impacts anticipated.*

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### Transportation measures

Examples of possible transportation reduction measures include the overachievement of workplace Commute Trip Reduction goals and/or implementation of fleet efficiency and truck protocols from the American Carbon Registry.

*No adverse environmental impacts anticipated.*

### Energy measures

- **Energy efficiency, weatherization (any source or community)**

The energy efficiency choices must be above the cost-effective threshold required by the Energy Independence Act.

*No adverse environmental effects anticipated.*

- **Increase renewable energy production/fuel conversion/waste to fuel projects**

This compliance options would increase the overall percentage of the renewable energy fuel mix for a facility. Alternative forms of energy include wind, solar, landfill gas, biogas, geothermal, and hydroelectric. The renewable energy generated must go beyond or differ from that required by the Energy Independence Act renewable portfolio standard. There are *air quality impacts* associated with the construction of facilities to harness renewable resources – primarily from fugitive dust and diesel particles from operation of construction equipment. These are assumed to be similar in nature to the *construction-related emissions* from natural gas-powered power plants, although the location and size of facilities can affect the magnitude and duration of these impacts. These impacts may be temporarily significant, and would be mitigated by employment of best management practices to minimize dust. The addition of significant new renewable resources may also alter the needed *transmission infrastructure* as renewable facilities are constructed to maximize resource capture at sites with optimal wind, solar, and geothermal resources. As with any project, the *siting and construction* of new facilities *may convert natural land or disturb biologically sensitive resources, or areas that have not been surveyed for historic buildings or cultural resources*. The lead and implementing entities would be required to contact the appropriate agencies and departments to ensure that potential impacts to *sensitive species* would be avoided, minimized or mitigated as appropriate.

*At this time, Ecology cannot determine the extent or significance of the impacts on biological resources, historic buildings or areas of pre-historic and historic significance because it can only speculate about the need for and locations of any new facilities that may result from the rule.*

- **Combined Heat and Power (CHP, or cogeneration plants), as documented by Ecology**

CHP, also referred to as “cogeneration,” generates on-site electricity and useful thermal energy simultaneously in a single, integrated system from a single fuel source, such as natural gas, biomass, and biogas). CHP systems may vary greatly in size, from less than 100 kilowatts to over 400 megawatts of generating capacity, and use a variety of operating technologies, including gas turbines, microturbines, reciprocating engines, fuel cells, and boilers. Reasonably foreseeable compliance

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responses could include increased construction and operation of new CHP facilities or retrofitting existing facilities with CHP systems.

*The potential impacts may be similar to renewable energy projects, or waste to fuel projects. As with any project, the siting and construction of new facilities may convert natural land or disturb biologically sensitive resources, or areas that have not been surveyed for historic buildings or cultural resources. The lead and implementing entities would be required to contact the appropriate agencies and departments to ensure that potential impacts to sensitive species would be avoided, minimized or mitigated as appropriate.*

*At this time, Ecology cannot determine the extent or significance of the impacts to biological resources, historic buildings or areas of pre-historic and historic significance which may be associated with this type of compliance option because it can only speculate about whether any new facilities will be constructed or other actions taken as a result of the rule.*

### Livestock and agricultural measures

- **Methane management**

Methane management at agricultural and livestock activities must follow the U.S. Livestock Protocol from the Climate Action Reserve. Implementation of projects to capture methane from livestock wastes have several goals: Reduce potential water pollution from managing the wastes, reduce odors from storage lagoons, and capture a potential income stream from sale of electricity produced by burning the methane in an engine-generator or producing vehicle or pipeline quality biomethane or through the separation and sale of the manure solids for use as soil amendments and animal bedding. All of these goals is subject to one or more environmental permitting program to reduce or potential adverse impacts, whether it is through an air quality permit for engine-generators and gas cleaning processes, or water quality impacts from the collected and treated liquid and solid fractions of the waste, controlled via waste management plans.

*No adverse environmental impacts are anticipated.*

### Waste and wastewater measures

All projects must comply with local, state and federal requirements, including air quality, water quality, and any waste disposal permits. Site specific SEPA review would be required for each project.

- **Landfill control**

Landfill methane control that follows the U.S. Landfill Protocol from the Climate Action Reserve is eligible for emission reduction units. Reducing methane emissions would have a beneficial impact on climate change and would further reduce emissions of toxic compounds and ozone precursors that are also present in landfill gas.

*No adverse environmental impacts are anticipated.*

- **Organic waste composting**

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Organic waste composting that follows the Organic Waste Protocol from the Climate Action Reserve is eligible for emission reduction units. This protocol allows for both forced aeration and turned-window composting technologies. Composting of eligible waste streams (food waste and non-recyclable food soiled paper) reduces the volume of material sent to a landfill, and potentially reduces methane generation from the landfill where the waste stream would have been deposited.

*No adverse environmental impacts are anticipated.*

- **Organic waste digesting**

Organic waste digesting that follows the Organic Waste Protocol from the Climate Action Reserve is eligible for emission reduction units. Organic waste digesting diverts eligible organic waste and/or agro-industrial wastewater away from anaerobic treatment and disposal systems to a biogas control system with methane destruction. The protocol accepts a wide range of technologies. Unused solids are stabilized and may be land applied, reducing the volume of waste and potential water pollution. By applying the unused solids to land applications or to a landfill those wastes have a reduce potential for contaminating streams and rivers via runoff.

*At this time, Ecology cannot determine the extent or significance of the impacts which may be associated with this type of compliance option because it can only speculate about whether any new organic waste digesting facilities may result from the rule.*

### **Industrial sector measures**

- **Refrigerant or other gas management protocols (Ozone Depleting Substance Protocol, American Carbon Registry)**

This compliance option addresses Ozone Depleting Substances (ODS) Projects. The ODS protocol provides methods to quantify and report GHG emission reductions associated with the destruction of high global warming potential ODS sourced from and destroyed within the U.S. that would have otherwise been released to the atmosphere. This project category includes ODS used in foam blowing agent and refrigerant applications (CFCs, HCFCs).

*At this time, Ecology cannot determine the extent or significance of the impacts which may be associated with this type of compliance option because it can only speculate about whether any new destruction facilities or other actions may result from the rule.*

- **Pneumatic controller protocols**

The protocol allows generation of emission reduction units for retrofitting or retiring pneumatic controllers that discharge methane at a high-bleed rate. Low-bleed pneumatic controller technology has been available for over 20 years.

*No adverse environmental impacts are anticipated with retrofitting or retiring high-bleed pneumatic controllers.*

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### Part III – Implementation considerations

#### 10) Consistency of the proposal with other plans, policies and laws

- a) Internal consistency - If there are internal inconsistencies between this proposal and your agency's previously adopted or ongoing plans and regulations, identify any strategies or ideas for resolving these inconsistencies.

Ecology has not identified any internal inconsistencies.

- b) External consistency - If there are external inconsistencies between this proposal and adopted or ongoing plans and regulations of adjacent jurisdictions and/or other agencies, identify any strategies or ideas for resolving these inconsistencies.

Ecology has not identified any external inconsistencies. Ecology will continue coordinating with EPA on federal air quality programs, and the Department of Commerce and the Utilities and Transportation Commission on the Clean Power Plan, to ensure consistency.

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