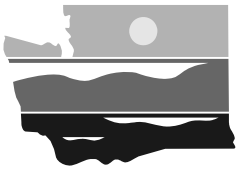

DEPARTMENT OF
ECOLOGY
State of Washington

As required by

the Washington State Administrative Procedures Act

Chapter 34.05 RCW

CONCISE EXPLANATORY STATEMENT

AND

RESPONSIVENESS SUMMARY

FOR THE ADOPTION OF

WAC 173-400-110, General Regulations for Air Pollution Sources
Chapter 173-460 WAC, Controls for New Sources of Toxic Air Pollutants

05/19/09

Publication: 09-02-008

As required by the Washington State Administrative Procedures Act, RCW 34.05.

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Washington State Department of Ecology
Air Quality Program

05/19/09

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CONCISE EXPLANATORY STATEMENT

I. Introduction

- Identify the reasons for adopting this rule (RCW 34.05.325(6)(a)(i)):

  The purpose of this rule revision is to update Washington's air toxic rules for new and modified sources of air pollution, chapter 173-460 WAC. This rule was last updated over 15 years ago. The updates are intended to change the rule to reflect current science, streamline and simplify regulatory requirements, and better integrate the air toxics rule into the overall provisions of New Source Review, chapter 173-400.

  Chapter 173-460 establishes the list of Toxic Air Pollutants (TAPs) that are subject to regulation, as well as the Acceptable Source Impact Levels (ASILs) for those TAPs that subject new and modified sources to additional regulatory review. This rule revision updates the TAPs and the ASILs according to current science, and also establishes an ASIL for each TAP listed. Ecology determined the updated TAP and ASIL list by evaluating the most recent air toxic listings in the US Environmental Protection Agency's IRIS program, the Agency for Toxic Substances and Disease Registry (ATSDR), and California's Office of Environmental Health Hazard Assessment (OEHHA).

  The rule revision also establishes Small Quantity Emission Rates (SQERs) and *de minimis* levels for every TAP. SQERs are used as a screening tool by permit engineers, and are levels of emissions below which dispersion modeling is not required to show that a new or modified source is below an ASIL. *De minimis* levels are small levels of emissions that Ecology has determined not to pose a health or environmental risk, and so don't require regulation. The previous version of the rule did not provide TAP-specific SQERs in the rule language, and had no provisions for *de minimis* levels. Providing this screening tool and *de minimis* levels allow for improved permitting efficiency for both the applicant and the permitting authority while still remaining protective of public health and the environment.

  Finally, the rule revision also provides some administrative clean up and clarification. It deletes out of date control technologies for sources of air pollution. It also clarifies the interface between the regulations for air toxics and the overall New Source Review program, providing a better understanding of the regulatory scheme and improving regulatory certainty.

  The statutory authority for adoption of this rule revision is found in the Washington Clean Air Act RCW 70.94.

- Identify the adoption date of rule and effective date of rule:

  The adoption date of the rule is May 19, 2009, as required in RCW 80.80. The effective date is 31 days after the rule is filed with the Code Reviser.

II. Describe Differences between Proposed and Final Rule

- 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. State the reasons for the differences (RCW 34.05.325(6)(a)(ii)):

  The Administrative Procedure Act (Chapter 34.05 RCW) requires Ecology to provide reasons for differences in the proposed rule text published in the Washington State Register with the CR-102, and the text of the rule as adopted. This section of the Concise Explanatory Statement fulfills this requirement.

  The changes are shown below in the order that they appear within the rule text. Deletions appear as strikethrough text and additions appear as underlined text. The reason for each change, as well as the source of the change, is given. Minor editing changes (i.e., punctuation or grammatical corrections) are not included.

WAC 173-400-110(4)(c)

Revised language:

A project with combined aggregate heat inputs of combustion units <u>(excluding emergency engines exempted by (4)(h)(xxxix) of this section)</u>, ≤ all of the following:

Reason:

The change clarifies that if emergency engines are exempted from regulation by a different provision of the rule, they don't have to be considered for further regulation under the above provision.

WAC 173-460-150

Change:

Common name	CAS	Avg. Period	ASIL	SQER
Nitrogen dioxide	10102-44-0	1-hr	470	1.03
Carbon monoxide	630-08-0	1-hr	~~2.03E+04~~	~~50.4~~ <u>1.14</u>

			23000	
Sulfur dioxide	7446-09-05	~~24 hr~~ 1-hr	~~26.7~~ 660	~~0.146~~ 1.45
Lead and compounds	~~C7439-92-1~~	Year	0.0833	16

Common name	**CAS**	***De minimis***	
Nitrogen dioxide	10102-44-0	~~0.0515~~	0.457
Carbon monoxide	630-08-0	~~2.52~~	1.14
Sulfur dioxide	7446-09-05	~~0.0073~~	0.457
Lead and compounds	~~C7439-92-1~~	~~0.799~~	10

Reason:

As originally proposed, the *de minimis* values for the above criteria pollutants were far below the *de minimis* values for those same pollutants in WAC 173-400-110. The effect of this difference would be that most projects with a combustion component would not qualify for the *de minimis* exemption established in WAC 173-400-110, and would therefore be subject to further regulation. Ecology recognizes the policy rationale behind the *de minimis* values in WAC 173-400-110, and believes these are more appropriately applied to WAC 173-460 to ensure consistency between the two rule provisions. Ecology therefore applied the existing WAC 173-400-110(5) exemption levels for NO_2, CO, SO_2, and lead to their corresponding toxic air pollutant *de minimis* levels.

The sulfur dioxide value which was originally set with the EPA IRIS value is replaced with the California OEHHA Acute RfC. This is consistent with how the ASILs, SQERs and *de minimis* values are set for the other criteria pollutants. Ecology believes that replacing the IRIS value with the OEHHA value will improve permitting consistency and remain protective of human health.

WAC 173-460-040(3)(a)

The new or modified emission units use ((~~T-BACT~~)) tBACT for emissions control for the toxic air pollutants ((~~which are likely to increase~~)) with emission increases that trigger the need to submit a notice of construction application; and

Reason:

Deletes the ambiguous term “likely to increase” and clarifies that actual increases in emissions of toxic air pollutants trigger the requirement for regulation.

WAC 173-460-040(3)(b)

Revised language:

~~The project complies~~ The new or modified emission units comply with WAC 173-460-070 as demonstrated by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance((~~,~~)) by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

Reason:

The change clarifies that it is the new or modified emission units that must comply with the rule.

WAC 173-460-050(2), -080(2)(a) & (b), and -090(2)(d)

Revised language:

-050(2) A notice of construction application that relies on SQERs rather than dispersion modeling ((~~shall~~)) to demonstrate compliance with WAC 173-460-070 must quantify the ~~aggregate~~ increase in emissions

-080(2)(a) Dispersion modeling. The applicant who relies on dispersion modeling must model the ~~aggregate~~ increase in the emissions

-080(2)(b) Small quantity emission rates. An applicant may show for any TAP that the ~~aggregate~~ increase in emissions

-090(2)(d) The ambient impact of the ~~aggregate~~ emissions increase of each TAP

Reason:

This change removes a redundant use of the term “aggregate” in these sections of rule language.

WAC 173-460-150

Footnote added at the end of the table in WAC 173-460-150:

NOS – Not otherwise specified. This applies to situation where emission factors for a group of pollutants is reported, but specific isomers, congeners, or chemicals are not reported.

Reason:

This footnote is needed to define a term used in the table.

Changes to chemical name:

2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin & Related compounds, NOS
Hexachlorodibenzo-p-dioxins, NOS
Polychlorinated biphenyls, NOS

Reason:

The NOS abbreviation indicates that the values apply when the emission of specific related compounds are not known.

Change to chemical name:

2, 3, 3', 4, 4'-pentatetrachlorobiphenyl

Reason:

This change corrects a typographical error. The CAS # 32598-14-4 corresponds with 2, 3, 3', 4, 4'-pentachlorobiphenyl and this is the chemical that Ecology intended to regulate.

Change to chemical name:

3, 3', 4, 4', 5, 5"-Tetrahexachlorobiphenyl

Reason:

This change corrects a typographical error. The CAS #32774-16-6 corresponds with 3, 3', 4, 4', 5, 5"-hexachlorobiphenyl and this is the chemical that Ecology intended to regulate.

Change CAS numbers:

Common name	**CAS#**
2,3,7,8-Tetrachlorodibenzo-p-dioxin & Related Compounds (TCDD)	~~C1746-01-6~~
Arsenic & Inorganic Arsenic Compounds	~~C7440-38-2~~
Beryllium & Compounds (NOS)	~~C7440-41-7~~
Chromium Hexavalent: Soluble, except Chromic Trioxide	~~C7440-47-3~~
Copper & Compounds	~~C7440-50-8~~

Diesel Engine Exhaust, Particulate	~~CAS-NA-1~~
Lead & Compounds (NOS)	~~C7439-92-1~~
Manganese & Compounds	~~C7439-96-5~~
Nickel Refinery Dust	~~C7440-02-0~~
Polybrominated Biphenyls	~~CAS-NA-2~~
Refractory Ceramic Fibers	~~CAS-NA-3~~
Selenium & Selenium Compounds (other than Hydrogen Selenide)	~~C7782-49-2~~

Reason:

All CASs that begin with a "C" have been deleted and the "NA" designation shown in the CAS column has been deleted as the Chemical Abstract Service registry does not identify any valid CAS numbers with this nomenclature.

Change ASIL:

Refractory Ceramic Fibers 0.03 fibers/cm^3

Reason:

Concentrations of refractory ceramic fibers are typically measured in terms of "fibers per volume".

Change ASIL, SQER and *De minimis*:

Common name	**ASIL**	**SQER**	***De minimis***
Diethyl mercury	~~0~~ 1.00E-99	1.00E-99	1.00E
Dimethyl mercury	~~0~~ 1.00E-99	1.00E-99	1.00E

Reason:

The ASIL, SQER, and *De minimis* values were changed from a value of 0 to 1.00E-99 as Ecology does not want to accidentally allow a source with a very small emission rate to be exempted from permitting when the intent is that no emissions of this substance be permitted without additional regulatory review.

Change name of chemical:

Common name	**CAS**
Fluoride containing chemicals, NOS	~~16984-48-8~~
Fluorine gas (F_2) ~~(soluble Fluoride)~~	7782-41-4

Reason:

In response to an informal comment received after the close of the official comment period, we changed the name of “fluorine (soluble fluoride)” to “fluorine gas, F_2” as this is the correct name for CAS #7782-41-4.

“Fluoride” was changed to “fluoride containing chemicals, NOS” to clarify the regulatory intent that this category applies to those compounds not otherwise specified in the rule language.

Change SQER and *de minimis* values for toxic air pollutants with 24 hour ASILs

Common Name	CAS #	Averaging Period	ASIL ($\mu g/m^3$)	SOER (lb/averaging period)	De Minimis (lb/averaging period)
1,1,1,2-Tetrafluoroethane	811-97-2	24-hr	8.00E+04	43810500	21.9526
1,1,1-Trichloroethane	71-55-6	24-hr	1000	5.48131	0.2746.57
1,1-Dichloroethylene	75-35-4	24-hr	200	1.126.3	0.05481.31
1,1-Difluoroethane	75-37-6	24-hr	4.00E+04	2195260	11263
1,1-Dimethylhydrazine	57-14-7	24-hr	0.5	0.002740.0657	0.0001370.00329
1,2,3-Trichloropropane	96-18-4	24-hr	1.84	0.01010.242	0.0005040.0121
1,2-Epoxybutane	106-88-7	24-hr	20	0.112.63	0.005480.131
1,6-Hexamethylene diisocyanate	822-06-0	24-hr	0.07	0.0003830.00920	1.92E-050.000460
1-Chloro-1,1-difluoroethane	75-68-3	24-hr	5.00E+04	2746570	13.7329
2-Chloroacetophenone	532-27-4	24-hr	0.03	0.0001640.00394	8.21E-060.000197
2-Ethoxyethanol	110-80-5	24-hr	70	0.3839.20	0.01920.460
2-Methoxyethanol	109-86-4	24-hr	60	0.3297.89	0.01640.394
2-Methylphenol	95-48-7	24-hr	600	3.2978.9	0.1643.94
2-Nitropropane	79-46-9	24-hr	20	0.112.63	0.005480.131
3-Methylphenol	108-39-4	24-hr	600	3.2978.9	0.1643.94
4-Methylphenol	106-44-5	24-hr	600	3.2978.9	0.1643.94
Acrolein	107-02-8	24-hr	0.06	0.0003290.00789	1.64E-050.000394
Acrylic Acid	79-10-7	24-hr	1	0.005480.131	0.0002740.00657
Ammonia	7664-41-7	24-hr	70.8	0.3889.31	0.01940.465
Antimony Trioxide	1309-64-4	24-hr	0.2	0.00110.0263	5.48E-050.00131
Arsine	7784-42-1	24-hr	0.05	0.0002740.00657	1.37E-050.000329
Chlorine	7782-50-5	24-hr	0.2	0.00110.026	5.48E-050.00131
Chlorine dioxide	10049-04-4	24-hr	0.2	0.00110.026	5.48E-050.00131
Chlorobenzene	108-90-7	24-hr	1000	5.48131	0.2746.57
Chlorodifluoromethane	75-45-6	24-hr	5.00E+04	2746570	13.7328
Chloropicrin	76-06-2	24-hr	0.4	0.0021900.053	0.0001100.00263
Cobalt	7440-48-4	24-hr	0.1	0.0005480.013	2.74E-050.000657
Cumene	98-82-8	24-hr	400	2.1952.6	0.112.63
Cyclohexane	110-82-7	24-hr	6000	32.9789	1.6439.4
Diazinon	333-41-5	24-hr	9	0.04931.18	0.0024600.0591
Diethanolamine	111-42-2	24-hr	3	0.01640.394	0.0008210.0197
Diethyl mercury	627-44-1	24-hr	01.00E-99	0.00E+001.00E-99	0.00E+001.00E-99

Dimethyl Mercury	593-74-8	24-hr	01.00E-99	0.00E+001.00E-99	0.00E+001.00E-99
Disulfoton	298-04-4	24-hr	6	0.032900.789	0.001640.0394
Ethyl Chloride	75-00-3	24-hr	3.00E+04	16043940	8.21197
Ethylene Glycol	107-21-1	24-hr	400	2.1952.6	0.1112.63
Ethylene glycol monobutyl ether	111-76-2	24-hr	1.30E+04	71.21710	3.5685.4
Ethylene glycol monoethyl ether acetate	111-15-9	24-hr	300	1.6439.4	0.08211.97
Ethylene glycol monomethyl ether acetate	110-49-6	24-hr	90	0.49311.8	0.02460.590
Fluoride containing chemicals, NOS	---	24-hr	13	0.07121.71	0.003560.0854
Fluorine gas F_2	7782-41-4	24-hr	15.8	0.08662.08	0.004330.104
Glutaraldehyde	111-30-8	24-hr	0.08	0.0004380.0105	2.19E-050.000526
Hexachlorocyclopentadiene	77-47-4	24-hr	0.2	0.00110.026	5.48E-050.00131
Hydrogen chloride	7647-01-0	24-hr	9	0.04931.18	0.0024600.0591
Hydrogen Cyanide	74-90-8	24-hr	9	0.04931.18	0.0024600.0591
Hydrogen Fluoride	7664-39-3	24-hr	14	0.07671.84	0.0038300.0920
Hydrogen Sulfide	7783-06-4	24-hr	2	0.0110.263	0.0005480.0131
Isophorone	78-59-1	24-hr	2000	112.63	0.54813.1
Maleic Anhydride	108-31-6	24-hr	0.7	0.003830.0920	0.0001920.00460
Manganese & Compounds	---	24-hr	0.04	0.0002190.00526	1.10E-050.000263
Mercury, Elemental	7439-97-6	24-hr	0.09	0.0004930.0118	2.46E-050.000591
Methyl Alcohol	67-56-1	24-hr	4000	21.9526	1.126.3
Methyl Bromide	74-83-9	24-hr	5	0.02740.657	0.0013700.0629
Methyl Chloride	74-87-3	24-hr	90	0.49311.8	0.02460.591
Methyl Ethyl Ketone	78-93-3	24-hr	5000	27.4657	1.3732.9
Methyl Isobutyl Ketone	108-10-1	24-hr	3000	16.4394	0.82119.7
Methyl Isocyanate	624-83-9	24-hr	1	0.005480.131	0.0002740.00657
Methyl methacrylate	80-62-6	24-hr	700	3.8392.0	0.1924.60
Methylene diphenyl isocyanate	101-68-8	24-hr	0.7	0.003830.0920	0.0001920.00460
m-Xylene	108-38-3	24-hr	221	1.2129.0	0.06051.45
n,n-Dimethylformamide	68-12-2	24-hr	80	0.43810.5	0.02190.526
n-Hexane	110-54-3	24-hr	700	3.8392.0	0.1924.60
o-Xylene	95-47-6	24-hr	221	1.2129.0	0.06051.45
Pentabromodiphenyl Ether	32534-81-9	24-hr	6	0.032900.789	0.001640.0394
Phenol	108-95-2	24-hr	200	1.126.3	0.05481.31

Phosgene	75-44-5	24-hr	0.3	0.001640.0394	8.21E-050.00197
Phosphine	7803-51-2	24-hr	0.8	0.0043805	0.00021900.00526
Phosphoric Acid	7664-38-2	24-hr	7	0.038300.920	0.0019200460
Phosphorus	7723-14-0	24-hr	20	0.112.63	0.0054800.131
Phthalic Anhydride	85-44-9	24-hr	20	0.112.63	0.0054800.131
Propylene	115-07-1	24-hr	3000	16.4394	0.82119.7
Propylene Glycol	57-55-6	24-hr	28.5	0.1563.75	0.007800.187
Propylene Glycol Dinitrate	6423-43-4	24-hr	0.276	0.0015100363	7.56E-050.00181
Propylene glycol monomethyl ether	107-98-2	24-hr	7000	38.3920	1.9246.0
p-Xylene	106-42-3	24-hr	221	1.2129.0	0.060051.45
Refractory Ceramic Fibers	---	24-hr	0.03 fibers/cm^3	0.0001640.00394	8.21E-060.000197
Selenium & Selenium Compounds (other than Hydrogen Selenide)	---	24-hr	20	0.112.63	0.0054800.131
Silica (crystalline, Respirable)	7631-86-9	24-hr	3	0.01640.394	0.00082100.0197
Styrene	100-42-5	24-hr	900	4.93118	0.2465.91
Sulfur Mustard	505-60-2	24-hr	0.7	0.00383000920	0.00019200460
Sulfuric Acid	7664-93-9	24-hr	1	0.0054800131	0.00027400657
Tetrabromodiphenyl Ether	40088-47-9	24-hr	6	0.03290.789	0.001640.0394
Titanium Tetrachloride	7550-45-0	24-hr	0.1	0.00054800131	2.74E-050.00657
Toluene	108-88-3	24-hr	5000	27.4657	1.3732.9
Toluene-diisocyanates	26471-62-5	24-hr	0.07	0.000383000920	1.92E-0500046 0
Toluene-2,4-diisocyanate	584-84-9	24-hr	0.07	0.000383000920	1.92E-0500046 0
Toluene-2,6-diisocyanate	91-08-7	24-hr	0.07	0.000383000920	1.92E-0500046 0
Trans-1,2-dichloroethene	156-60-5	24-hr	807	4.42106	0.2215.30
Triethylamine	121-44-8	24-hr	200	1.126.3	0.054831.31
Vanadium	7440-62-2	24-hr	0.2	0.00110.0263	5.48E-050.00131
Vinyl acetate	108-05-4	24-hr	200	1.126.3	0.054831.31
Vinyl Bromide	593-60-2	24-hr	3	0.01640.394	0.00082100.00197

Reason:

Ecology discovered a math error in the equation calculating SQER and *de minimis* values for toxic air pollutants with 24 hour ASILs. A factor of "24" was omitted which is required to convert the values from hourly to 24 hour values. That error has now been corrected and the SQER and *de minimis* values for those pollutants are now accurately reflected and consistent with the calculation for the other chemicals listed.

III. Response to Comments

- Summarize all comments received regarding the proposed rule and respond to comments by category or subject matter. You must indicate how the final rule reflects agency consideration of the comments or why it fails to do so (RCW 34.05.325(6)(a)(iii)):

Comments received on the proposed rule are shown below. They are organized by rule section. There is a separate index table for written comments and verbal testimony received. You can find the responses to each comment by going to the page numbers referenced in the tables.

Written Comments		
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Verbal Comments		
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#1-2	Chuck Studer	22,25
#1-3	Lucinda Penn	52, 72, 73

General Comments on WAC 173-400-110 & Chapter 173-460 WAC

Comment: People for Puget Sound #7

Public process for this rule revision did not meet the standards of Ecology public process that we have experienced for other regulatory changes:

a. The announcement about the rule changes that we received did not include a date that comments were due.
b. When I asked for a date, I was given a date that fell on a weekend (I am assuming that the actual date comments are due is that following business day).
c. No public meeting was held in Seattle. This is especially surprising given the recent publication of a study of toxic air pollution in the South Seattle area by the Department of Health - that showed increased cancer risks due to toxic pollutants that are regulated by this rule.
d. There was no fact sheet or easy synopsis that explained the changes in a way that would be understandable to the public.
e. Only two weeks (Jan 9-24) were offered for public comment.
f. No list of stakeholders in the rule-making process is on the web or in the meeting notes.
g. Power points from the meetings (that are mentioned in the notes) are not posted.
h. A list of chemicals that are dropped in the rule revision is not shown

Response: People for Puget Sound #7

Ecology is always interested in improving on our public process. We recognize that your time is valuable, and apologize for any inconvenience you experienced. Thank you for your feedback on the notification procedures. While we followed the timelines and process specified by the state Administrative Procedure Act, (RCW 34.05.320), it is difficult to reach all those interested in the rule. We will make adjustments in the future to avoid the potential for confusion or miscommunication.

The Administrative Procedure Act requires publication of the draft rule language and the hearing dates in the State Register a minimum of twenty days before the rule-making hearing (RCW 34.05.320). The notice for the WAC 173-460 rule proposal was published in the State Register on December 3, 2008. This notice announced the two hearings and opened the 52-day public comment period on the proposal that extended from December 3rd to January 24th.

We thought it important to hold two hearings although only one is required. In response to the current budget situation and Ecology's limited resources, we held the first hearing at our main office in Lacey and the second in Spokane. In addition,

Ecology extended the post–hearing comment period from the required seven days to ten days. Ecology extended the comment periods as this rule has important statewide implications.

Comment: ORCAA #1

The term “construction” does not always describe the process by which a new source is established and, therefore, is misleading. A typical response from an owner/operator after being informed that their newly established source required a Notice of Construction (NOC) is often, “but nothing was constructed.” This is often an accurate statement. Many emission units are packaged or modular units and require only installation. In other instances, the new source results from an operational change (modification) that does not involve construction or installation.

Because there are new sources that do not require construction, the term “construction” in both WAC 173-400-110 and Chapter 173-460 needs to be revised to “construction, installation or establishment” in the following sections and subsections: WAC 173-400-030(52), WAC 173-400-110(2)(a), WAC 173-400-110(2)(b), WAC 173-400 -110(5)(a)(i), WAC 173-400-110(5)(c), WAC 173-400 110(9), WAC 173-460-020(6).

Response: ORCAA #1

Thank you for this idea. The term “construction,” especially when used in “Notice of Construction,” is a term of art used in both regulation and practice, in Washington as well as in similar federal regulations. While this concept was briefly discussed with the stakeholder committee, Ecology felt that it would be better to hold the question for a future revision, as section 110 was the only section in chapter 173-400 WAC that was open for amendment. We found that the concept would be better addressed when all of the relevant sections were open for revision.

As noted in your comment, “construction” is used in several sections of chapter 173-400 WAC. Now that those sections are open, we are willing to consider and discuss this suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

Specific Comments on WAC 173-400-110

WAC 173-400-110(2)(a)(ii)

Comment: SRCAA #1

Under WAC 173-400-110(2)(a)(ii) Ecology exempts temporary/portable sources from New Source Review (NSR); however, the US Environmental Protection Agency (EPA) has declared that temporary/portable sources are classified under "stationary sources"; therefore, temporary/portable sources are required to go through NSR the first time that the temporary/portable source operates in a jurisdiction. This does not apply to non-road engines.

Comment: SWCAA #1

Under WAC 173-400-110(2)(a)(ii) Ecology exempts temporary/portable sources from new source review (NSR); however, the US Environmental Protection Agency (EPA) has declared that temporary/portable sources are classified under "stationary sources"; therefore, temporary/portable sources are required to go through NSR the first time that the temporary/portable source operates in a jurisdiction. This does not apply to non road engines. This exemption should be removed from this section of the WAC.

Response: SRCAA #1 & SWCAA #1

The rule language on which this comment focuses is currently existing language. This concept was not discussed during the rule making process. This suggestion presents a concept that is substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language. We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(2)(b)(i) and (iii); WAC 173-400-110(4)(h)(xxxix)

Comment: USDOE #1

There are federal regulations (e.g. 40 CFR 60 Subparts IIII and JJJJ, 40 CFR 63 Subpart ZZZZ) addressing the emission limits, installation and operation of new or modified internal combustion engine sources. Operation of internal combustion engines classified as emergency engines, which typically have limited hours of operation, is already sufficiently constrained by those regulations to ensure adequate protection of human health and the environment without imposing

additional permitting requirements, costs and delays. The proposed new source review (NSR) exemption should be extended to all emergency generator engines regardless of size or horsepower rating. The source registration requirements of WAC 173-400-100 *et. seq*. will continue to ensure that permitting authorities are aware of these larger internal combustion engine sources.

Revise the proposed rule language in three locations to read as follows:

WAC 173-400-110(2)(b)(i)

- *…as they apply to emergency stationary internal combustion engines ~~with a maximum engine power less than or equal to 500 brake horsepower~~ (federal rules in effect on April 30, 2008);*

WAC 173-400-110(2)(b)(iii)

- *…as it applies to emergency or limited use stationary reciprocating internal combustion engines ~~with a maximum engine power less than or equal to 500 brake horsepower~~ (federal rules in effect on April 30, 2008);*

WAC 173-400-110(4)(h)(xxxix)

- *Emergency generators powered by internal combustion engines ~~with a maximum power of less than or equal to 500 brake horsepower.~~*

Response: USDOE #1

Ecology adopted 40 CFR 60 Subpart JJJJ as effective on October 1, 2006. We have not adopted 40 CFR 60 Subpart IIII or 40 CFR 63 Subpart ZZZZ. Ecology believes that emergency generators are an integral part of many commercial and industrial businesses in the State of Washington. Historically, we have required all emergency generators to obtain a Notice of Construction Order of Approval prior to operation. However, as the commenter points out, emergency generators only run limited hours, and so do not implicate the same potential for air quality impacts as other stationary sources. Today's action is intended to lessen the permitting burden on the regulated community for emergency generators located at commercial/industrial stationary sources that are truly intended to be for emergency use. We believe that emergency generators larger than 500-brake horsepower should undergo New Source Review based upon their size.

Ecology did not change the text in response to this comment.

WAC 173-400-110(2)(b)(i)

Comment: SRCAA #2 & SWCAA #2

Under WAC 173-400-110(2)(b)(i) Ecology is proposing to exempt emergency internal combustion engine generators with a maximum engine power of 500 brake horsepower from new source review. SRCAA suggests that you also include an hours of operation limitation such as 200 hours per year to otherwise limit the use of the engine to "emergency" situations. We have seen project proposals where "emergency" engines are operated by a third party for other than “emergency use” that the facility defines as emergency. Certainly one could then argue that it is no longer an emergency; however, the rule should be clear enough to avoid this argument. Providing an hour limitation would help restrict the use to just emergency situations. The underlying NSPS limits hours of operation to 100 hours per year for readiness testing and maintenance. The horsepower limitation should also be cited as an aggregate limit so a project does not include multiple units that could sum to a sizeable aggregate. This would avoid the possibility of someone proposing a project of say 10 or more 499 horsepower engines to avoid getting a permit which results in a significant project emission impact but would otherwise be exempted on an individual basis.

Response: SRCAA #2 & SWCAA #2

As stated in the response to USDOE-1, Ecology does not believe that emergency generators implicate the same air quality concerns as other stationary sources because of their limited hours of operation. This action is intended to lessen the permitting burden on the regulated community for emergency generators. A 500 brake horsepower generator is slightly larger than the size one would find at a grocery store or big box building supply store. If an emergency generator is used for other purposes than emergency or testing purposes, there are sufficient grounds to issue a notice of violation and require the source to undergo New Source Review. Ecology is willing to consider and discuss the question of how to review or permit multiple exempt units and the concept of establishing an annual operation limit with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(2)(b)(ii)

Comment: USDOE #2

The existing rule language allows the possible exemption from new source review (NSR) for demolition and asbestos renovation projects by not automatically requiring submittal of a notice of construction (NOC) application for activities subject to 40 CFR 61.145. The corresponding inclusion of a specific categorical exemption for these activities in WAC 173-400-110(4) is necessary to ensure consistency with past

Ecology guidance that demolition projects are not subject to NSR. Inclusion of such an exemption will also ensure that the listing of asbestos as a toxic air pollutant (TAP) in WAC 173-460-150 does not result in the unnecessary submittal of an NOC application for asbestos renovation activities.

Revise the rule language in WAC 173-400-110(4)(a) to read as follows:

(a) Maintenance/Construction/Demolition:
(i) …
(x) Asbestos renovation activities;
(xi) Wrecking or demolishing facilities or buildings, including removal of equipment, walls, excess or scrap materials, and /or load bearing structures;

Response: USDOE #2

Your suggestion includes both a new exemption for asbestos renovation and structure demolition. These two suggestions present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. We will have another opportunity to discuss this issue as part of the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC. Therefore, we are not incorporating the proposed revisions into the rule language.

Ecology did not change the text in response to this comment.

WAC 173-400-110(2)(b)(i), (ii) and (iii)

Comment: USDOE #3

The inclusion of exceptions to the list of new source types that automatically require submittal of a notice of construction (NOC) application is consistent with a desire to avoid unnecessarily permitting sources which are already adequately controlled by federal regulations. However, EPA has issued numerous changes to the federal regulations since WAC 173-400-110 last underwent significant review and revision. The list of subparts in 40 CFR Parts 60, 61 and 63 should be reviewed to ensure that all appropriate exceptions to the automatic requirement to submit an NOC application have been identified in these state regulations.

Review 40 CFR Parts 60, 61 and 63 and identify all applicable new source types that are already adequately controlled by the federal regulations, as well as those that Ecology routinely does not place additional controls on when submittal of an NOC application and issuance of an approval order are required.

Based on the results of this review, revise the rule language in applicable sections of WAC 173-400-110(2)(b) to include additional exceptions, as appropriate.

Response: USDOE #3

Ecology routinely includes adoptions by reference of federal regulations such as MACT Standards and New Source Performance Standards when we update Chapter 173-400 WAC. We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC. At that time, we can also evaluate Washington's *de minimis* threshold based on the newly adopted federal regulations.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(c)

Comment: SRCAA #5

Under WAC 173-400-110(4)(c) Ecology sets de minimis sizes for combustion units under which NSR is not required. This section is inconsistent in the use of logical symbols and is redundant. Combustion units (i) through (iii) and (v) use the symbol "≤"; however, (iv) uses the symbol "<". A de minimis value is one where the person considers anything under that value to be trivial and therefore should not be considered. Therefore, de minimis implies the symbol "<". This is consistent with how de minima are treated in chapter 173-460 WAC. In addition, the term "combined" is a synonym for "aggregate" and is therefore unnecessary.

A suggested revision to section (c) follows:

(c) A project with aggregate heat inputs of combustion units, < all of the following:
(i) 500,000 Btu/hr using coal with ≤ 0.5% sulfur or other fuels with ≤ 0.5% sulfur;
(ii) 500,000 Btu/hr used oil, per the requirements of RCW 70.94.610;
(iii) 400,000 Btu/hr wood waste or paper;
(iv) 1,000,000 Btu/hr using kerosene, #1, #2 fuel oil, or other fuel oil and with ≤0.05% sulfur or any other liquid fuel with no sulfur content;
(v) 4,000,000 Btu/hr using natural gas, propane, LPG, or other gaseous fuel";

(vi) In the case of multi-fuel devices, the more stringent of the fuels heat inputs apply for determining whether the unit is exempt. (e.g. If a combustion unit can burn either used oil or natural gas and the heat inputs are 600,000 and 3,000,000 BTUs, respectively, then the used oil heat input is the most stringent and the combustion unit is subject to NSR.)"

If Ecology is determined to use the aggregate of combustion sources, then it would be practical to establish de minimis values under each of the categories that would be too trivial to include in the aggregate.

Response: SRCAA #5

Thank you for catching this long-standing typographical error. Ecology will make the change to WAC 173-400-110(4)(c)(iv) by replacing the < with ≤. While the sentence structure throughout subsection (4)(c) might be improved by eliminating the repeated symbol, we are keeping it for the sake of clarity.

The second part of this comment points out that "combined aggregate" is a term that would benefit from editing and suggests that Ecology establish new *de minimis* values for the subcategories that make up the aggregate of combustion sources.

These two suggestions present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language.

We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

WAC 173-400-110(4)(e)(v)

Comment: SRCAA #3

Under WAC 173-400-110(4)(e)(v) Ecology is proposing to exempt sumps and lift stations associated with wastewater treatment plants. There is presently in the works a proposed waste water treatment plant SRCAA's jurisdiction that includes two emergency generators that exceed 500 BHP (1 – 750 and 1-1300 BHP) at the plant's lift stations. The applicant is applying for a notice of construction for both of these emergency generators. It is not uncommon for sumps and lift stations to have emergency generator sets for backup power. Why should these emergency

generators be singled out for exemption, when any other facility would have to go through NSR. Sumps and lift stations should be eliminated from the exemption list.

Comment: SWCAA #3

Under WAC 173-400-110(4)(e)(v) Ecology is proposing to exempt sumps and lift stations associated with wastewater treatment plants. It is common for waste water treatment plants to include emergency generators/pumps at list stations. We have several facilities that have 15 or more such units. Aggregate horsepower for these facilities can exceed 6000 horsepower. Aggregate emissions from these units can e sizeable based on individual hours of operation. Why are these emergency generators/pumps singled out for exemption when any other facility would have to go through NSR? Sumps and lift stations should be eliminated from the exemption list.

Response: SRCAA #3 & SWCAA #3

The exemption for sumps and lift stations is not a new exemption. It has been in the rule since 1997. Ecology believes that there is no additional protection of health or the environment in requiring a municipality to permit an emergency generator for this type of activity. This suggestion presents a concept that is substantially different from the rule language published in the rule adoption notice. If Ecology made this change now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(f)(iv)

Comment: SRCAA #4 & SWCAA #4

Under WAC 173-400-110(4)(f)(iv) Ecology is proposing to exempt laboratory research, experimentation, analysis and testing facilities/activities whose primary activity is research or education. This exemption would exclude consideration of emissions from any school or university or research facility, such as those at Hanford, that have the potential to do cancer, controlled substance and nuclear based products research without any oversight of their air emissions. In the arguments made by these facilities during the stakeholder process to exempt these facilities, the argument was made that it was too difficult to identify and track all the substances that they use and emit. This is one of the best arguments to be made that the public will not be protected from potential adverse emissions from facilities that may have some of the highest rick[sic] potential for human health impact type

emissions, but also the affected public at the universities lives on campus and walks the sidewalks next to where these substances are emitted. This is very different than an industrial facility that has a property boundary that keeps the public at some distance from the emission point. This exemption is bold and un-protective of our younger population which is one of the more sensitive groups. There is no identified basis for this exemption. SRCAA proposes deletion of this exemption.

Response: SRCAA #4 & SWCAA #4

The current version of WAC 173-460-030 does not specifically list research and education labs as being subject to the rule. Ecology holds that these laboratories have always been exempt. The intent of the new rule language is to make it clear that these laboratories have retained their exempt status.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(f)(iv)

Comment: WWU #1, WSU #1, UW #1, Battelle #1

Western Washington University supports the proposed exemption of laboratory activities at noncommercial research and educational institutions. Western hopes that the Department of Ecology is able to incorporate this exemption into the new regulation.

Washington State University supports the inclusion of the exemption language. It will allow for the continuation of research, teaching and innovation in a timely and cost effective manner that supports the people and economy of the State of Washington.

The University of Washington supports the exemption of laboratory activities at noncommercial research and educational institutions. A laboratory exemption will continue to allow the necessary flexibility for the University to conduct research and education activities without interruption.

Battelle supports the exemption of laboratory activities at noncommercial research and educational institutions.

Response: WWU #1, WSU #1, UW #1, Battelle #1

Thank you for the assistance in drafting this exemption and for your participation in the rule making process.

WAC 173-400-110(4)(g)(xxxvii) and (xxxviii)

Comment: SRCAA #6 & SWCAA #5

Under WAC 173-400-110(4)(g)(xxxvii) and (xxxviii) abrasive blasting is specifically exempted. These conditions were previously included in WAC 173-460(060) as control technology requirements (T-BACT) implying that there were a minimum set of requirements surrounding these activities. By including these two sections in the exemption unit and activity section of WAC 173-400-110(4), these activities are now exempt from review and consideration. Many of the items to be abrasive blasted are older items that have been coated with materials that contain lead and chrome based products. Exempting abrasive blasting activities from New Source Review will allow uncontrolled blasting of components that contain very toxic components such as lead and chrome to the ambient air. These two sections are misplaced in WAC 173-400-110(4). These two items should more appropriately be placed in WAC 173-400-070.

Oral testimony: Chuck Studer #1

The first, being of the one for abrasive blasting. Originally in the rule that was in the present rule the abrasive blasting this wording was in a section that was called t-BACT for certain categories of a certain categories of air pollution sources and to take that out and just automatically exempt seems to be not in line with what is presently going on, it's not exempt right now. In addition, the local agencies do not exempt abrasive blasting facilities so the Department of Ecology is kind of going against the flow of the local agencies.

Response: SRCAA #6, SWCAA #5 & Chuck Studer #1

The only section of Chapter 173-400 open for revisions in AO #05-19 was WAC 173-400-110. While Ecology realizes these items would be more appropriately located in WAC 173-400-070, that option was not available as that section of the rule was not open. Part of the 2009 work plan for Chapter 173-400 WAC rule revisions is to relocate these two items.

Ecology is willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(h)(xl)

Comment: Hildebrandt #1

It appears to be the intent of the rules to continue the exemption for gasoline dispensing facilities (GDFs), as an exemption. Wording was deleted from WAC 173-460, and different exemption wording was inserted into WAC 173-400.

The proposed draft exempts gasoline dispensing facilities regulated by chapter 173-491 WAC. The applicability of section WAC 173-491 is broad enough to cover GDFs, but the actual regulation of gasoline dispensing facilities in subsection 404(4) is limited to facilities above a certain size and/or in specific areas.

To clarify the intent to exempt all GDF's, it is suggested that WAC 173-400-110(4)(h)(xl0 be amended as follows: Gasoline dispensing facilities (GDFs) ~~regulated by~~ as defined in chapter 173-491 WAC.

Response: Hildebrandt #1

Thank you for your comment. WAC 173-491-040(5) requires New Source Review for gasoline dispensing facilities, however the only issue to be considered is whether to apply Stage II vapor recovery systems (see next comment and response below). The suggestion to change "regulated" to "defined" would exempt all gasoline dispensing facilities from New Source Review.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(xl)

Comment: SRCAA #7

Under WAC 173-400-110(4)(xl) Ecology proposes to exempted gasoline dispensing facilities (GDF) that are regulated under chapter 173-491 WAC. It is important to understand that chapter 173-491 WAC is a Reasonably Available Control Technology (RACT) rule which establishes a technology that was state-of-the-art at the time that the rule was written. The gasoline dispensing equipment is continuously evolving and is doing so at rapid pace compared to other industries.

However; WAC 173-491-040(5)(e) requires new or modified GDFs to go through NSR to determine whether or not Stage II equipment is required. As such, permitting authorities must perform new source review for every new installation of a GDF, or modification to an existing GDF. NSR ensures that new or existing source GDFs are equipped with Best Available Control Technology (BACT). The emissions from GDFs are a significant contribution to the formation of ozone; therefore

requiring NSR for GDFs is very important to either maintaining ozone compliance or avoiding becoming an ozone non-attainment area.

In addition, if GDFs are exempt from NSR, the permitting authority has no means to determine whether a new or modified GDF would trigger the facility having to install Stage II. VOC emissions from a Stage I GDF are 4.2 times the emissions that would come from a Stage II GDF. A GDF could be installed without having to inform the permitting authority. A very large GDF, with a annual throughput of 15,000,000 gallons of gasoline (which is possible), assuming that the facility was installed with only Stage I equipment would emit 97.5 tons of VOCs per year; whereas, the same GDF equipped with Stage II equipment would emit only 23.3 tons of VOCs. It is obvious that a GDF with this amount of throughput should be required to install Stage II equipment; however, chapter 173-491 WAC does not provide that authority; whereas, chapter 173-400WAC would, assuming that the GDFs were not exempt from NSR.

There would be no mechanism to ensure that GDFs remain in compliance with chapter 173-491 WAC, because the GDFs could install without notification and therefore would not have to register with the permitting authority.

SRCAA issues NSR permits on GDFs with throughput limits in their orders of approval to ensure that the people living next to them are not exposed to high levels of benzene and other toxic pollutants.

Chapter 173-400 WAC and chapter 173-491 WAC are at odds with each other; therefore, the exemption for GDFs should be deleted, as well as, exempting them from NSR does not protect the public health.

Comment: SWCAA #6

Under WAC 173-400-110(4)(xl) Ecology proposes to exempted gasoline dispensing facilities (GDF) that are regulated under chapter 173-491 WAC. It is important to understand that chapter 173-491 WAC is a Reasonably Available Control Technology (RACT) rule which establishes a technology that was state-of-the-art at the time that the rule was written – over 10 years ago. 491 does not have its wone NSR section. The gasoline dispensing equipment is continuously evolving and is doing so at rapid pace compared to other industries.

However; WAC 173-491-040(5)(e) requires new or modified GDFs to go through NSR to determine whether or not Stage II equipment is required. As such, permitting authorities must perform new source review for every new installation of a GDF, or modification to an existing GDF. NSR ensures that those new or existing source GDFs are equipped with Best Available Control Technology (BACT) in accordance with RCW 70.94.152. The emissions from GDFs are a significant

contribution to the formation of ozone; therefore requiring NSR for GDFs is very important to either maintaining ozone compliance or avoiding becoming an ozone non-attainment area.

In addition, if GDFs are exempt from NSR, the permitting authority has no means to determine whether a new or modified GDF would trigger the facility having to install Stage II. VOC emissions from a Stage I GDF are 4.2 times the emissions that would come from a Stage II GDF. A GDF could be installed without having to inform the permitting authority. A very large GDF, with a annual throughput of 15,000,000 gallons of gasoline (which is possible), assuming that the facility was installed with only Stage I equipment would emit 97.5 tons of VOCs per year; whereas, the same GDF equipped with Stage II equipment would emit only 23.3 tons of VOCs. Without Stage II, this facility would be a HAP major source subject to Title 5. It is obvious that a GDF with this amount of throughput should be required to install Stage II equipment; however, chapter 173-491 WAC does not provide that authority; whereas, chapter 173-400WAC would, assuming that the GDFs were not exempt from NSR. This exemption is also at odds with the tonnage exemption table of 400-110(5)(d). This table identifies supposedly a deminimis level of 2 tons per year for VOCs. A Stage I facility emits 2.0 tons per year of VOC at a throughput of 308,000 gallons per year. This is a very small facility. In addition, there is no accounting for TAPs of HAPS in addition to the VOCs. This is not a small source that should be exempted.

There would be no mechanism to ensure that GDFs remain in compliance with chapter 173-491 WAC, because the GDFs could install without notification and therefore would not have to register with the permitting authority.

NSR permits are issued on GDFs with throughput limits in their orders of approval to ensure that the people living next to them are not exposed to high levels of benzene and other toxic pollutants.

Chapter 173-400 WAC and chapter 173-491 WAC are at odds with each other; therefore, the exemption for GDFs should be deleted, as well as, exempting them from NSR does not protect the public health.

Oral testimony: Chuck Studer #2

The second comment I have is on gasoline dispensing facilities. Gasoline dispensing facilities are covered under 173-491 WAC and that rule that specifically says that all gasoline dispensing facilities are to go through new source review. So this puts rule 400 and 491 in a conflict.

Response: SRCAA #7 & SWCAA #6 and Chuck Studer #2

The proposal says: *"(4) Except as provided in subsection (2) of this section, the construction or modification of emission units in one of the categories listed below is exempt from new source review, provided that the modified unit continues to fall within one of the listed categories. The construction or modification of an emission unit exempt under this subsection does not require the filing of a notice of construction application.*

(h) Miscellaneous:
(xl) Gasoline dispensing facilities (GDFs) regulated by chapter 173-491 WAC."

Ecology's intent is to limit New Source Review (NSR) on gasoline dispensing facilities to those regulated by Chapter 173-491 WAC.

WAC 173-491-040(5)(e) says that NSR is not required unless the source is specifically required to undergo NSR as found in WAC 173-491-040(5)(a, b or c). The issue in all of these subsections deals with the installation of Stage II vapor recovery systems. Subsection (a) is no longer relevant since at this time there are no ozone non-attainment areas in Washington and Ecology has not made a determination that Stage II is required for maintenance planning. Subsection (b) says that in certain named counties that were previously required to have Stage II equipment, gasoline dispensing facilities (GDFs) are no longer required to have and may remove Stage II equipment. Subsection (c) says that GDFs with a throughput of greater than 1.2 million gallons per year must apply Stage II equipment only if they are located less than a defined distance from a residence. All other GDFs are not required to install and operate Stage II equipment. Any NSR action under Chapter 173-491 WAC is limited to this question of whether or not to require Stage II vapor recovery equipment.

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)

Comment: SRCAA #8 & SWCAA #7

Under WAC 173-400-110(5) subsection (a) speaks to new emissions units and existing emissions units while subsection (b) refers to a "project". The basis for these exemptions should be consistent. As proposed the language is confusing and not clear how it would be implemented. This section should be revised to speak only to emission units.

Response: SRCAA #8 & SWCAA #7

WAC 173-400-110(5) is divided into three subparagraphs (a), (b) and (c). Subparagraph (c) is the Exemption Table. Subparagraph (a) says that an emissions unit is exempt from New Source Review if the unit is below the emissions limit set in subparagraph (c). Subparagraph (b) is the procedural requirements when one determines that the emissions unit under consideration is exempted under subparagraph (c). In subparagraph (b) the word "project" refers to the steps that a source takes to modify or build a new emissions unit. Both subparagraphs refer to a single emissions unit.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4) and WAC 173-460-030

Comment: USDOE #4

The proposed rule language will expand the potential applicability of the new source review (NSR) process to all new or modified toxic air pollutant (TAP) sources instead of the select list of source types currently identified in WAC 173-460-030. Under the proposed rule language, exclusion of new or modified sources from the NSR process will rely exclusively on the exemption criteria in WAC 173-400-110(4) and (5). Since the emission threshold criteria provided in -110(5) are conservatively low, it is important that the listed categorical exemptions in -110(4) adequately represent the entire spectrum of emission sources (including TAPs) for which submittal of a notice of construction (NOC) application is not justified.

The current list of exemptions was developed over ten years ago and was not originally intended for use in conducting NSR evaluations of TAP sources. The exemption list has only undergone minor changes since its initial issuance and no significant changes have been proposed as part of this rule revision effort to reflect its proposed expanded use. A comprehensive evaluation must be performed to ensure WAC 173-400-110(4) identifies sufficient exemptions to effectively serve its proposed expanded function.

Provide a public involvement opportunity to comprehensively identify and update the list of categorical NSR exemptions in WAC 173-400-110(4) to reflect all types of emission sources that are appropriate for inclusion.

As an initial step, revise the categorical NSR exemption rule language in WAC 173-400-110(4) to read as follows:

(a) Maintenance/Construction/Demolition
(i) …

(v) ~~Plant~~ ~~m~~Maintenance and upkeep activities (grounds keeping, ~~general~~ repairs, ~~routine~~ housekeeping, remodeling, ~~routine plant~~ painting, welding, cutting, drilling, machining, grinding, brazing, soldering, plumbing, retarring roofs, etc.);
(xii) Drilling wells;
(xiii) Excavation.

(e) Water Treatment:
(i)…(ix) Drinking water treatment facilities;
(x) Sewage lagoons.

(g) Monitoring/quality assurance/testing:
(i)…(iii) Sample gathering, preparation and management, including actions required to obtain access to samples;
(iv) Vents from ~~continuous~~ emission monitors and other analyzers, and calibration/instrument checks of these instruments.

(h) Miscellaneous:
(i)…(xii) Vehicle or equipment (e.g. mowers, trimmers, etc.) maintenance or repair activities, not including vehicle surface coating;
(xli) Office activities and use of office products;
(xlii) The use of consumer products packaged and typically sold for use by the general public;
(xliii) Training and education activities;
(xliv) Process vents subject to 40 CFR 264 Subpart AA or 40 CFR 265 Subpart AA.

Response: USDOE #4

Thank you for the comprehensive review of the rule language.

These suggestions present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language.

We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(a)

Comment: USDOE #5

The existing rule language in WAC 173-400-110(4)(a) identifies a number of various maintenance and construction activities that are categorically exempt from new source review (NSR) and the requirement to submit a notice of construction (NOC) application. Historically, informal Ecology guidance has indicated that construction activities, in general, are exempt from NSR unless directly related to the establishment or modification of a new air emissions source. This approach is reasonable and relies on the general emission standards of WAC 173-400-040 to adequately control these types of fugitive emission sources.

However, Ecology has not provided definitive formal guidance that the NSR exemption is generally applicable to maintenance and construction activities as represented by the listed activities, or whether it is strictly limited to those specific activities listed in WAC 173-400-110(4)(a).

Provide clarification and guidance that construction activities, in general, are exempt from NSR provided they are not related to the establishment of a new or modified air emission source; and that the list of maintenance/construction activities in WAC 173-400-110(4)(a) is intended to be representative, not limiting.

OR

If the list of maintenance/construction activities in WAC 173-400-110(4)(a) is intended to be limiting, not representative, provide a public involvement opportunity to revise the list to more specifically address all maintenance, construction or demolition activities that should be exempt from the NSR process.

Response: USDOE #5

Ecology did not propose to change WAC 173-400-110(4)(a) in this rule making. The suggestions present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language.

Ecology is willing to consider and discuss your suggestions with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(c)

Comment: USDOE #6

A strict reading and sequential evaluation of the existing rule language appears to create a situation where a proposed project meeting the criteria in sub-sections (iv) and (v) would not qualify for the exemption because it does not also meet the more general and restrictive criteria in (i) and the introductory language requires a proposed project to meet all criteria in (i) through (v). For example, a project with natural gas (<0.5% sulfur content) fired combustion units totaling 3 million Btu/hr would qualify under (v), but could not meet the criteria in (i) for fuels other than coal with <0.5% sulfur content. Since not all exemption criteria are met, the proposed project would not qualify for the exemption. This result is not consistent with Ecology's field implementation and interpretation, or the intention to group and evaluate combustion units by specific fuel type.

Revise and clarify the existing rule language in WAC 173-400-110(4)(c)(i) to read as follows:

- *≤500,000 Btu/hr using coal with ≤0.5% sulfur or other fuels with ≤0.5% sulfur not specifically identified in (c)(ii) through (c)(v) or*
- Issue clear implementation guidance that will assist the regulated community in consistently evaluating proposed projects for applicability of these exemption criteria.

Response: USDOE #6

This suggestion presents a concept that is substantially different from the rule language published in the rule adoption notice. If Ecology made this change now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revision into the rule language.

Ecology believes this issue can be better addressed through guidance. We intend to provide such formal guidance in the future.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(c)

Comment: USDOE #7

Evaluation of a proposed project to determine if it qualifies for this exemption should exclude any emergency engines that independently qualify for the new proposed exemption in 173-400-110(4)(h)(xxxix). Otherwise, a source (i.e. the emergency engine) that Ecology has already determined should be exempt from new source review could be the sole reason a proposed project becomes subject to new source review.

Revise the existing rule language in WAC 173-400-110(4)(c) to read as follows:

- *A project with combined aggregate heat inputs of combustion units [excluding emergency engines exempted by (4)(h)(xxxix) of this section], ≤ all the following:*

Response: USDOE #7

Thank you for pointing out this oversight. Ecology modified the text in response to this comment.

WAC 173-400-110(4)(c)

Comment: USDOE #8

The existing rule language would require proposed projects using new clean fuels such as hydrogen or biodiesel to be evaluated for potential new source review (NSR) categorical exemptions using the more restrictive criteria in WAC 173-400-110(c)(i) since these fuel types are not specified elsewhere in this section of the regulations. Biodiesel and hydrogen fuel would more appropriately be considered under the exemptions in 173-400-110(c)(iv) and (v), respectively, with the other similar fuel types.

Revise the rule language in WAC 173-400-110(4)(c)(iv) and (v) to read as follows:

- *<1,000,000 Btu/hr using biodiesel, kerosene, #1, or #2 fuel oil and with ≤0.05% sulfur;*
- *≤ 4,000,000 Btu/hr using hydrogen, natural gas, propane or LPG.*

Response: USDOE #8

Ecology does not agree that this exemption should be incorporated into the rule. The impact of biodiesel on air quality is an important topic to the department.

Ecology has not fully analyzed the literature that addresses the air quality impacts of the array of biodiesel and biodiesel blends. The use of biodiesel will remain subject to NSR. On the issue of using hydrogen as a fuel, regulation is not needed, unless the emissions of nitrogen oxides are high enough to trigger NSR.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(h)(xxxix)

Comment: USDOE #9

Emergency generators are frequently installed as part of a package that includes dedicated fuel tanks. Any such tanks with greater than 260 gallons capacity would not qualify for the exemptions found in WAC 173-400-110(4)(b) due to the presence of toxic air pollutant constituents in most fuels (including both gasoline and diesel). Providing a new exemption for emergency generators without adequately capturing the accompanying fuel tank will constrain practical usefulness of the exemption. The proposed exemption language should be revised to clarify that fuel tanks installed as part of an emergency generator package are also exempt.

Revise the proposed rule language in WAC 173-400-110(4)(h)(xxxix) to read as follows:

- *Emergency generators (including dedicated fuel tanks) powered by internal combustion engines…*

Response: USDOE #9

Ecology understands the concern, but also recognizes that fuel tanks are commonly used for more than one emissions unit. Emissions from a diesel fired emergency generator are different from those of a diesel fuel tank. Emissions from a diesel fired emergency generator are combustion products, containing a variety of air toxics and criteria pollutants. Emissions from a diesel tank would be a result of volatization of the diesel fuel, and while harmful in nature, not of the same significance as combustion emissions. Further, the vapor pressure of a small diesel fuel tank is low, resulting in a very small emission rate that would not require permitting on its own merits.

Ecology did not change the text in response to this comment.

WAC 173-400-110(4)(h)(xl)

Comment: USDOE #10

The proposed rule language should be expanded to ensure that diesel fuel operations similar to those regulated in WAC 173-491 for gasoline operations are also exempted from the new source review (NSR) process. Diesel fuel has a lower volatility than gasoline, resulting in a much lower potential for emissions from management processes. Therefore, it does not make sense to grant an exemption for gasoline fuel operations, but not diesel fuel operations, simply because they are not regulated by WAC 173-491.

Revise the rule language in proposed WAC 173-400-110(4)(h)(xl) to read as follows:

- *Gasoline marketing operations regulated by chapter 173-491 WAC, and similar diesel fuel marketing operations;*

Response: USDOE #10

Ecology agrees that volatile organic compound emissions from diesel dispensing facilities are much lower than those from a gasoline dispensing facility. Usually these emissions will be low enough to qualify as *de minimis* under WAC 173-400-110(5). Further, while gasoline dispensing facilities are exempted from NSR, they are subject to a separate regulatory scheme under Chapter 173-491 WAC. This regulation does not include diesel fuel operations. For these reasons Ecology does not believe it is appropriate to add "diesel fuel marketing operations" to the proposed exemption WAC 173-400-110(4)(h)(xl).

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)

Comment: ORCAA #2

The initial New Source Review (NSR) applicability trigger in WAC 173-400-110 requires a NOC application be filed and an order of approval issued prior to beginning construction of any "new source". However, the section providing exemptions based on emissions under WAC 173-400-110(5) applies to "emissions units." Is there a difference between "emissions units" and "new sources" requiring that WAC 173-400-110(5) apply specifically to "emissions units"? Even though "emissions unit" is defined in Chapter 173-400 as any portion of a stationary source or source, the term implies a physical piece of equipment and could be interpreted as ruling out new sources involving only operational changes or changes in raw materials or raw material formulations.

Unless there is a difference between “stationary source” and “emissions unit” and Ecology’s intent is to limit the emissions exemption to just the subset of new sources that are emissions units, why not be consistent and use the term “new source’ in place of “emissions unit” for this exemption?

Response: ORCAA #2

The commenter raises a very good question. The terms “emissions unit,” “source,” and “stationary source” all have specific meanings in Washington state statute and regulations. This topic deserves a thorough discussion with more parties involved that just Ecology and EPA staff. Ecology is willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

These suggestions also present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language.

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)

Comment: ORCAA #3

WAC 173-400-110(5) requires an owner/operator seeking to exempt a project from new source review based on emissions to notify the authority and, upon request, file a brief project summary with the permitting authority prior to beginning actual construction on the project. The permitting authority is then charged with reviewing the notice or brief project description and may require the filing of a NOC. The owner/operator may begin actual construction on the project thirty-one days after the permitting authority receives the summary, unless the permitting authority notifies the owner/operator (within 31 days) that a NOC is required. There are several problems with this section.

According to WAC 173-400-110(5)(b) the owner/operator is required to submit a notice, but a project summary is only required to be submitted if requested by the permitting authority. This is a problem since subsection (c) of the section bases the date construction may begin relative to when the permitting authority receives the summary, not the notice. Also, a simple notice will not likely provide any information

from which a permitting authority can base a decision regarding whether a NOC should be required.

Since compiling a “brief project summary” is not significantly more work than compiling a “notice,” it would be better to simply require the brief project summary along with the notice. This would significantly simplify the exemption provision by reducing it from a potential two-step process (notice followed by summary) to a single step process (notice plus summary).

WAC 173-400-110(5)(b) also provides that if the permitting authority determines the project will have more than a de minimis impact on air quality, the permitting authority may require the filing of a NOC application. However, determining impacts on air quality requires at least knowing emission rates and, often, use of an air dispersion model.

Since the primary purpose of the exemption under subsection (5) is to exempt projects with emission rates below thresholds already determined to be de minimis, it would be better, and less confusing, to simply verify that a project qualifies for the emission rate exemption rather than assessing air quality impacts.

This end can be accomplished by requiring the summary submitted by the owner/operator to demonstrate that emissions increases are less than the de minimis thresholds, and changing the goal of the permitting authority’s review of a summary to verifying emission increases are below the de minimis thresholds. In this way the exemption criteria and the permitting authority’s task in reviewing a notice/summary both focus on emissions compared to the de minimis thresholds and are, therefore, consistent with each other.

Lastly, ORCAA’s experience implementing minor NSR is that many owner/operators take issue with regulations that require unnecessary waiting on minimum notification periods to expire or permits to be issued before they can begin construction, installation or establishment of a new source. The emissions based exemption under WAC 173-400-110(5) as currently proposed has the potential to result in unnecessary waiting periods since subsection (c) only offers two possible pathways before construction, installation or establishment can begin: 1) Wait 31 days after a permitting authority receives the summary; and, 2) Submit a NOC and complete this process in its entirety. Since these are the only options provided under section (c), the minimum time period before construction can begin reduces to 31 days. This timeframe seems out-of-proportion with the standard NOC process considering that a NOC application can be reviewed, approved and an Order of Approval issued in a much shorter timeframe for many source categories.

Since the absolute minimum amount of time a NOC application can be reviewed and approved is 15 plus one days (the amount of time for application noticing plus one

day for processing), it seems reasonable that small sources with de minimis emissions be afforded a similar timeframe in subsection (c). It also seems reasonable that this timeframe be applied as a maximum rather than a minimum.

Also, it seems more important that the permitting authority review and concur with the owner/operators claim that the exemption applies rather than waiting for the minimum notification time period to expire. If an authority reviews a notice/summary and concurs with the owner/operators claim that emissions are less than the de minimis thresholds for all pollutants it seems reasonable that construction, installation or establishment be allowed to commence regardless of whether or not the minimum time period has expired.

ORCAA edits in *italics.* WAC 173-400-110 **New Source Review (NSR)...**

(5) **Exemptions based on emissions.**

(a) Except as provided in subsections (2) of this section and in this subsection:

(i) Construction of a new *((~~emissions unit~~))source* that has a potential to emit below each of the levels listed in the table contained in (d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(ii) A modification to an existing *((~~emissions unit~~))stationary source* that increases the unit's actual emissions by less than each of the threshold levels listed in the table contained in (d) of this subsection is exempt from new source review provided that the conditions of (b) of this subsection are met.

(b) The owner or operator seeking to exempt a project from new source review under this section ((~~shall~~)) must notify*((~~, and upon request,~~)) and* file a brief project summary with the permitting authority prior to beginning actual construction on the project. If the permitting authority determines that the project will have more than a de ((~~minimus~~)) minimis emission rate increase ((~~impact on air quality~~)), the permitting authority *shall notify the owner/operator within fifteen days from receipt of the notice and summary that ((~~may require the filing of~~))* a notice of construction application *and approval by the authority* is required *prior to construction*. The *brief project summary* ((~~permitting authority may require the owner or operator to~~)) *shall* demonstrate that *((the emissions increase))emission increases* from the new or modified *((~~emission((s)) unit is~~))stationary source are* smaller than all of the levels listed below.

(c) The owner/operator may begin actual construction on the project *upon notification from the permitting authority or ((~~thirty-one~~))fifteen* days after the permitting authority receives the summary, unless the permitting authority notifies the owner/operator within *((~~thirty~~))fifteen* days that the proposed new source requires a notice of construction application.

Response: ORCAA #3

The suggestions present concepts that are substantially different from the rule language published in the rule adoption notice. If Ecology made these changes now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revisions into the rule language.

Ecology is willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)

Comment: USDOE #11

In accordance with Section 70.94.152(1) of the Revised Code of Washington (RCW), a permitting authority may "require notice of the establishment of any new sources except (emphasis added) single family and duplex dwelling or *de minimis new sources as defined in rules adopted under subsection (11) of this section* (emphasis added)." Other language in RCW 70.94.152 differentiates between the referenced notice of establishment and a notice of construction application for a new or modified source. This distinction clearly indicates that the legislature did not intend the statutory language of RC W 70.94.152 to exempt de minimis sources solely from the requirement to submit a notice of construction application (as asserted by Ecology's January 2006 CR-101 published as WSR 06-03-135), but instead, from all notifications to the permitting authority.

The legislature recognized that de minimis emissions posed little or no threat to human health or the environment, and therefore, determined there are no commensurate benefits in requiring notification of establishment of such sources to the permitting authority. This is reinforced by the fact that Ecology is proposing to establish de minimis emission thresholds at a fraction (5%) of the level (i.e. SQER) it has already determined is adequately protective of human health and the environment.

Revise the rule language in WAC 173-400-110(5) to reflect the following changes:

- Deletion of paragraph (5)(b) and the requirement to submit a notification to the permitting authority prior to establishment of a new/modified source with emissions below the de minimis thresholds;
- Deletion of paragraph (5)(c) and the requirement to wait 31 days following submittal of the notification before beginning construction on a new/modified source with emissions below the de minimis thresholds;
- Revision of paragraph (5)(a) to reflect the elimination of paragraphs (5)(b) and (5)(c); and
- Addition of a requirement that the owner/operator of a new/modified source with emissions below the de minimis thresholds maintain records supporting the exemption determination.

Response: USDOE #11

RCW 70.94.152 says that Ecology may exempt *de minimis* sources from a notice of establishment. But the word "may" indicates that the exemption is not mandatory. The policy choice to require the notice of establishment is one that was made during the 1996 rulemaking that established *de minimis.* The current process gives Ecology adequate review time to review projects. Ecology believes this review is necessary to ensure that ambient air quality is protected.

This suggestion also presents a concept that is substantially different from the rule language published in the rule adoption notice. If Ecology made this change now, we would be required to either reopen the proceedings for public comment or withdraw the proposed rule and start a new rule-making process as required by the Administrative Procedures Act, RCW 34.05.340. Therefore, we are not incorporating the proposed revision into the rule language.

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)

Comment: USDOE #12

If Ecology can demonstrate that the permitting authority has statutory authority to require submittal of a proposed exemption notification, and if Ecology continues to believe such notification has practical value, then the notification process should be revised to consist of one step (submittal of project summary with required information) instead of two (submittal of notification and then the requested project summary), especially since the subsequent required waiting period is triggered by submittal of the project summary, not the initial notification.

Revise the rule language in WAC 173-400-110(5) to create a streamlined one-step process that includes submittal of the project summary as part of the initial exemption notification, allows the notification to be made verbally or via email, and gives the permitting authority the flexibility to provide an immediate response to either proceed with the project or request additional information.

Response: USDOE #12

This proposal to look at the permit process is outside the scope of the current rule making process, AO #05-91. When this rule making process began in January 2006, Ecology stated that WAC 173-400-110 was opened so that "Applicability should be harmonized between the two chapters." The discussions with the Stakeholder Committee were kept to that defined construct and did not delve this deeply into the permit process. This proposal goes beyond the concepts that were discussed with the larger committee. However, this topic is already being discussed as part of the 2009 work plan for the Chapter 173-400 WAC rule revision. We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-400-110(5)(d) and WAC 173-460-150

Comment: USDOE #13

The proposed rule language in WAC 173-460-150 contains de minimis thresholds for four toxic air pollutants that appear to be inconsistent with existing de minimis thresholds for the same criteria pollutants listed in WAC 173-400-110(5)(d). These inconsistencies will make it more difficult to accurately evaluate and determine when a new or modified source is exempt from new source review and the need to submit a notice of construction application. The table below illustrates the issue.

Comparison of de minimis threshold values		
Pollutant	*Existing WAC 173-400-110(5)(d)*	*Proposed WAC 173-460-150*
NO_x/NO_2	2 tons/year (tpy)	0.23 tpy (0.0515 lbs/hr)
CO	5 tpy	11 tpy (2.52 lbs/hr)
SO_x/SO_2	2 tpy	0.001 tpy (0.0073 lbs/24-hr)
Lead	0.005 tpy	0.0004 tpy (0.799 lbs/yr)

**Tons/year equivalent threshold values for WAC 173-460-150 calculated from proposed de minimis values shown in parenthesis.

Review the proposed de minimis threshold values and revise either the existing or proposed rule language, as appropriate, to eliminate the inconsistencies.

Response: USDOE #13

The commenter is correct. The four toxic air pollutants nitrogen dioxide (NO_2), sulfur dioxide (SO_2), carbon monoxide (CO), and lead (Pb) are also criteria pollutants and are regulated under Chapter 173-400 WAC. Following the procedure established for the other toxic air pollutants, most projects with a combustion component would not qualify for the *de minimis* exemption. This is contrary to Ecology's intent to provide a *de minimis* level to emission rates under Chapter 173-400 WAC. Ecology has therefore determined that a single *de minimis* value apply under both Chapter 173-400 WAC and Chapter 173-460 WAC.

Ecology retained the existing WAC 173-400-110(5) *de minimis* rates for nitrogen dioxide, sulfur dioxide, carbon monoxide and lead. Sources must demonstrate that these emissions do not exceed respective ASILs.

In addition, the sulfur dioxide ASIL previously based on ATSDRs acute MRL will be based on California OEHHAs Acute REL. Although the MRL was established more recently than the REL, Ecology determined that the REL was more appropriate for addressing acute health impacts related to SO_2 exposure. Using the REL is also consistent with the treatment of the other criteria pollutant ASILs subject to this rule, which are also based on OEHHA's data.

The new toxic air pollutant table will look like the following:

Common Name	**CAS #**	**Averaging Period**	**ASIL (µg/m^3)**	**SQER (lb/ averaging period)**	***De Minimis*** **(lb/averaging period)**
Nitrogen dioxide	10102-44-0	1-hr	470	1.03	~~0.0515~~ 0.457
Carbon monoxide	630-08-0	1-hr	23000	50.4	~~2.52~~ 1.14
Sulfur dioxide	7446-09-05	~~24-hr~~ 1-hr	~~26.7~~ 660	~~0.146~~ 1.45	~~0.0073~~ 0.457
Lead and compounds (NOS)		year	0.0833	16	~~0.799~~ 10

Ecology modified the text in response to this comment.

WAC 173-400-110(5)(d) and WAC 173-460-150

Comment: USDOE #14

The proposed rule language in WAC 173-460-150 contains de minimis threshold values for a significant number of toxic air pollutants (TAPs) that are considered volatile organic compounds (VOCs). The rule language in WAC 173-400-110(5)(d) contains a de minimis threshold value for total VOCs. No guidance is provided on whether meeting the total VOC threshold is sufficient to satisfy the individual compounds threshold values, or vice versa.

Provide clarification and guidance on the intended use of de minimis threshold values for VOCs, both as a total value and for each individual TAP. The guidance should include information on when use of a total VOC quantity is appropriate, without the need to evaluate individual TAPs. Revise the rule language to address this issue, as appropriate.

Response: USDOE #14

Since VOC's are a criteria pollutant, all projects must quantify the specific species of volatile chemicals and total VOC's. The *de minimis* value for VOC is not intended to be a substitute for an evaluation of each TAP that would be considered volatile because the criteria pollutant (VOC) is a precursor for ozone formation. It does not consider the toxicity of each TAP.

If emission factors exist, then both the VOC's and the specific toxic air pollutants that are volatile can be quantified and evaluated against the numbers contained in the rule. If no emission factors exist then just total VOC's are evaluated. If a project consists only of emissions of VOC's and if the elements of the VOC's can be quantified, then the project would be exempt from NSR if both the VOC and each quantifiable TAP are below their individual *de minims* levels.

Ecology did not change language in response to this comment.

WAC 173-400-110(7)(a)

Comment: USDOE #15

The text does not clearly convey the intended timeline that final determination on a submitted notice of construction application must be accomplished within 60 days of the permitting authority determining that the application is complete, not within 60 days of initial receipt of an application that is subsequently determined to be complete without additional information.

Revise the rule language to read as follows:

- *Within sixty days of determining that ~~receipt of~~ a ~~complete~~ notice of construction application is complete, the permitting authority must either…*

Response: USDOE #15

When Ecology is reviewing an application for completeness, we often request additional information from the applicant. We issue a final determination or initiate public comment based on the complete application, not the submittal of an application. In addition, this language comes directly from the Washington State Clean Air Act. See RCW 70.94.152(9).

Ecology did not change the text in response to this comment.

Chapter 173-460 WAC Comments

Comment: SWCAA #8 & SRCAA #9

Since the determination of emissions from a new or existing source are based on the sources uncontrolled potential-to-emit, where applicable, the term "emissions" should be changed to "potential emissions". This informs the applicant that he must base his request for exemption from chapter 173-460 WAC on potential emissions and not actual emissions. The term "emissions" should be changed to "potential emissions".

Response: SWCAA #8 & SRCAA #9

The term "emission" is defined in the Washington State Clean Air Act and Chapter 173-400 WAC. It can mean many different things, including an "air contaminant" as stated in the definition. Some of the possibilities include potential emissions, allowable emissions or actual emissions. Each could be calculated differently and could have a different meaning. Ecology does not believe it appropriate to limit all emission discussions to the potential to emit.

Ecology did not change the text in response to this comment.

WAC 173-460-020

Comment: USDOE #16

Words and phrases have general dictionary or common usage meanings, but in regulations some have specific meanings that can be substantively different.

Identify words in the body of the regulation (e.g. with bold, italicized, underlined, bracketed, or in some other way) where they are intended to be interpreted as defined in the regulation.

Response: USDOE #16

Ecology has done this in the past. In 2003, we bolded defined terms throughout Chapter 173-400 WAC. Since then, Ecology has decided that the bolded text made the regulation visually confusing. Bold text is used to denote sections or paragraph titles.

Ecology did not change the text in response to this comment.

WAC 173-460-020(4)

Comment: USDOE #17

The use of the word "trivial" in the proposed definition of "de minimis" is unnecessary to convey the intended meaning and creates ambiguity since it has not been defined. The definition also needs to clarify that it applies to the incremental increase in emissions. Finally, the definition should reflect that threshold values have been determined to not pose a threat (based on a specific evaluation process), not that they do not pose a threat, which makes a much broader claim.

Revise the proposed definition of "de minimis" as follows:

- *"De minimis emissions" means ~~trivial~~ levels of emissions or increases of emissions that have been determined to ~~do~~ not pose a threat to human health or the environment. The de minimis threshold values are listed in WAC 173-460-150.*

Response: USDOE #17

The use of "trivial" in the definition of "*de minimis*" will be retained because it is copied from RCW 70.94.152(12).

Ecology did not change the text in response to this comment.

WAC 173-460-020(8)

Comment: USDOE #18

The proposed definition of “Toxic air pollutant (TAP)” is reasonable and represents an improvement over the previous definition. However, it is inconsistent with the WAC 173-400-030(88) definition for the same term.
Revise the definition of “toxic air pollutant” found in WAC 173-400-030(88) to be consistent with the proposed definition in WAC 173-460-020(8).

Response: USDOE #18

Thank you for identifying a change that would increase the consistency. We are not able to make this change now, as this rule making process did not open WAC 173-400-030 for revision.

We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-460-030

Comment: People for Puget Sound #6

A large number of emission types are exempted in the rule. We believe that many of these should be revisited.

Response: People for Puget Sound #6

Your comment is correct, there is a long list of exemptions in WAC 173-400-110(4). The vast majority of these were developed in the 1996 rule making. In the current rule making Ecology proposes to move the exemptions previously found in WAC 173-460-030 into Chapter 173-400 WAC. Ecology’s goal was to consolidate the permit process requirements for the Notice of Construction. We consolidated the requirements as Chapter 173-460 WAC takes much of its authority from Chapter 173-400 WAC. The interdependence between the two rules is made clear when all of the exemptions are located in Chapter 173-400 WAC. We are willing to consider and discuss your suggestion with the new rule advisory committee that is working with us on the upcoming changes to Chapter 173-400 WAC.

Ecology did not change the text in response to this comment.

WAC 173-460-040(3)(a)

Comment: USDOE #19

The phrase “likely to increase” is ambiguous since the word “likely” has not been defined and is not used elsewhere in the proposed rule. Proposed rule language should more accurately reflect that the requirement to use tBACT is for those toxic air pollutants with increased emissions that trigger the need to prepare and submit a notice of construction application.

Revise the proposed rule language to read as follows:

- *The new or modified emission units use tBACT for emissions control for the toxic air pollutants with emission increases that trigger the need to submit a notice of construction application ~~which are likely to increase~~; and*

Response: USDOE #19

Thank you for this edit. Ecology modified the text in response to this comment.

WAC 173-460-040(3)(b)

Comment: SWCAA #9 & SRCAA #10

Under WAC 173-460-040(3)(b) the text cites “the project complies with …” where the rest of the rule language speaks to an emission unit. The language indicates that the project must comply with WAC 173-460-070 which is the ambient impact requirements. WAC 173-460-070 does not use the word project; it refers to emission unit. The reference to project in WAC 173-460-040(3)(b) should be changed to emission unit.

Response: SWCAA #9 & SRCAA #10

The commenter’s are correct, WAC 173-460-040(3)(b) does refer to a project, where the rest of WAC 173-460-040 refers to emissions unit. Thank you for this edit.

Ecology modified the text in response to this comment.

The revised language reads:

(b) The new or modified emission units comply with WAC 173-460-070 as demonstrated by using the procedures established in WAC 173-460-080 or, failing that, demonstrates compliance by using the additional procedures in WAC 173-460-090 and/or 173-460-100.

WAC 173-460-050(2)

Comment: USDOE #20

The proposed rule language in the final sentence of this subsection does not adequately convey that it is the increase in emissions that must be less than the SQER, not the total emissions.

Revise the proposed rule language to read as follows:

- *The quantification must contain sufficient detail to demonstrate to the satisfaction of the permitting authority that the increase in emissions is ~~are~~ less than the applicable small quantity emission rates listed in WAC 173-460-150.*

Response: USDOE #20

Ecology accepts the proposed change from "are" to "is". The verb refers to "increase," not "emissions."

Ecology modified the text in response to this comment.

WAC 173-460-050(2), -080(a) & (b), and -090(2)(d)

Comment: USDOE #21

Use of the word "aggregate" in the proposed rule language with respect to increased emissions is confusing and inconsistent with language proposed in other sections of the revised regulation, especially since it is not clear what is being aggregated. Simply referring to "increased emissions" is sufficient to convey the desired regulatory meaning/criteria.

Revise the proposed rule language in the respective four citations to read as follows:

- *A notice of construction application that relies on SQERs rather than dispersion modeling to demonstrate compliance with WAC 173-460-070 must quantify the ~~aggregate~~ increase in emissions of each TAP emitted by the new or modified emission units after application of tBACT.*
- *The applicant who relies on dispersion modeling must model the ~~aggregate~~ increase in the emissions of each TAP emitted by the new or modified emission units, after application of tBACT. The notice of construction application must demonstrate that the modeled ambient impact of the*

~~aggregate~~ emissions increase of each TAP does not exceed the ASIL for that TAP as listed in WAC 173-460-150.

- *An applicant may show for any TAP that the ~~aggregate~~ increase in emissions of that TAP, after application of tBACT, is less than the small quantity emission rate listed for that TAP in WAC 173-460-150.*
- *The ambient impact of the ~~aggregate~~ emissions increase of each TAP that exceeds acceptable source impact levels has been quantified using refined air dispersion modeling techniques as approved in the health impact assessment protocol;*

Response: USDOE #21

The commenter is correct; the use of the word "aggregate" is redundant. Thank you for this edit.

Ecology modified the text in response to this comment.

WAC 173-460-060(2)

Comment: SWCAA #10 & SRCAA #11

Under WAC 173-460-060(2) Ecology is proposing to exempt TAP emission increases from fugitive sources such as coal piles, waste piles and fuel and ash handling operations. These sources can, by nature, be highly concentrated sources of toxics with a high degree of transportability via the wind. T-BACT for many of the fugitive sources can be as minimal as applying water sprays or other similar actions that are very cost effective and have reasonably high control efficiency. There does not appear to be a basis for this exemption that would justify exempting a toxic substance from review and reasonable controls for protection of public health. This entire subsection should be removed.

Response: SWCAA #10 & SRCAA #11

The language exempting construction and demolition site, roads, coal and waste piles from tBACT is in the current rule. See WAC 173-460-030(2)(b). The retention of this exemption is not a change in policy, and Ecology does not believe a change in such policy is appropriate during this rule revision. Retaining this exemption does not affect a permitting authority's ability to control dust.

Ecology did not change the text in response to this comment.

WAC 173-460-070

Comment: SRCAA #12 & SWCAA #11

Under WAC 173-460-070 “Ambient impact requirement” an application must demonstrate that the increases in toxic emissions are sufficiently low to protect human health and safety from potential carcinogenic and/or other toxic effects. There is no specific criterion in this section as to what “sufficiently low” means. In addition, there is no consideration for combined health risk from multiple pollutants. For example, a source may emit four different carcinogenic toxic pollutants that individually modeled out to meet the ASIL, however, by combing[sic] these pollutants, the increased health risk could exceed an increased cancer risk of greater than one in a million, or greater, which has generally been the target threshold. This is allowed under the rule as written and is not sufficiently protective. This section should be modified to provide additional detail as to what is “sufficiently low” and address the impacts of multiple pollutants.

Response: SRCAA #12 & SWCAA #11

This comment asks how an applicant can demonstrate that toxic emissions are “sufficiently low to protect human health and safety.” This subsection requires application of control technology in compliance with WAC 173-400-060 and then, if necessary, submittal of a first, second, or third tier review as codified in WAC 173-460-080, 090 and 100. These reviews use several methods to demonstrate “sufficiently low” emissions. Emissions that are below *de minimis* or below the ASIL are sufficiently low to protect human health. If these emission thresholds are exceeded then a Health Impact Analysis (HIA) must be completed as part of second or third tier review.

The crux of the issue is the question, “What constitutes sufficiently low once the new or modified emissions exceed the ASIL levels?” This requirement is analyzed in the Health Impact Assessment and is met when the increased cancer risk does not exceed 1:100,000 and if the hazard quotient or hazard index does not exceed 1.

The Health Impact Analysis also addresses the impacts of multiple pollutants, the second main point of this comment. Ecology believes it has set the ASILs sufficiently low to protect human health and safety. Since an ASIL is a trigger level and not an ambient standard there is no way to quantify the risks associated with more than one carcinogenic pollutant in a first tier review. A first tier review does not evaluate the impacts from multiple pollutants. The risk from multiple pollutants is quantified and evaluated after a project has triggered second or third tier review. During a second or third tier analysis the additive risks for multiple pollutants with the same target organ or organ system are considered.

Ecology did not change the text in response to this comment.

WAC 173-460-080

Comment: USDOE #22

Subsection 173-460-080(2) is missing from the proposed rule language.
Insert subsection (2) designator at the appropriate location, or renumber subsequent subsections (3) and (4), as applicable.

Response: USDOE #22

The strike out/underline editing method can be confusing. Paragraph 460-080(2) starts on the top of page 13 of 32 in the PDF format file as is posted on the Ecology web site with the number "(2)". The text of this paragraph re-starts on page 14 of 32. This paragraph reads: (2) The acceptable source impact analysis requirement of WAC 173-460-070 can be satisfied for any TAP using either dispersion modeling or the small quantity emission rate.

Ecology did not change the text in response to this comment.

WAC 173-460-080(3)

Comment: SRCAA #13 & SWCAA #12

Voluntary Limits on Emissions. SRCAA/SWCAA supports the concept of some type of offsetting provision for TAPs, however the proposed language in this section only requires that the applicant demonstrate a benefit to the receptors. What is a "benefit" - how is this defined? The only time this clause would be needed is when an applicant proposed a new or modified emission unit that has an increase above the ASIL. Reducing that TAP from a secondary source on that plant site or a different plant site still does not bring the source into compliance with the ASIL for the new or modified emission unit. This activity could only happen under a second tier review.

This language is out of context in this location and the acceptable criteria that must be met are not clearly delineated. This section needs substantial clarification. For this to be a viable section, there needs to be language similar to the non-attainment provisions under chapter 173-400 WAC and there should be offsetting of greater than 1:1 such as 1.5:1 in order for there to be a health benefit. Why should the public suffer the exposure to a toxic because a company wants to expand with potential cancer risks greater than 1 in a million?

Response: SRCAA #13 & SWCAA #12

The offsetting provisions are different for first tier review than for second tier review. In first tier, the section that this comment addresses, the actual reduction of a particular TAP must come from emission units at the source where the new or modified emission unit is located. This is an alternate provision that may be implemented to meet the regulatory requirements.

An applicant must meet several criteria in order to get the emission offsetting option approved:

- the emission reductions must be actual reductions based on the previous 24 months' emissions;
- the reductions must be modeled against all impacted/affected receptors; and
- the modeling must demonstrate that the off-set proposal results in emission values lower than the ASIL when the emission increases and reductions are modeled together at the receptor.

Ecology has prepared a guidance document that explains in detail how this section is applied. That guidance will be published along with this responsiveness summary.

Ecology did not change the text in response to this comment.

WAC 173-460-090

Comment: People for Puget Sound #3

We are concerned that the rules protect public health and that full information about each facility will be available to the public. Under the revised rule, the public is not able to get a full list of all of the toxic chemicals that are emitted by a facility. It is concerning to see in the notes that "the list of information that the applicant must submit had been reduced considerably from the much longer original list of items that the toxicologist recommended." Again, the public will not be able to fully understand the toxic load implications from each facility.

Response: People for Puget Sound #3

The Washington Clean Air Act, Chapter 70.94 RCW, limits our review of new or modified sources to proposed increases in emissions. This process is called New Source Review (NSR). Only those facilities that trigger NSR can be evaluated under this regulation. Further, this regulation was never intended to provide a list of all toxic substances emitted by a facility. Instead, it requires that the permitting authority evaluate the risk for any new or modified TAP source with emission levels above the specified ASIL. When a facility triggers a second tier analysis, the

applicant must identify all TAPs that are increasing because of the project, and assess the health risks associated with the increase that triggered application of the rule. A public comment period is required for all second tier reviews.

Ecology did not change the text in response to this comment.

WAC 173-460-090

Comment: People for Puget Sound #4

Cumulative impacts are not considered. The rule focuses on a chemical-by-chemical approach that does not consider the interactions of chemicals. In addition, the rule focuses on ASIL for each facility and does not consider other nearby emissions. Further, unless we are misreading: "Health impact assessment (HIA) protocol. The HIA presents data about the new or modified source and its built environment. A HIS (sic) includes but is not limited to: Site description, TAP concentrations and toxicity, identification of exposed populations and an exposure assessment. The HIA protocol must be reviewed and approved by ecology prior to development of the HIA." It appears that even the HIAs do not include cumulative impacts.

Response: People for Puget Sound #4

Cumulative impacts are not considered during the ASIL determination for new or modified emissions. This is because ASILs are threshold levels, not regulatory limits or ambient standards. If the proposed increased emissions are above the ASIL for a specific toxic air pollutant, then a second tier review is triggered.

The revised text of the rule does not prescribe the contents of Health Impact Analyses (HIA). AQP deliberately excluded prescriptive text on HIA procedures so that flexibility to evaluate cumulative impacts, chemical interactions, and the effects of nearby emission sources could be included in an HIA if warranted in each case. In situations where it is warranted, AQP can require applicants to disclose the exposure pathways and the total daily intake of TAPs attributable to project sources as well as the background sources. In all cases, estimates of exposure duration, including long-term averages, short-term peaks and worst-case scenarios, and details the exposure parameters associated with sensitive population subgroups will be reviewed in Health Impact Analyses.

Ecology did not change the text in response to this comment.

WAC 173-460-090

Comment: USDOE #23

The lower threshold values in WAC 173-460-150 for many regulated toxic air pollutants will result in an increasing number of required second tier reviews. Therefore, the existing sequential review process outlined in the proposed (and existing) regulation (i.e. the permitting authority performs the first tier review and then Ecology performs the second tier review) will have increasing potential to adversely impact project schedules to accommodate permitting timelines that can exceed six months. When an applicant submits a notice of construction application to the permitting authority for first tier review, he/she usually knows whether second tier review will be needed and prepares the second tier petition at that time.

Revise the propose rule language in WAC 173-460-090, as appropriate, to allow Ecology to begin review and processing of the second tier petition (to the extent possible) concurrent with first tier review by the permitting authority, if requested by the applicant.

Oral comment: Lucinda Penn #3

The third comment I have to propose is that the lower threshold values in WAC 173-460-150 for many regulated toxic air pollutants will result in an increasing number of required second tier reviews. Therefore the existing sequential review process outlined in the proposed and existing regulations IE: the permitting authority performs the first tier review and then Ecology performs the second tier review will have increasing potential to adversely impact project schedules to accommodate permitting timelines that can exceed six months.

When an applicant submits a notice of construction application to the permitting authority for first tier review he or she usually knows whether second tier review will be needed and prepares the second tier petition at that time.

The suggestion or request is to revise the proposed rule language in WAC-173-460-090 as appropriate to allow Ecology to begin review and processing of the second tier petition to the extent possible concurrent with the first tier review by the permitting authority if requested by the applicant.

The fact that we have such low values now and zero for diethyl and die methyl mercury will automatically throw the Hanford site for the Tank Farms into a second tier and possible third tier review for every modification or new permit that we submit to the Ecology. This means that instead of taking three to six months to get a project started it will take six months to a year potentially. So we are requesting that some of this review time can be performed concurrently in order to streamline the process and save lots and lots of money for the taxpayer.

Response: USDOE #23 & Lucinda Penn #3

Ecology understands the commenter's concern. Emission details in most second tier reviews change during the analysis. As a result, the analysis of the proposed emissions and the project impacts must be re-evaluated during the second tier process. Ecology therefore does not believe that allowing for concurrent processing of first and second tier applications will result in efficiencies.

The proposed rule does provide for a pre-application meeting prior to submitting a second tier application. At this meeting, Ecology identifies exactly what information is needed to evaluate the risks from the proposed project, and documents it in an approved second tier protocol. We hope this step will accelerate the processing time, and improve the efficiency of the overall process.

Ecology did not change the text in response to this comment.

WAC 173-460-090(3)

Comment: USDOE #24

The final sentence in this subsection of the proposed rule language is redundant with the proposed rule language in WAC 173-460-090(2)(c). There is no beneficial reason to repeat the fact that the health impact assessment protocol must be reviewed and approved by Ecology.

Revise the proposed rule language to read as follows:

- ~~*The HIA protocol must be reviewed and approved by ecology prior to development of the HIA.*~~

Response: USDOE #24

These two citations are expressing the same thought, but are not redundant. WAC 173-460-090(3) is the requirement to have a Health Impact Analysis (HIA) approved by Ecology before is written. It outlines the contents of a HIA for the applicant. WAC 173-460-090(2)(c) is part of a list of items that must be submitted by the permitting authority to Ecology before work on a second tier review is started.

Ecology did not change the text in response to this comment.

WAC 173-460-090(5)

Comment: People for Puget Sound #5

Use of “background” is unclear. This appears to be an addition to the rule. Are background concentrations being used to allow higher emission? If so, we strenuously object. This appears to be another case where cumulative impacts are not addressed and in fact may be looked at in reverse.

Response: People for Puget Sound #5

The term “background concentration” refers to the concentration of toxic air pollutants in the ambient air. This is not a new inclusion; it is part of the current rule. The rule lists three methods for estimating these concentrations. Once the background concentrations have been estimated, the information is folded into the Health Impact Analysis. Ecology looks at the sum of the background concentration level and the new or modified emission level to determine if the increased health risk is acceptable or not. High background concentrations of toxic air pollutants have never been used to justify additional emissions.

Ecology did not change the text in response to this comment.

WAC 173-460-090(5)

Comment: SRCAA #14 & SWCAA #13

This time it (offsetting provisions) is included in the second tier review process however the criteria are not clearly delineated as to what would be acceptable. What is the definition of “health benefit”? If the ASIL is not met, how could there ever be a health benefit?

Response: SRCAA #14 & SWCAA #13

Several criteria must be met before an offsetting proposal can be approved. The proposal must demonstrate compliance with the following criteria:

- the emission reductions must be actual reductions based on the previous 24 months’ emissions;
- the reductions must be modeled against all impacted/affected receptors; and
- the modeling must demonstrate that the off-set proposal results in emission values lower than the ASIL when the emission increases and reductions are modeled together at the receptor.

This comment also asks what constitutes a health benefit when emissions exceed the ASIL levels. The health benefit is analyzed in the Health Impact Assessment as part of a second tier review. The health benefit is met if the increased cancer risk does not exceed 1:100,000 and if the hazard quotient or hazard index does not exceed 1.

Ecology did not change the text in response to this comment.

WAC 173-460-090(6)

Comment: People for Puget Sound #1

We specifically request that the provisions ("Emissions Netting") that "allow sources to reduce toxic emissions across multiple sources to meet standards" be removed. This new language gives credit for reductions of chemical source emissions that were not counted in the first place (or would be counted) for a health risk analysis. We don't believe that polluters can have it both ways – reductions should only be granted for pollutants, even at low levels, that would be included in an analysis. We also believe that these multiple (small) sources should be included in health analysis assessments and, further, that cumulative impacts should be considered.

Response: People for Puget Sound #1

The provision that allows reductions of Toxic Air Pollutants (TAPs) from units other than those being modified (WAC 173-460-090(6)) allows for the most economical method to reduce ambient concentrations of the TAP in question while also reducing overall ambient exposures. If a source is modifying Unit A, but finds that it is more economical to reduce emissions at Unit B, Ecology believes it appropriate to allow the reduction at Unit B as long as the ambient concentrations at the point of compliance are at or below the regulatory limit set in the Notice of Construction. The reduction at Unit B must be real and permanent. Section 400-071 is being created to ensure that the reductions at Unit B are maintained.

Ecology did not change the text in response to this comment.

WAC 173-460-100(2)

Comment: USDOE #25

The final sentence in this subsection of the proposed rule language contains an incorrect reference to WAC 173-460-090(8). Revise the proposed rule language to reference the correct subsection of WAC 173-460-090.

Response: USDOE #25

Thank you for this edit. Ecology modified the text in response to this comment.

WAC 173-460-150 ASIL Table

Comment: People for Puget Sound #2

A large number of chemicals were dropped from the list of regulated chemicals. Three lists were used to derive regulatory numbers, USEPA, USDOH, and OEHHA. Any chemical that was not finalized on one of these three lists was dropped from regulatory consideration in Washington.

We believe that the hazardous air pollutants (some of which are highly toxic according to the meeting notes) that were dropped should be retained within the rule in a separate list.

No list of regulated chemicals that were dropped is provided for public review. Does the list on chemicals are in the retained in the draft revision include all chemicals that moved from "draft promulgation" status (on the three lists that are being used to draw regulatory numbers from) to "final" status by the date this notice went out for public notice included? If not, what was the cutoff date? Because this list will only be revised on an infrequent basis, all finalized chemicals from the three source list should be included.

Response: People for Puget Sound #2

The purpose of the toxic air pollutant list and its associated Acceptable Source Impact Levels (ASILs) is to have regulatory screening levels that are protective of human health. Selecting the sources and values for the ASILs was a major portion of the work involved in revising Chapter 173-460 WAC. Ecology selected risk-based concentrations from three sources, the U. S. Environmental Protection Agency (EPA), the Agency for Toxic Substances and Disease Registry (ATSDR), and the California Office of Environmental Health Hazard Assessment (OEHHA). These sources of risk data are internationally recognized and accepted within the field of toxicology. Any chemical listed in one or more of three databases with an inhalation Risk-Based Concentration (RBC) promulgated to protect against health risk is listed in the revised TAP-ASIL table.

Many of the substances dropped were added in 1993 when Ecology used TLVs developed by ACGIH, American Conference of Governmental Industrial Hygienists,

as part of our process to establish ASILs. We did not include these chemicals now because ACGIH states:

> *Policy Statement on the Uses of TLVs® and BEIs®. The Threshold Limit Values (TLVs®) and Biological Exposure Indices (BEIs®) are developed as guidelines to assist in the control of health hazards. These recommendations or guidelines are intended for use in the practice of industrial hygiene, to be interpreted and applied only by a person trained in this discipline. They are not developed for use as legal standards and ACGIH® does not advocate their use as such.*
>
> *Approved by the ACGIH® Board of Directors on March 1, 1988.*
> http://www.acgih.org/tlv/PolicyStmt.htm

Ecology acknowledges that a rule sets regulations that reflect best available science at a set point in time. The commenter is correct that between the draft rule language filing date, November 19, 2008, and the adoption date, May or June 2009, there may be chemicals newly promulgated by OEHHA. These newly promulgated chemicals must wait for a future rule revision as we are required to publish proposed rule language, take it to public hearings, solicit comment, and revise the rule as appropriate in response to those comments before the final adoption.

Ecology has a spreadsheet that compares the list of chemicals in the existing ASIL table with the proposed list of chemicals in the revised rule. This list has been available from the Air Quality Program for the last year in electronic or printed form. Although Ecology will not include a list of deleted chemicals in the rule, the list is available in Appendix F of this Concise Explanatory Statement.

Ecology did not change the text in response to this comment.

Comment: NCASI #1

NCASI is concerned regarding the inclusion of ASILs for groups of PCDD/Fs such as the one proposed for 'Hexachlorodibenzo-p-dioxins' CAS no. 34465468), which potentially limits the emissions of 7 hexachlorinated dioxins (those not chlorinated at the 2, 3, 7 and 8 positions) that are considered to have no toxicity relative to 2,3,7,8-Tetrachlorodibenzo-p-dioxin. The ASIL for CAS 37871004 and CAS 34465468 should be removed from the list.

Response: NCASI #1

Isomers are two or more compounds that have the same molecular formula, but different structural formulae. There are 10 possible isomers of hexachlorodibenzo-p-dioxin, but only three isomers have toxicity factors relevant to WAC 173-460-150. These three compounds are separately listed in the ASIL Table.

We included the general (non-specific) term for hexachlorodibenzo-p-dioxins on the ASIL list intending that it would apply only in situations where the applicant cannot specify which isomers of hexachlorodibenzo-p-dioxin are emitted from a source. Ecology did not delete CAS # 34465-46-8 as requested, but has altered the name of the chemical to include the abbreviation "NOS" (not otherwise specified) to indicate that the ASIL only applies when the emissions of specific isomers of hexachlorodibenzo-p-dioxins are not known. A footnote was placed at the end of the table to define the abbreviation.

Similarly, Ecology did not delete CAS #37871-00-4 but has altered the name of the chemical to include the abbreviation "NOS" (not otherwise specified) to indicate that the ASIL only applies when the emissions of specific isomers of heptachlorodibenzo-p-dioxins are not known. A footnote was placed at the end of the table to define the abbreviation. CAS# 35822-46-9 was added to the list of ASILs. This CAS # relates to 1, 2, 3, 4, 6, 7, 8-heptachlorodibenzo-p-dioxin as shown in the table below:

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/averaging period)	*De Minimis* (lb/averaging period)
Hexachlorodibenzo-p-Dioxins, NOS	34465-46-8	year	2.63E-07	5.05E-05	2.52E-06
Heptachlorodibenzo-p-dioxins, NOS	37871-00-4	year	2.63E-06	0.000505	2.52E-05
1,2,3,4,6,7,8-Heptachlorodibenzo-p-dioxin	35822-46-9	year	2.63E-06	0.000505	2.52E-05

NOS – Not otherwise specified. This applies to situations where emission factors for a group of pollutants is reported, but specific isomers or chemicals are not reported.

Ecology modified the text in response to this comment.

Comment: NCASI #2

The identity of the specific compounds included in '2, 3, 7, 8-Tetrachlorinated dibenzo-p-dioxin and related compounds' (CAS no. C1746016) is unclear. Since the ASIL value (2.63e-08 µg/m^3) is the same as the ASIL value for '2, 3, 7, 8-Tetrachlorinated dibenzo-p-dioxin" (CAS no. 1746016)

This redundant entry should be deleted.

Response: NCASI #2

The entry for 2, 3, 7, 8-Tetrachlorinated dibenzo-p-dioxin and related compounds was not intended to be a duplicate. This entry was included on the ASIL list with the intent to apply only in situations where the applicant cannot specify which dioxin or dioxin-like compounds are emitted from a source. The entry was not deleted however Ecology has altered the name of the chemical to include the abbreviation "NOS" (not otherwise specified) to indicate that the ASIL only applies when the emissions of specific dioxin related compounds are not known.

NOS are defined in a footnote at the end of the table. CAS# C1746016 was deleted because there is not a common CAS # for mixtures of dioxins or dioxin-like compounds.

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/averaging period)	*De Minimis* (lb/averaging period)
2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin & Related Compounds, NOS	-	year	2.63E-08	5.05E-06	2.52E-07

NOS – Not otherwise specified. This applies to situations where emission factors for a group of pollutants is reported, but specific isomers or chemicals are not reported.

Ecology modified the text in response to this comment.

Comment: NCASI #3

The OEHHA REL for phenol does not have a firm scientific foundation and should not be used as the basis for the ASIL. The OEHHA's decision to develop an REL for inhalation exposures is a significant departure from the recommendation of US EPA.

Response: NCASI #3

Ecology derived our ASILs from three sources, USEPA's Integrated Risk Information System, California OEHHA's reference exposure levels and cancer potency factors, and ATSDR's minimal risk levels. These three sources were determined by a committee to be reputable public agencies. In the interest of maintaining consistency and transparency, Ecology chose to use a uniform approach for choosing which of the three databases would be used to develop specific ASILs. In short, Ecology chose to use the most recently published toxicity value from any of the three sources to develop ASILs. In the case of phenol, OEHHA was the only agency to develop a toxicity value. OEHHA follows a rigorous process in developing toxicity values: they are subject to a full review by a board of appointed toxicologists

and subject to public review and comment prior to adoption. Ecology has reviewed OEHHA's regulatory record, and finds that the REL established for phenol has a scientifically sound basis. For this reason, Ecology chose to use OEHHA's REL as the basis for the ASIL.

Ecology did not change the text in response to this comment.

Comment: SRCAA #15a & SWCAA #14a

During the stakeholder meetings for this rule revision, Ecology was questioned several times about the need and desire to have a technical document, if not in the rule, that explains how the ASIL was developed for each toxic pollutant and to identify the basis or source for the ASIL. The basis for listing an item is also missing. During stakeholder meetings Ecology indicated that only those substances listed in one of 3 databases (IRIS, ATSDR and OEHHA) would be on the toxic list. Sometimes there are differing values established in these databases for the same toxic. There is no identification of why a particular value was used. This will likely serve an important basis when performing a second tier health impacts assessment. This needs to be identified for each toxic pollutant.

Response: SRCAA #15a & SWCAA #14a

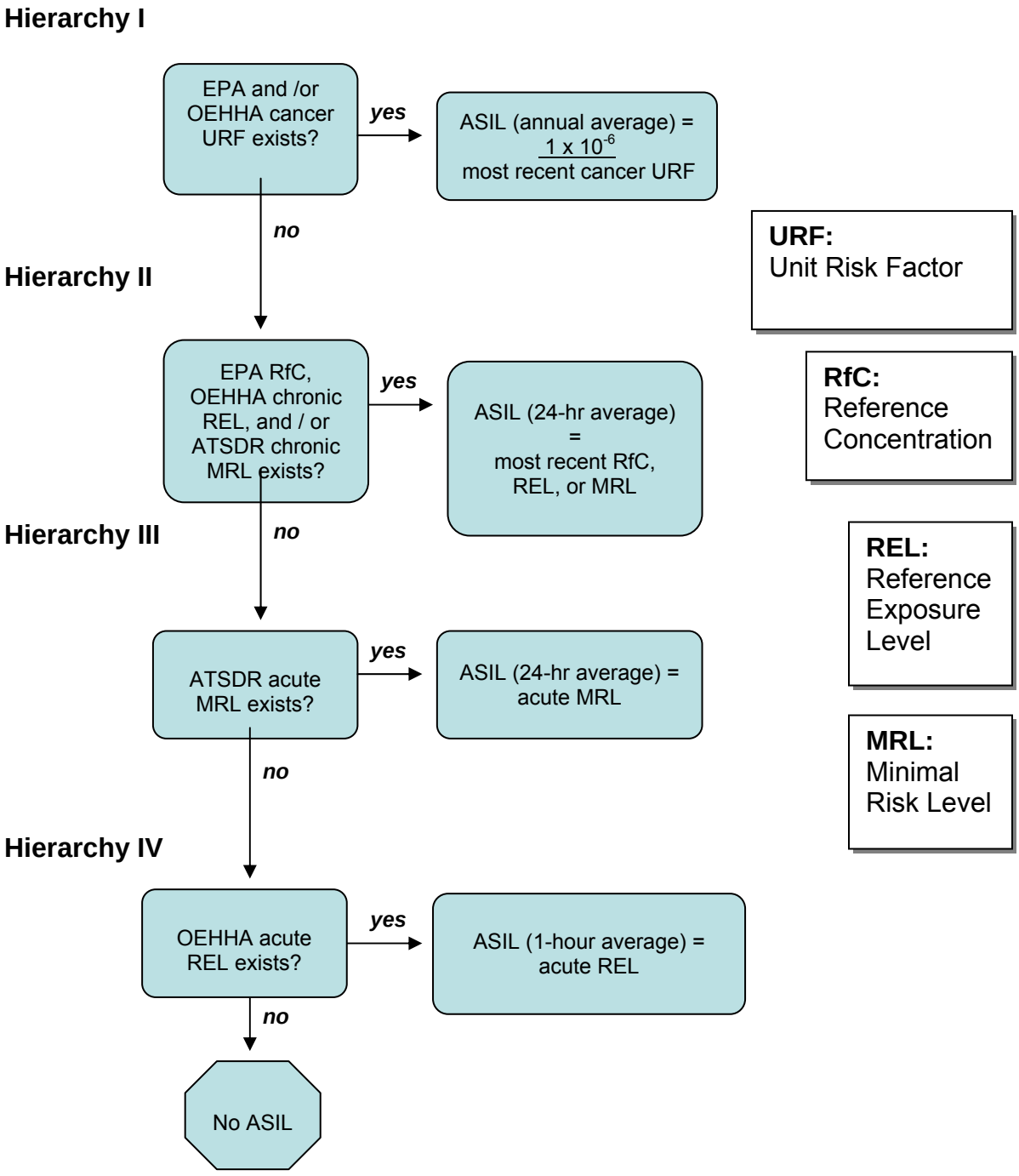
During the stakeholder process for the rule, Ecology explained the use of the three databases and how Ecology would select one value over the other in the event of multiple values for the same substance.

On November 18, 2008, Ecology sent all stakeholders, including SRCAA and SWCAA, the *Preliminary Cost Benefit and Least Burden Analyses,* Ecology publication #08-02-023. Appendix B of this document is titled, *Setting the Acceptable Source Impact Level, Small Quantity Emission Rates, and De Minimis Values.* This document details the procedure that the Air Quality Program used to set the ASIL for the toxic air pollutants. The major decisions used to develop the ASIL list include the following: Only those pollutants with a final (published) risk factor are included on the list. The final version of this document will be released when the Concise Explanatory Statement is published.

The ASIL is a trigger level that establishes the point when a second tier analysis is required. Once the second tier is triggered we consider all current information in evaluating the proposed project's risks. The ASIL hierarchy flow chart is not proposed as part of the rule. It illustrates the decision process used to select the ASIL's toxicological values.

Ecology did not change the text in response to these comments.

Flow chart illustrating the ASIL toxicological value selection process



ASIL Acceptable Source Impact Level (ug/m3)
ATSDR Agency for Toxic Substances and Disease Registry
EPA U.S. Environmental Protection Agency
OEHHA California Office of Environmental Health Hazard

WAC 173-460-150 ASIL Table

Comment: SRCAA #15b & SWCAA #14b

Approximately two thirds (2/3) of the toxic items were removed from the toxics list because there was no established inhalation reference concentration (IRC) in one of the 3 databases. Items that have been listed in these databases only reflect toxic items that have a compendium of information gathered and reported about toxic impacts to humans as a result of inhalation. This is good information, however excluding the numerous items from the list because there have not been specific health studies performed based on human inhalation, ignores a substantial number of toxic items that are known carcinogens and other toxic health impacting pollutants that do not have studies but which have scientific data that identifies significant health impacts due to environmental exposure. This basis ignores about half of the items listed by the American Conference of Governmental Industrial Hygienists (ACGIH) which identifies pollutants that have been determined to have health impacts to workers. The ACGIH establishes exposure levels permissible to workers at a source. Above these levels it is considered unhealthy and for each pollutant for which a TLV-TWA has been established. If it is unhealthy for a worker to be exposed to these levels for an 8 hour shift then it most certainly is unhealthy for the public in general to be exposed to these levels for 24 hours or months or years, not to mention the increased susceptibility of children, people with respiratory ailments and the elderly. The public in general should be afforded the same protection that workers are provided under the ACGIH guidelines. To exclude these items is bad science and bad policy and by delisting these items will result in a substantial relaxation of toxic protection for the public. This relaxation was not explained or documented in the rulemaking analyses and deceives the public on the real impacts of the proposed changes.

Response: SRCAA #15b & SWCAA #14b

Ecology disagrees that our actions on this rule constitute bad science and bad policy. We strongly disagree with the notion that by this rule we are deceiving the public. We have been transparent and open in our rationale for revising this rule through an extensive stakeholder process, and will continue to do so in our outreach efforts to explain the rule to members of the public and regulatory community.

In the 1993 version of this rule, Ecology produced ASILs for a large number of atmospheric pollutants. It relied on occupational as well as ambient standard databases. We have since come to understand that occupational exposure limits cannot appropriately be applied to ambient standards. We currently do not have the staffing resources to develop and defend ASILs derived independently from other regulatory agencies.

Ecology developed ASILs only for chemicals that had published inhalation toxicity values from at least one of three sources: USEPA's Integrated Risk Information System, California's OEHHA reference exposure levels and cancer potency factors, and ATSDR's minimal risk levels. These sources of risk data are internationally recognized and accepted within the field of toxicology.

We did not include the values established by ACGIH for several reasons. ACGIH clearly states that their data are intended only as guidelines in the practice of industrial hygiene in an occupational setting. The data are not definitive measures of occupational health impacts. The data are expressly not to be used as legal or ambient standards. See ACGIH, Policy Statement on the Uses of TLVs and BEIs. This statement is quoted in the response People for Puget Sound-2 above. It is also available at http://www.acgih.org/tlv/PolicyStmt.htm.

While ASILs are not ambient standards, they are ambient threshold levels that trigger regulatory action. ASILs apply in the context of ambient exposures, not occupational settings. In contrast, the TLV established by ACGIH are occupational exposure limits. Converting occupational data to risk exposures for ambient settings requires multiple assumptions and in some cases lack appropriate scientific basis.

OEHHA's processes for establishing cancer potency factors and REL's are very detailed, involving multiple scientific staff, thorough literature reviews, and extensive public comment and response processes. EPA and ATSDR use similar processes for developing cancer potency factors, RfCs and MRLs.

Ecology did not change the text in response to this comment.

Comment: SRCAA #15c

For this rule to be effective at staying abreast of the ongoing science behind the toxicology for each listed item, the list should not be put in the rule. Rather, the rule should identify the process by which a toxic pollutant is listed or delisted. The list could then be updated real time and posted to the internet as the evaluation and basis for a determination is made for each pollutant. This process is similar to the process used to update the 3 databases that Ecology supposedly used to establish the listing proposed in the rule. There is, however, no process identified in the rule to add or delete items from the list. This is a major oversight in this proposed rulemaking.

There has been no substantial update to the rule by Ecology since about 1993. That includes fixing significant typographical errors in the rule. That is 15 years. While budgets have been scarce in the past, the future, at least near term, would suggest that there will be no budget/staff time available to perform periodic updates to the rule as necessary to keep the list of pollutants up to date with the toxic studies. This

will likely lead to another lengthy period of time before the rule is updated again. This is unacceptable and is very short sighted for an Agency that portrays itself as protecting the citizens of the state from unnecessary toxic risks.

Comment: SWCAA #14c

For this rule to be effective at staying abreast of the ongoing science behind the toxicology for each listed item, the list should not be put in the rule. Rather, the rule should identify the process by which a toxic pollutant is listed or delisted. The list could then be updated real time and posted to the internet as the evaluation and basis for a determination is made for each pollutant. This process is similar to the process used to update the 3 databases that Ecology supposedly used to establish the listing proposed in the rule. There is, however, no process identified in the rule to add or delete items from the list. This is a major oversight in this proposed rulemaking. An example of this is propionaldehyde (CAS 123-38-6). Since this rule was published, a reference concentration (RfC) has been established in IRIS at 8.0 micrograms per cubic meter (9/30/08) and therefore propionaldehyde should be added to the list. This is why the updating procedure needs to be adopted.

There has been no substantial update to the rule by Ecology since about 1993. That includes fixing significant typographical errors in the rule. That is 15 years. While budgets have been scarce in the past, the future, at least near term, would suggest that there will be no budget/staff time available to perform periodic updates to the rule as necessary to keep the list of pollutants up to date with the toxic studies. This will likely lead to another lengthy period of time before the rule is updated again. This is unacceptable and is very short sighted for an Agency that portrays itself as protecting the citizens of the state from unnecessary toxic risks.

Response: SRCAA #15c & SWCAA #14c

The listing of toxic air pollutants in Section 150 of Chapter 173-460 WAC is vital to the rule. Any language that places a requirement on members of the public, that imposes a duty to comply and that might impose a penalty if not followed must be in a rule rather than in guidance. The rule must be adopted in accordance with the Administrative Procedures Act (APA) (*Hillis v. State Department of Ecology*, 131 Wn.2d 373, 932 P.2d 139 (1997)). See also *Simpson Tacoma Kraft Co. v. Dept of Ecology*, 119 Wn. 2d 640, 835 P.2d 1030 (1992) (invalidating Ecology's numeric dioxin standard because it had not been adopted by rule).

The ASIL list is part of a requirement and it must be codified. Sources must demonstrate that their new or modified emissions are below the ASILs before a first tier analysis is incorporated into a Notice of Construction (NOC). A second tier review is triggered if a source cannot demonstrate that its emissions are *de minimis*

or below the ASIL. Ecology must list specific TAPs and ASILs in the rule before we can require that sources comply with those emission levels.

Ecology recognizes that the list of TAPs and ASILs will change in the future as science evolves. Our goal is to update this rule on a more frequent and efficient basis using the guidelines and parameters for updating TAPs and ASILs that were established in this rule making process.

Ecology did not change the text in response to these comments.

Comment: SRCAA #15d & SWCAA #14d

The table should be sorted by CAS number as many (most) of the pollutants have multiple names. On numerous occasions, sources in our jurisdictions have looked on the list and not found the chemical by name and assumed therefore that it was not on the list. The CAS number is the definitive identifier – not the pollutant name.

Response: SRCAA #15d & SWCAA #14d

Ecology intends that the regulations be easy to administer. In the old version of the rule, the chemicals were listed by name and divided into four different tables. We have decided to retain the proposed organization of the Table in WAC 173-460-150, which consolidates all of the information into one table. When the final rule is published, a copy of the ASIL table will be posted on the Air Quality web site in Excel format. Anyone will be able to save a copy of the file, then use Excel tools to search and sort. We believe this will help minimize the potential confusion noted by the commenter's.

Ecology did not change the text in response to this comment.

Comment: SRCAA #15e & SWCAA #14e

The list is missing several EPA identified hazardous air pollutants (HAPs) as has been discussed in several of the meetings. Why have these federally listed items not been included on the state list? Is there science that suggests that EPA and Congress made an error in identifying these substances as hazardous to humans? What science does Ecology have that would defend not having these items on the toxic list? If Ecology has no science suggesting that they be delisted, then what possible sound basis does Ecology have for removing them? When you couple this with the hundreds of other chemicals that have been removed from the list, the proposed revision is substantially less protective of public health and is in conflict with the purpose of the rule identified under WAC 173-460-010 to protect human health.

Response: SRCAA #15e & SWCAA #14e

Ecology strongly disagrees with the commenter's characterization that the proposed version of the rule is substantially less protective than the current rule and fails to protect human health. We have updated our list of TAPs and ASILs according to three internationally recognized and leading authorities on air toxics; USEPA's Integrated Risk Information System, California OEHHA's reference exposure levels and cancer potency factors, and ATSDR's minimal risk levels. The proposed list of TAPs and corresponding ASILs are updated to current science, provide a clear approach for appropriately characterizing ambient risks associated with a new source or modification.

Ecology reminds the commenter's that the Federal Hazardous Air Pollutants (HAPs) were established in a regulatory context that did not contemplate risk assessment. As a result many of the HAPs do not have established inhalation toxicity values. Those that have such values established were included in the proposed rule. To include the others, Ecology would need to independently evaluate the literature and underlying studies for each substance to make a defensible determination of the risk values. To complete that process in a scientifically appropriate way would take substantial effort, and Ecology is not staffed to do such work.

Ecology did not change the text in response to this comment.

Comment: SWCAA #14f

With the current legislative focus on greenhouse gases and climate change, sulfur hexafluoride has been identified as one of the most "powerful" greenhouses gases, over 23,000 times more effective than CO_2. It is on the current list of regulated toxic pollutants. Under the proposed list, it is absent. This pollutant should be added back onto the list.

Comment: SRCAA #15f & SWCAA #14h

In July of 1993, Ecology released a focus document (FA-93-32) entitled "Controls for New Sources of Toxic Air Pollution" which summarized the changes that were made to chapter 173-460 WAC at that time. One of the bulleted items stated: "Add 42 chemical substances. The rule now contains over 600 chemical substances. An additional 42 substances, included in the federal Clean Air Act Amendments of 1990, were incorporated for consistency." Is it no longer Ecology's desire to be consistent with the federal Clean Air Act Amendments of 1990?

Response: SWCAA #14f, SRCAA #15f & SWCAA #14h

Ecology developed ASILs only for chemicals with published toxicity values from at least one of the three sources: USEPA's Integrated Risk Information System, California OEHHA's reference exposure levels and cancer potency factors, and ATSDR's minimal risk levels. There are no ASIL's for several hazardous air pollutants (HAPs) because there was no published toxicity value from any of the three sources. These HAPs lack adequate toxicity data to quantify health risks from emission of and exposure to these pollutants.

Ecology seeks to be consistent with the Federal Clean Air Act Amendments of 1990. However, the EPA does not require new source review for hazardous air pollutants. Chapter 173-460 WAC does not have a federal analogue.

Ecology did not change the text in response to these comments.

Comment: SRCAA #15g

New source review is presently the only mechanism available to permit writers to quantify HAP emissions to determine whether a source is subject to a MACT Standard or if it is a Title V source. Chapter 173-401 WAC provides for collection of applicable requirements only. Many of those requirements come from permits generated as a result of NSR either through chapter 173-400 WAC or chapter 173-460 WAC.

Comment: SWCAA #14i

New source review is presently the only mechanism available to permit writers to quantify HAP emissions to determine whether a source is subject to a MACT Standard or if it is a Title V source based on hazardous air pollutants (HAPs). If all the HAPs are not included in the list of pollutants, then our intent and authority to collect this information can be questioned and unclear. WAC 173-401 provides for collection of applicable requirements only. Many of those requirements come from permits generated as a result of NSR either through WAC 173-400 or 173-460 WAC. If those requirements do not exist in the underlying permits it is difficult to establish a basis otherwise. At a minimum, all HAPs should be listed for clarity.

Response: SRCAA #15g & SWCAA #14i

Chapter 173-460 WAC is a New Source Review (NSR) regulation. The suggestion that we retain a list of delisted TAPS in the Chapter 173-460 WAC does not have an NSR purpose and should not be included in an NSR rule. Sources subject to the registration program or Title V are required to quantify their emissions independently of NSR. See WAC 173-400-099(2) and WAC 173-410(2)(c).

Another way to quantify TAP and HAP emissions is to consult the individual Maximum Achievable Control Technology (MACT) standard. MACT standards are issued to certain source categories. Applicability of the MACT standard is defined in each individual MACT standard. If a permitting authority finds sources that meet the MACT applicability, the permitting authority can require source testing to determine if the source is subject to the MACT.

Ecology did not change the text in response to these comments.

Comment: SWCAA #14g

There are many toxic pollutants that have been removed from the list (rule) where arguments can be made on a pollutant specific basis that it should be kept because of health hazards. The reason for listing in most cases is different for each pollutant. The number of removed items are too numerous to list. Ecology should have cited in its rule making, documentation of the reason for removing each toxic pollutant and performed a health risk assessment to demonstrate that it was not necessary to be on the list. . A basis should be identified in this rulemaking for removing any item from the toxic list and the basis for having an item on the list. In the future if that basis is modified the rule could be modified to include or exclude a pollutant. As it is proposed, there is no basis documented.

Response: SWCAA #14g

The commenter suggests that Ecology should have looked at the existing TAP list from a different point of view. It is suggested that rather than looking for data to justify listing specific chemicals, Ecology should have begun with the existing list and completed a risk assessment for each chemical to justify all deletions from the TAP list. This approach was not appropriate. Ecology does not have the resources to complete independent scientifically sound research on each TAP.

Rather than attempting to prove that there is insufficient data to justify retention of a chemical on the list, Ecology turned to sources of risk data that are internationally recognized and accepted within the field of toxicology. Ecology developed ASILs only for chemicals that had published inhalation toxicity values from at least one of three sources: USEPA's Integrated Risk Information System, California OEHHA's reference exposure levels and cancer potency factors, and ATSDR's minimal risk levels.

Ecology did not change the text in response to this comment.

WAC 173-460-150

Comment: USDOE #26

The entry for 2, 3, 3', 4, 4'-tetrachlorobiphenyl appears to be in error. The listed CAS #32598-14-4 corresponds with 2, 3, 3', 4, 4'-pentachlorobiphenyl.

Verify the correct chemical name and revise the proposed rule language, as appropriate.

Response: USDOE #26

The commenter is correct. We will change "…Tetra..." to "…Penta…" for the TAP w/ CAS 32598-14-4. The following change was made in the ASIL Table as a result of this comment:

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/ averaging period)	*De Minimis* (lb/ averaging period)
2, 3, 3', 4, 4'-Pentachlorobiphenyl	32598-14-4	year	0.000263	0.0505	0.00252

Ecology modified the text in response to this comment.

Comment: USDOE #27

The entries for "2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin Related Compounds (TCDD)", "Hexachlorodibenzo-p-Dioxins, Total", "Heptachlorodibenzo-p-dioxins", and "Polychlorinated Biphenyls" appear to be 'catch-all' entries for groups of toxic air pollutants (TAPs) that have individual species listed elsewhere in the table. It is unclear from the proposed rule language whether the threshold values for these 'catch-all' TAPs are to be used only when individual TAPs that make up each group have not been identified and quantified. Contributing to this confusion is the fact that the threshold values for "Polychlorinated Biphenyls" are significantly larger than those for any of the individual TAPs that fall into this group, whereas the threshold values for "2, 3, 7, 8 Tetrachlorodibenzo-p-dioxin Related Compounds (TCDD)" reflect the lowest threshold values listed for any CDD or CDF TAP.

Provide clarification and guidance on the intended use of the threshold values for these 'catch-all' TAPs, as well as all the individual TAPs that make up each group, when evaluating emissions from a new/modified source. Verify that the listed threshold values are consistent with the intended use.

Response: USDOE #27

We agree with the commenter. *2, 3, 7, 8*-Hexachlorodibenzo-p-dioxin (mixture)" is not contained in the proposed ASIL list. We will change "2, 3, 7, 8 Tetrachlorodibenzo-p-dioxin & Related Compounds (TCDD)" to "2, 3, 7, 8 Tetrachlorodibenzo-p-dioxin & related compounds, NOS"; change "Hexachlorodibenzo-p-Dioxins, Total" to "Hexachlorodibenzo-p-dioxins, NOS"; change Polychlorinated biphenyls to "Polychlorinated biphenyls, NOS. Please see the response to NCASI-1. The table, which is part of that response, shows these changes.

With regard to polychlorinated biphenyls, Ecology used EPA's and OEHHA's inhalation unit risk factor for unspeciated polychlorinated biphenyl mixture to develop an ASIL. This ASIL applies in situations where emissions of specific PCB congeners are not known. It is important to point out that if the species are known, it is not necessary to compare the emissions to the NOS ASIL. Ecology has altered the name of the chemical to include the abbreviation "NOS" (not otherwise specified) to indicate that the ASIL only applies when the emissions of specific polychlorinated biphenyl congeners are not known. A footnote was placed at the end of the table to define the abbreviation.

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/averaging period)	*De Minimis* (lb/averaging period)
Polychlorinated Biphenyls, NOS	1336-36-3	year	0.00175	0.336	0.0168

NOS – Not otherwise specified. This applies to situations where emission factors for a group of pollutants is reported, but specific isomers, congeners, or chemicals are not reported.

Ecology modified the text in response to this comment.

WAC 173-460-150

Comment: USDOE #28

The entry for 3, 3', 4, 4', 5, 5'-tetrachlorobiphenyl appears to be in error. The listed CAS #32774-16-6 corresponds with 3, 3', 4, 4', 5, 5"-hexachlorobiphenyl.

Verify the correct chemical name and revise the proposed rule language, as appropriate.

Response: USDOE #28

The commenter is correct. We will change "…Tetra..." to "…Hexa…" for the TAP w/ CAS 32774-16-6. The following change was made in the ASIL Table as a result of this comment:

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/averaging period)	*De Minimis* (lb/averaging period)
3, 3', 4, 4', 5, 5' - Hexachlorobiphenyl	32774-16-6	year	0.000263	0.0505	0.00252

Ecology modified the text in response to this comment.

Comment: USDOE #29

The creation of a new list of toxic air pollutants via the merging of information from three separate toxicological databases has created a number of duplicative, inconsistent and confusing entries. Several examples (not intended to be exhaustive) are listed below to help illustrate the concern.

- Separate entries are included for "Chromium Hexavalent: Soluble, except Chromic Trioxide", "Chromic Trioxide", "Chromium (VI)", "Chromic Acid" and "Chromic (VI) Acid" (Note…review of chemical databases suggest the latter two are identical soluble compounds with multiple assigned CAS #s). These could be replaced by only two entries "Chromium Hexavalent: Soluble, compounds except Chromic Trioxide, as Cr (VI)" and "Chromic Trioxide", and still capture the intent to limit exposure to the Cr (VI) ion.
- "Chromium Hexavalent: Soluble, except Chromic Trioxide" is inaccurately listed with a hybrid form of the CAS number for chromium metal, while it would appear that listing the CAS number for the Cr (VI) ion (18540-29-9) is more appropriate.
- Separate entries are included for "Hexachlorodibenzo-p-Dioxins, Total", as well as three individual Hexachlorodibenzo-p-Dioxin compounds. Each entry identifies the same threshold values and could be captured by a single entry.
- Separate entries with identical threshold values are included for both "Chlorinated Paraffins" (CAS #108171-26-2) and "Short-chain (C10-13) chlorinated paraffins" (CAS #85535-84-8). Chemical databases describe "Chlorinated Paraffins" as C10-C12, meaning both entries could be captured by a single entry.

Thoroughly review the proposed list of toxic air pollutants and eliminate duplicative and inconsistent entries created by the merging of three different data sets. Where Ecology determines that maintaining separate entries is warranted, additional clarification and guidance should be provided on exactly what contaminant(s), compounds or portions thereof must be evaluated against each identified threshold.

Response: USDOE #29

The three databases do not use the same naming conventions which results in some inconsistencies. Nonetheless, for TAP entries that are actually composed of multiple chemical species, the list is written in a way that allows applicants to find and use the entries that are appropriate for their situation. If the specific CAS number is on the list there is no reason to regulate the TAP twice and the compound or CAS that covers multiple pollutants should not be used.

Ecology did not change the text in response to this comment.

Comment: USDOE #30

Threshold values for some of the listed toxic air pollutants (e.g. nitrosamines) are lower than laboratory detection levels, which presents field implementation and enforceability concerns. Provide guidance clarifying how compliance with established toxic air pollutants threshold values can be demonstrated where such values are less than achievable laboratory detection levels.

Oral Testimony: Lucinda Penn #2

The second comment that I have is that the threshold values for some of the listed toxic air pollutants for instance the nitrosamines are lower than laboratory detection levels which presents field implementation and enforceability concerns. The suggestion is to provide guidance clarifying how compliance with established toxic air pollutant threshold values can be demonstrated where such values exceed achievable laboratory detection levels. This guidance could be in the form of guidance document as opposed to integration within the rule making.

Response: USDOE #30 and Lucinda Penn #2

The rule does not require monitoring of pollutants in the field to determine compliance. Compliance is demonstrated by use of an accepted air dispersion model. Therefore, lab detection levels are not an issue.

Ecology did not change the text in response to this comment.

Comment: USDOE #31

The establishment of threshold values equal to zero for Diethyl mercury (CAS #627-44-1) and Dimethyl mercury (CAS #593-74-8) is unreasonable, presenting field implementation (including tBACT evaluations, permit compliance demonstrations, and potential use as CERCLA ARARs) and regulatory agency enforcement

challenges. Ecology staff have indicated that "zero thresholds" were established for these two chemicals because Ecology's "extreme hazard policy requires a second tier analysis for any proposed industrial emission regulated by WAC 173-460." This is inconsistent with Ecology's established methodology for establishing toxic air pollutants during this rule revision effort (i.e. only list those contaminants with appropriate toxicological data in one of three pre-determined databases), and it is unclear what exactly this "extreme hazard policy" is, or why these two chemicals (among the hundreds of "proposed industrial emission" chemicals regulated by WAC 173-460) are singled out by this undefined policy. Finally, Ecology's *Toxic Air Pollutants Priority Study* (Publication 08-02-030) published in November 2008 does not identify either diethyl or dimethyl mercury as one of the twenty-one (21) priority toxic air pollutants, at least 16 of which actually have numerical threshold values identified in WAC 173-460-150.

Establish threshold values for Diethyl mercury (CAS #627-44-1) and Dimethyl mercury (CAS #593-74-8) using appropriate toxicological data from at least one of the three pre-determined databases specified by Ecology for this rule revision effort. If no such toxicological data exists, these chemicals should be removed from the list of regulated toxic air pollutants.

If Ecology maintains that "zero thresholds" are justified for these two chemicals, clarify the basis for such a conclusion and provide additional guidance addressing potential regulatory uses of these values, compliance demonstration methodologies and enforcement protocol.

<u>Oral Comment: Lucinda Penn #1</u>

My first statement is regarding the establishment of threshold values equal to zero for diethyl and dimethyl mercury. This presents field implementation challenges and compliance and regulatory agency enforcement challenges. It makes it extremely difficult to establish a tBACT what a tBACT means, they potentially use a CERCLA or ARARs would be difficult and confusing and permit compliance demonstrations would be difficult. Ecology staff has indicated that zero thresholds were established for these two chemicals because Ecology's extreme hazard policy requires a second tier analysis for any proposed industrial emissions regulated by WAC 173-460.

This is inconstant with Ecology's established methodology for determining toxic air pollutants during the rule revision effort. IE: only those contaminants with appropriate toxicological data in one of three predetermined databases and it is unclear what exactly this extreme hazard policy represents or why these two chemicals among the hundreds of proposed industrial emission chemicals are singled out by this undefined policy.

Finally Ecology's toxic air pollutants priority study publication 802-030 published in November 2008 does not identify either diethyl or dimethyl mercury as one of the 21 priority toxic air pollutants at least 16 of which actually have numerical threshold values identified in WAC 173-460-150.

It is suggested that we establish threshold values for diethyl mercury and dimethyl mercury using appropriate toxicological data from at least one of the three predetermined data basis specified by Ecology for this rule revision effort. If no such toxicological data exists these chemicals should be removed from the list of regulated toxic air pollutants.

If Ecology maintains the zero thresholds are justified for these two chemicals clarify the basis for such a conclusion and provide additional guidance addressing potential regulatory uses of these values, compliance demonstration methodologies and enforcement protocol.

Response: USDOE #31 and Lucinda Penn #1

The two chemicals referenced by the commenter's are extremely toxic and warrant an ASIL of "none." As little as a single drop of dimethyl mercury provided a lethal dose to a researcher handling the substance following appropriate lab protocols. They are not a part of any known industrial process in Washington. To our knowledge, these chemicals have never been detected in Washington. They have been detected in waste tanks at the Savannah River nuclear waste site in South Carolina, and may be present in the nuclear waste tanks at the Hanford Reservation.

When conducting a first tier analysis under WAC 173-460-080, one of the requirements is to demonstrate compliance with the ASILs in WAC 173-460-150. The ASIL for Diethyl and Dimethyl mercury has been changed to 1.00E-99 in the final rule. First tier review would immediately move to a second tier analysis under WAC 173-460-090 if Diethyl or Dimethyl mercury were detected and quantified.

A Health Impact Assessment (HIA) would then be required. Paragraph (7) indicates that, "*Ecology may recommend approval of a project that is likely to cause an exceedance of acceptable source impact levels for one or more TAPs only if it determines that the emission controls for the new and modified emission units represent tBACT and the applicant demonstrates that the increase in emissions of TAPs is not likely to result in an increased cancer risk of more than one in one hundred thousand and ecology determines that the noncancer hazard is found to be acceptable."*

Therefore, it is possible that after a rigorous examination a permit could be issued even if diethyl or dimethyl mercury were detected or estimated to be present.

Ecology did not change the text in response to this comment.

Comment: USDOE #32

The entry for Refractory Ceramic Fibers (CAS-NA-3) identifies associated threshold values using µg/m^3 (ASIL) and lb/averaging period (SQER and de minimis). Concentrations of Refractory Ceramic Fibers are typically measured in terms of "fibers per volume."

Verify the units of the threshold values presented for Refractory Ceramic Fibers and revise proposed rule language, as appropriate.

Response: USDOE #32

The comment is correct. We will list the ASIL for Refractory Ceramic Fibers as "3.0E-2 fibers/cc (24-hr TWA)".

The following change was made in the ASIL Table as a result of this comment:

Common Name	CAS #	Averaging Period	ASIL (µg/m3)	SQER (lb/averaging period)	*De Minimis* (lb/averaging period)
Refractory Ceramic Fibers	CAS-NA-3	24-hr	0.03 fibers/cm^3	0.000164	8.21E-06

Ecology modified the text in response to this comment.

Comment: USDOE #33

The entries for "Beryllium and Compounds" and "Lead and Compounds" contain a parenthetical notation "NOS". The meaning of "NOS" has not been defined within the proposed rule. Provide a footnote or other clarifying text to the table in WAC 173-460-150 defining what "NOS" means.

Response: USDOE #33

We will add clarifying text to the table in WAC 173-460-150 stating that "NOS" means, "not otherwise specified."

Ecology modified the text in response to this comment.

Comment: USDOE #34

Numerous table entries reference CAS numbers with either a preceding “C” or an included “NA”. The CAS registry does not identify any valid CAS numbers that include such nomenclature. The inclusion of such hybrid or informal designators is inappropriate for a list of regulated toxic air pollutants without additional guidance or clarification on exactly what materials, compounds or portions thereof are intended to be captured by each such entry in the table. Several entries (not intended to be exhaustive) are listed below to help illustrate the concern.

- 2, 3, 7, 8-Tetrachlorodibenzo-p-dioxin Related Compounds (TCDD)
- Arsenic & Inorganic Arsenic Compounds
- Beryllium & Compounds (NOS)
- Diesel Engine Exhaust, Particulate
- Nickel Refinery Dust
- Polybrominated Biphenyls

Review each toxic air pollutant in WAC 173-460-150 with a listed CAS # that includes a preceding “C” designator or “NA” nomenclature and provide additional guidance and clarification identifying exactly what chemicals, compounds, hazardous materials, etc. are intended to be included for purposes of evaluating emissions against the listed threshold values (e.g. for the “Beryllium and Compounds” entry, does the mass of the entire compound need to be considered, or just the actual beryllium in those compounds?)

Response: USDOE #34

We agree with the commenter that using “C” and “NA” in the CAS column is inappropriate. We will delete any CASs that begin with “C” and delete the “NA” designations now shown in the CAS column.

In those situations where an applicant is not certain of how to complete the notice of construction, it is best to get clarification from the permitting agency. Here is clarification on the specific examples listed in the comment:

- For metals and compounds, only the mass of the metal present in the compound is considered in the analysis.
- For Polybrominated Biphenyls, the total mass of all PBB congeners is considered in the analysis.
- For revisions to TCDD, see the response to USDOE-27.
- For Diesel Engine Exhaust, Particulate – the mass of particulate emitted from diesel engines in required.
- For Nickel Refinery Dust - Nickel refinery dust is a mixture of many nickel moieties. It is not certain what the carcinogenic nickel species is in the refinery dust and so it needs to be considered in its entirety.

Ecology modified the text in response to this comment.

IV. Summary of public involvement opportunities

Please provide a summary of public involvement opportunities for this rule adoption:

- Hearing dates and locations

  Ecology Headquarters Building, Lacey
  January 13, 2009, 6:30pm
  2 people attended
  0 testified

  Ecology Eastern Regional Office, Spokane
  January 14, 2009, 4:00 pm
  18 people attended
  2 testified

- Mass mailing pieces (i.e., FOCUS sheet, news releases)

  A Press release was issued January 9, 2009 and posted on Ecology's Laws and Rules website.

  An email notice went out to the following:

  - An email list serve for this rule (90 subscribers)
  - Representatives of the seven local air authorities

- Advertisements and/or newspaper announcements

  Notice for these hearings was published in the Washington State Register on December 3, 2008.

  - A general Ecology email list serve (1,471 subscribers)
  - Posted on Listserve.wa.gov on December 8, 2008

  Legal notices were published in the Spokesman Review and Daily Journal of Commerce on December 12, 2008.

  The hearing notice was posted on Ecology's public involvement calendar starting on December 12, 2008.

V. Appendices

Appendix A	**Written Comments Received During Comment Period**
Appendix B	**Written Comments Received After Comment Period**
Appendix C	**Transcript and List of Individuals Testifying at Hearings**
Appendix D	**Public Notices**
Appendix E	**Final Rule Text**
Appendix F	**Comparison of Toxic Air Pollutants: 1994 to 2009**