# January 6, 1999, "Scoping Paper"

# DRAFT Proposal For Changes To

# WAC Chapters 173-400 & 460

# New Source Review

⇔ ⇔ ⇔

## Table of Contents

# GENERAL INFORMATION

## *Purpose*

The purposes of the current proposal to amend WAC 173-460 and -400 are to make editorial changes for clarity, to address the issue of *de minimis*, to consider new control technology requirements, to consolidate the NSR process, and to consider updates to the ASILs.

## *Issues*

The general scope of this rule writing is NSR. Within that broad scope are many potential issues that may or may not be addressed. (The full text of the comments is presented in a separate responsiveness document.) The rule writer should decide which NSR issues to address by the time the CR-101 is filed, after soliciting comments from various interested parties.

This scoping paper summarizes over 130 comments submitted prior to filing of the CR-101 Statement of Inquiry. There are many issues raised here. These issues may or may not be carried through to resolution in this rule making. Some may require technical assistance that is not forthcoming. Some may be deferred to later rule makings or later phases of this rule making because more time and resources are required for their resolution. There is an implicit burden on the proponents of these issues to provide the support necessary for their resolution. From this point on, inclusion of additional issues is discouraged.

Control Requirements

**1) coordinate BACT and MACT**

Whether to coordinate BACT and MACT requirements. MACT can not simply stand in as a surrogate for BACT. This could involve providing for MACT standards in WAC 173-460-060. If not, then whether MACT is completely outside of NSR and this rule writing. Should Ecology incorporate or depart from federal MACT standards, and if so how? *I.e.*, what about MACT? This would be a substantive change.

> Comment: "BACT does not equal MACT. MACT is for many existing emission units considerably less than BACT. Even for new sources, MACT can be less than BACT or TBACT. We probably should include the requirements of 112(g) here, because permit writers may be required to do interim MACT determinations which should be equivalent to BACT or TBACT. In this case, and I expect only in this case MACT = BACT = TBACT."

> Comment: "Remember MACT is only for HAPs, not state toxics. Sources may have insignificant impacts concerning HAPs and not for state TAPs. I don't think any source should be exempt from modeling unless a Tier II analysis has been performed on a representative case study for that category. Just because a source meets MACT, does not mean that is TBACT or BACT or that it poses an insignificant risk. Risk should not be a political decision, rather it should be determined by analysis. It may make a permit writer's life easier to assume that facilities meeting MACT should be categorically exempt from ambient impact analysis, but does it serve the public's interest, who we are required to protect?"

> Comment: "We'd have to watch out here. MACT is a set-in-concrete "floor," whereas BACT is a gradually rising "ceiling." MACT is set by the EPA for applicable sources, typically the medium and large sources for a given category. The "mom-and-pop" operations may be exempted from MACT requirements. If we established MACT as BACT for everybody, we'd blow away the small guys and after a few years we'd have outmoded controls."

This issue received negative commentary. It should be dropped from further consideration.

**2) four existing control technology requirements**

Whether to update any of the four existing control technology requirements in WAC 173-460-060. These requirements constitute “generic BACT” for petroleum solvent dry-cleaning, abrasive blasting, chromic acid plating, and solvent metal cleaners.

Comment: “Currently, the requirements for these categories given in WAC 173-460 are essentially meaningless because they are less stringent than the federal MACT standards. I think the "generic BACT" for chrome plating and solvent metal cleaners should be updated to make them at least as stringent as the MACT standards.”

Comment: “BACT, especially for petroleum dry cleaners, has changed substantially since the last time WAC 173-460 was revised. I think the "generic BACT" for petroleum dry cleaners and abrasive blasting should also be updated to reflect the current BACT for these categories.”

Comment: “One specific comment on one of the BACT abrasive blasting requirements given in WAC 173-460-060(6)(d), it would be helpful if the definition of sand" could be further delineated. The reason for this request is because we have recently encountered a company who is trying to market recycled glass, which is mainly comprised of "amorphous silica" as an abrasive-blasting medium. Is amorphous silica of the same toxicity as "crystalline silica?" Which is meant by the term "sand" in WAC 173-460?”

Comment: "The solvent metal cleaner requirements should also reference the NESHAP when appropriate. Over half of our cleaners do not use one of the listed chemicals, so we have kept our regulation in place to cover these cleaners. However, many of them do not use a listed TAP, so I do not think 173-460 would apply. Our Regulation III, Section 3.05 does apply to all solvent metal cleaners. We recommend including the language in Regulation III, Section 3.05(c) that requires use of an alternative whenever technically and economically feasible. We also recommend exempting cold solvent cleaners that use a very low vapor pressure solvent since air emissions will be minimal (PSAPCA uses 4.2 kPa or 0.6 psia), unless greater than 5% of a halogenated solvent regulated by the NESHAP. These ideas bring in a pollution prevention element that we have found very useful."

Comment: "PSAPCA has updated our chromium electroplating and anodizing regulation to more closely follow the EPA NESHAPs, and we would recommend you refer to the EPA NESHAP requirements for new sources. You may also want to consider whether you want to exempt research & development (R&D) activities that the NESHAP does. PSAPCA requires permitting of R&D chrome plating and anodizing operations to assure they really are R&D. As noted in the previous paragraph, it is important not to delete this reference, because it is likely that there are times when the ASIL may be exceeded. However, the NESHAP sufficiently controls these sources and we would recommend continuing to keep this source category in the generic BACT category (similar to reference to perchloroethylene dry cleaners)."

Comment: "Abrasive blasting is difficult since PSAPCA does not require permitting for most outdoor blasting and, therefore, we have fewer tools for implementing this requirement. We would suggest further discussion with other agencies and Ecology to determine how best to implement this requirement."

**3) more control technology requirements**

Whether to include more control technology requirements in WAC 173-460-060, setting up generic requirements for small sources so they do not have to do anything else. Implementing any of these suggestions would require substantive input from the proponents and knowledgeable practitioners.

Comment: "I would like to see a lot more control technology requirements for specific industry types. PSAPCA has a pretty good model, I believe, but then they can revise their rules a lot quicker than we can. Control technology requirements should only apply to facilities constructed before some future date, say January 1, 2005. This would allow for the increasing complexity in revising rules."

Comment: "I would like to see a lot more control technology requirements for specific industry types. PSAPCA has a pretty good model, I believe, but then they can revise their rules a lot quicker than we can. Control technology requirements should only apply to facilities constructed before some future date, say January 1, 2005. This would allow for the increasing complexity in revising rules."

a) wood stripping

Comment: "A generic BACT tier II analysis was done for wood stripping facilities by Ecology for SCAPCA. Almost every wood stripping facility will require a Tier II analysis because of their extensive use of Methylene Chloride. Could we include wood stripping facilities in this list and establish requirements for generic BACT?"

Comment: "We concur that Ecology should use the results obtained from their review of a methylene chloride wood stripping operation in Spokane to determine generic control requirements. You may want to have a phased approach depending on the size of the operation (i.e., gallons used annually, as limited in a permit).

b) welding

Comment: "Many welding operations use welding rods that have Chromium VI in them. It may be hard to get these facilities to pass modeling with TSCREEN. A de-minimis usage of rod may be a way to handle them w/ a generic BACT for those facilities above the de-minimis. I have a spreadsheet that calculates the toxic emissions from welding operations depending on the type of welding rod used. The spreadsheet is based on the emission factors given in AP-42."

Comment: "PSAPCA exempts welding, brazing, and soldering equipment. We would recommend Ecology determine whether 173-460 is the most appropriate place to regulate these operations. If looking at these operations, Ecology should also look at cutting torches because the emissions are similar."

c) Consider references to MACT and NESHAPS standards

d) portable fertilizer plants

e) ethylene oxide sterilizers

Comment: "PSAPCA recommends reviewing our ethylene oxide regulations for new source generic BACT requirements (Regulation III, Section 3.07).

**4) categorical exemption from ambient impact analysis**

Whether sources with control technology requirements under WAC 173-460-060 should be categorically exempt from all ambient impact analysis. WAC 173-460-030(2)(c) presently exempts four technologies. This differs from the general scheme, where ambient impact analysis is required even after BACT for TAPs is applied. Eg., is there any assurance that a dry cleaner would have insignificant residual risk if it applies the designated technology?

a) Should a generic ambient impact analysis be a condition to adopting such "generic BACT?"

b) Should the authority reserve the right to require ambient impact analysis at its discretion?

c) Should applicability of generic BACT be limited under certain conditions such as size or location) expressed in the rule?

Comment: "Some sources should be categorically exempted from ambient impact analysis. I agree with exempting dry cleaning operations because the operation is not directly vented, so it is difficult to accurately model the impacts. I also agree with exempting chrome platers because the emissions are so small that it is difficult to model such small impacts. Also, the ASIL for chromium is so small that it is difficult to use a screening type of model to assure compliance because screening models have a high factor of safety built into them."

Comment: "We'd need careful consideration and concurrence by the toxicologists on this one. Sure, it would be a lot less hassle to permit little guys simply because they fit a template, but I'd hate to see it result in some sort of toxic health catastrophe on "Sixty Minutes" after I'm retired.. If the toxicologists say "No problem-o" on a source category basis, within reasonable qualifying parameters, I would be all for it. If a source falls outside of the qualifying parameters, an impact analysis would be prudent, in order to assure public safety."

Comment: "I think ambient impact analysis should still be required after T-BACT is applied. The purpose is to make sure there is no risk to human health. Adding a new source or modifying a source that increases toxic emissions may still have a health impact even if BACT is applied. Doing an ambient impact analysis and comparing the value to the ASIL lets us make sure that the increased risk is insignificant. This depends not only on the increased level of emissions, but also the location of the source. This comes into play in Tier 2 I think, where the increase is added to the current ambient level of that pollutant to determine whether or not the health impact is significant. T-BACT or MACT does not necessarily mean that the level at which they control toxics makes the toxic emissions insignificant, it is just the available control technology. The

ambient impact analysis may show that it is better to not make the modification or build the new source, even if T-BACT or MACT is installed."

Comment: Generic BACT requirements would certainly make permitting easier for the engineers and more understandable for the businesses. Generic BACT does not necessarily mean that the ASILs would be met, however. It would have to be stated in the regulation that ambient impacts would not have to be assessed (health and toxicologist's decision), otherwise the business would not understand that even though they meet the control requirements, they still could not get a permit because the ASILs have been exceeded.

Comment: "As noted before in this letter, exempting sources from the ambient impact analysis when generic control technology requirements have been established serves a very important purpose. However, it is important to make these determinations in conjunction with a representative risk analysis for that category and it may be useful to caveat with a statement clarifying that there may be cases when the local air agency or Ecology determines the risks are unacceptable because of sensitive receptors. It also is appropriate to limit generic BACT under certain conditions as appropriate (i.e., size of operation). This would be a very useful approach to expanding the number of source categories that do not have to go through a case-by-case ambient analysis without the concern of a few larger operations driving the modeling assumption to an extreme. Since a majority of our permits are small and for a limited number of source categories, having Ecology perform this generic ambient analysis would be very useful. This would also help permitting authorities focus on the more critical toxic issues. We included a copy of our instructions for permitting soil and groundwater clean-up operations that uses this type of approach. We have generic control requirements, then specify that benzene emissions greater than 15 pounds/year or emissions of chlorinated compounds would require a case-by-case toxics screening analysis. PSAPCA has also made a generic BACT determination to require afterburners for coffee roasters. We still, however, require roasters with a capacity of greater than 3200 pounds per day to do an ambient air quality analysis."

Comment: "The exemption list contained in 173-460-030(c) and 173-460-060 should be expanded. This would reduce the burden on the facilities and agencies within the limits of T-BACT. A second option would be for implementing agencies to have the flexibility to establish an exemption list by regulation or policy."

Comment: "We concur that the existing control technology requirements in WAC 173-460-060 should be updated and additional control technology requirements should be added. The value of these generic source category requirements is when there is a potential for exceeding the Acceptable Source Impact Levels (ASILs), but Ecology has determined that there is a very stringent minimum control technology requirement that would allow permitting without additional toxics screening. The implication would be that Ecology has evaluated the potential health impact of continuing to permit these types of sources, and determined that the minimum "BACT" is sufficient to protect public health. As you know, this eliminates the case-by-case look at sensitive receptors for that specific location, but is appropriate for taking in some of the more general conservativeness of the ASILs and the screening analysis. Ecology should caveat the general control requirements with a statement clarifying that there may be cases when the local air agency or Ecology determines through the permitting process that

additional controls are necessary because of project-specific factors such as the amount of emissions, nature of pollutant, or source location (as done in proposal)."

a) exempt auto body spray booths less than 10 tpy

Comment: "We would encourage you to perform a generic review of . . . spray coating operations (dependent on what is painted and size of operation)."

b) exempt boilers fueled on natural gas or low sulfur fuel (less than 0.05%)

Comment: "We would encourage you to perform a generic review of boilers and other fuel burning equipment (dependent on what fuel and size) . . . ."

c) exempt asphalt plants

d) exempt gas or oil heaters less than 2 mmBtu/hr

e) exempt rock crushers

f) exempt wastewater treatment plants - Chloroform only

g) exempt landfills - Hydrogen sulfide

h) exempt small paint booths less than 5 tpy of VOCs

i) exempt gasoline storage and dispensing operations

j) exempt graphic arts systems

k) exempt can and paper coating operations

l) exempt polyester/vinylester/gelcoat/resin operations

m) exempt ethylene oxide sterilizers

n) exempt coating and ink manufacturing

Comment: "Also, painting and ink manufacturing operations (Regulation II, Section 3.11) should be considered, with a push for pollution prevention for ink manufacturing (soy-based products with low vapor pressure)."

o) eliminate exemption for tanks

Whether to eliminate the exemption for tanks under 173-460-030(2)(a) because all active tanks will vent directly or indirectly. The MACT and NESHAPS standards apply to tanks larger than 10,000 gallons (MACT standards for chromium and vapor degreasers applies to smaller tanks).

Updating ASILs and tables

**5) ongoing review**

Whether the Dept. of Ecology should remove its self-imposed requirement to review TAPs, ASILs, and source applicability. This is in WAC 173-460-120. The Washington CAA does not require this. The Dept. of Ecology AQP does not presently devote the considerable resources necessary to do this. As it is, ASILs are incorporated from other lists. The Dept. does not even have a process for tracking or incorporating revisions from these sources. Such an administrative updating mechanism would be the first step. Reviewing individual ASILs would be a second, technical procedure.

**6) compounds in the table without ASILs**

How should permit writers address compounds in the table that do not have ASILs. Permit writers generally ignore a toxic when it doesn't have an ASIL. The options are:

a) give the compounds an ASIL,
b) take them off of the table, or
c) state that an ambient assessment (tier-1 or tier-2) does not have to be made for compounds without an ASIL.

The third option may be most practical for this rule making effort.

> Comment: "We agree that having compounds on the TAP list without an ASIL seems useless, and is useless when performing a toxics screening analysis. However, it may be important to permit the operation and require BACT (depending on the operation). Taking the chemical off the list may indicate that the permitting authority could not require a permit for the operation. However, there may be compounds for which we should always do a risk analysis. If there are such compounds, we should list them in the regulation."

**7) updating existing numbers**

Whether the existing ASILs should be updated. Most all of the numbers were incorporated from other sources. Updating would involve determining the basis for each number in the table, and whether that basis has changed. If this is to be done, resources would have to be provided. The product would be a permanent mechanism for administratively updating the numbers as the sources of the numbers are revised. ASILS are calculated from numbers found in the following:

- IRIS for class-A TAPs
- IRIS for class-B TAPs
- TLV for class B TAPs not found in IRIS
- other

**8) changing existing numbers**

Whether particular ASILs should be added, removed, or changed. Some of these would require substantial involvement of technical specialists to justify variance from the existing sources of the numbers. Only in rare and special circumstances would Ecology have the resources to independently evaluate any particular number. WAC 173-460-120 requires this sort of review.

a) chemicals with ASIL greater than 250 µg/$m^3$ (24 hour average)

Comment: "Drop all chemicals with a Acceptable Source Impact Level (ASIL) of greater than 250 µg/$m^3$ (24 hour average) except for the hazardous air pollutants (188 listed). BACT for criteria pollutants should reduce emissions to below the 250 µg/$m^3$ (24 hour average). The National Ambient Air Quality Standards for the pollutants are as follows: carbon monoxide 10,000 µg/$m^3$ (8 hour average), nitrogen dioxide 100 µg/$m^3$ (annual average), sulfur dioxide 365 µg/$m^3$ (24 hour average), total particulate matter 260 µg/$m^3$ (24 hour average)."

Comment: "We don't need ASILs for criteria pollutants; the PSD program should address health impacts. We found the comment to drop all chemicals with an ASIL greater than 250 ug/m3 to be very interesting and worth some thought. Would BACT for these pollutants be addressed elsewhere in the permitting process or should we even require BACT for these pollutants? We suggest working with your toxicologists and permitting engineers to determine if there is some point when we would have no interest having an operation go through the permitting process. We concur that these pollutants rarely, if ever, have an ASIL exceedance, but do we want to lose the BACT requirement for these sources? At a minimum, specifying that facilities that have the potential to emit below a certain threshold of these low toxicity chemicals probably do not have to be permitted. In conjunction with this approach, we may want to identify source categories/operations that would require permitting, even if low quantities of these chemicals are emitted, because we have determined a generic control technology requirement is appropriate."

b) groups of chemicals instead of specific compounds

The toxic list contains groups of chemicals instead of specific compounds, for example, arsenic compounds and glycol ethers. These groups of chemicals should be broken down into the specific compounds whenever possible for example: arsenic pentoxide, and arsenic trisulfide.

c) zero as ASILs for Persistent Bioaccumulative Toxics

Whether to consider zero as ASILs for Persistent Bioaccumulative Toxics (PBTs) (or Bioaccumulative Chemicals of Concern-BCCs- to use water section's language) or otherwise accomplish phaseouts for these substances through the rulemaking?

d) health impacts associated with prenatal and childhood exposures

Whether to address health impacts associated with prenatal and childhood exposures.

e) full range of noncancer health impacts

Whether to address the full range of noncancer health impacts, including for example, hormone disruption

f) 8-hour ASIL for nonresidential neighborhoods

Whether to add an 8-hour ASIL for nonresidential neighborhoods. Creating an 8hr ASIL would complicate the tier-1 analysis. Receptor location can be addressed in tier-2 under the existing rule.

**9) compounds regulated under FCAA 112(r) accidental release prevention program**

Whether the list of compounds identified for regulation through the accidental release prevention program of FCAA 112(r), due late 1994, should be included on the ASIL list. This issue was identified in the Dept. of Ecology's response to a comment on the 1994 revision to WAC chapter 173-460. Negative commentary indicates that this issue should be dropped.

**10) move SQERs into the master table**

Whether to move the SQERs into the master table. Each chemical would have its own SQER, calculated from the ASILs and a set of conservative, yet realistic SCREEN-3 input parameters.

Editorial

**11) unified table**

Whether to combine all the ASIL tables into a single unified table. These changes would be editorial, not substantive. This would eliminate double entries. The combined tables would not be entirely unlike those of Puget Sound Air Pollution Control Agency's Regulation III, although more columns would be necessary for SQER etc.

**12) consolidate all new source review**

Whether to combine all new source review into its own chapter. This new chapter 460 could include the following. This would include major and non-major source NSR for criteria pollutants and TAPs. Should also this include:

- PSD
- NSPS
- NESHAPS

The rule-writer plans to clarify and consolidate the applicability and exemptions criteria of WAC 173-460. These changes would be editorial.

**13) industrial classifications**

Whether NSR for TAPs should be required within all industrial classifications. See WAC 173-460-030(1)(i). (Note that the U.S. Census Bureau is converting from the SIC system to the NAICS.) This would be in line with NSR for criteria pollutants. This would not change the substance of the rule if exemptions for industries are specified where appropriate. Identifying those industries for which exemption is appropriate would require stakeholder recommendations.

> Comment: "I think that NSR for TAPS should be required within all industrial classifications. A toxic is a toxic and can be a potential health risk in source classifications that are not listed as well as those that are listed. If you want to exempt certain industries or emission units based on control technology, then do so based on a risk analysis performed for that industry not politics. If stakeholders want to perform the risk analysis and have it reviewed by Ecology to exempt them from the reg., then I don't see a problem. If the stakeholders just want to get out of regulation with out proof of no public risk, then I don't think an exemption request should be entertained. Basically they should be required to put their money where their mouth is."

**14) move WAC 173-460-090(3)(ii) to -100**

Whether to move WAC 173-460-090(3)(ii) to –100. The subject matter would seem to be more coherent this way.

Misc.

**15) Definitions**

a) "contaminant" or "pollutant"

Whether to choose between uniform use of either the term "contaminant" or the term "pollutant." This would clarify the rule, without changing its substance. The Washington CAA uses the term "contaminant" while the federal CAA uses the terms "pollutant". The EPA regulations use the terms of the Federal CAA, while the WAC uses "contaminant" and "pollutant" interchangeably." Based on the numbers below, consistent use of "pollutant" may be preferable.

- FCAA uses "pollutant"(?)
- CFR uses "pollutant"(?)
- RCW 70.94.152 uses "contaminant"
- WAC 173-400 (1996) uses "contaminant" 66 times and "pollutant" 87 times
- WAC 173-460 (1994) uses "contaminant" 7 times and "pollutant" 63 times
- colloquially: "contaminant" implies any **known** foreign substance
  "pollutant" implies any **harmful** contaminant

b) "asphalt fumes"

Whether to include definition for "asphalt fumes" and test methods to be used to measure asphalt fumes.

c) Class A and B

Whether to update the definitions of Class A and B. The Class A and B definitions need to be updated.

d) all known available and reasonable technology

Whether to define "all known available and reasonable technology." The term is used in WAC 173-460-100(3)(a) and (3)(b).

e) substantial alteration

Whether to define "substantial alteration."

f) similar parts replacement

Whether to define "similar parts replacement."

**16) Pollution Prevention**

How can pollution prevention be encouraged by explicit provisions in the rule?

Whether to add WAC 173-460-100(4) to 173-460-090? This provision allows for voluntary further exposure reduction.

**17) TAPS de minimis**

Whether to adopt *de minimis* levels for TAPS. (*De minimis* means "concerning trifles.") An unimplemented decision to do so is manifested in a cross reference in the table at WAC 173-400-110(5)(d). This "exemption threshold table" includes levels for criteria pollutants, but only a cross-reference to nonexistent levels for TAPs. If so, should there be an agency processing fee?

Comment:
"Currently, there is a big discrepancy in WAC 173-460 on de minimis levels. WAC 173-460-040(2)(b) and (c) say that if a new source is a minor process change or the result of minor changes in raw material composition, and total toxic air pollutant emissions do not exceed the emission rates specified in small quantity emission rate tables, a NOC is not required. This means that "minor changes" could increase emissions by 20 tons / year and not have any NSR requirements. I don't think it makes sense to use the SQER as the de minimis levels for NSR for minor process changes, but then have no de minimis levels for new toxic air pollutant sources. Using the SQER for de minimis values for process changes is also inconsistent with the de minimis levels given in WAC 173-400 because many of the TAPs are also VOCs. The VOC

NSR de minimis value is 2.0 tons/year. Therefore, TAPs that are also VOCs would not trigger NSR under WAC 173-460 until 20 tons/year. However, under WAC 173-400, they would trigger NSR at 2 tons/year.
I think there should be 1 set of de minimis values for new and modified TAP sources. The de minimis values should not be the SQER because this values is too large for many TAPs. I don't think a process should be allowed to emit 20 tons / year of a TAP and not go through NSR. On the other hand, there needs to be some kind of de minimis levels for NSR… otherwise, someone who puts in a new source that emits 5 lbs/yr of acetone would have to go through NSR."

Comment:
Regarding de minimis levels, we do not concur that WAC 173-460-040(2)(b) and (c) mean a "minor change" could increase emissions by 20 tons/year and the operation would not need a new source review permit. The change has to be a minor process change that does not increase capacity or a minor change in raw material composition and emissions will not exceed the SQERS.
If potential emissions are below de minimis levels (less than 0.1 of SQER) and the authority or Ecology has not determined that the process needs to be permitted, we would be comfortable exempting these sources from new source review. However, it is very important to be clear that there may be times that an authority will say all processes, regardless of size, need to be permitted because it is important to specify conditions for BACT or proper operation. A good example is evaporators. A facility could imply that there are no air emissions since they are just evaporating water. However, PSAPCA requires permitting of evaporators to specify what can be evaporated and how the evaporator should be operated to assure only water vapor is emitted."

**18) streamline/simplify tier-2**

Whether to streamline or simplify tier-2. There is some vague dissatisfaction with the tier-2 process. It may be misunderstood. It is an expensive process that may not provide added value to the permit. It is may not change the permit. More specific examples and information on the frequency of such instances would be useful.

To justify streamlining, the rule writer needs something more than allusions. The rule writer needs case histories, examples, and numbers. E. g, how many NOCs are there, how many go to Tier-2, and how many change as a result?"

E. g.: "Businesses that are installing boilers or back-up fuel systems, and other combustion sources are exceeding the acceptable source impact levels (ASILs) in Chapter 173-460 WAC. CRO, ERO, and SCAPCA have issued or are in the process of issuing draft permits for boilers with curtailed number of hours of operation, using TSCREEN as a design tool, and with input from EPA AP-42 emission factors and Chapter 173-460 WAC. We are not sure that this is the correct approach to use, but it is the only one we have for now.

E. g.: "ERO issued a preliminary determination for Pacific Northwest Sugar Company (PNSC), our largest Notice of Construction permit to date. Several problems were encountered in attempting to address Chapter 173-460 WAC. It was found that they exceed the acceptable

source impact levels for several toxic pollutants, even though they were operating a relatively clean fuel, low sulfur distillate fuel oil, as a back-up to a clean fuel, natural gas. A lot of resources were expended on addressing Chapter 173-460 by Ecology and PNSC to ensure the provisions of Chapter 173-460 WAC were met. The same scenario is encountered in other proposals and by other permitting engineers. We are not advocating that our toxic regulations are without merit, however, they need a serious review now that they have had five years of application. Please contact us for any information."

E. g., "Huntwood Industries in Spokane. The facility is currently in compliance with the wood finisher MACT standard emission limit because all of their coatings have VHAP contents less than 1.0 lb VHAP/lb solid. However, the facility uses a tremendous amount of sealer per year (>40,000 gallons per year). This sealer contains only a small percentage of formaldehyde. However, when the emissions are totaled for the facility, they emit more than 500 lbs per year of formaldehyde. When these emissions were modeled, the modeled impact was 5 times over the ASIL, based on modeling by TSCREEN and ISC3. Therefore, Huntwood is going to have to switch to a coating with almost no formaldehyde to meet the ASIL. Based on my experiences with Huntwood Industries, it appears that we need the ambient impact analysis capabilities for some facilities to adequately protect human health."

Comment: "Most small sources (? 95% of SCAPCA's air pollution sources) can not afford to have a Tier II performed. From my understanding, there has never been a project denied after having to go through a Tier II. If this is the case, then it appears that added cost was required of each proponent to prove that their process would not create a health risk with no apparent benefit to anyone except the Department of Ecology and possibly environmental consultants that did the risk assessment. This method appears to be classifying the source as "guilty until proven innocent". I'm not sure how to fix the process. Investigation of problem SQERs and asils and verification of their values may go a long way toward fixing the problem. A committee of permit writers, Ecology staff, environmental consultants and industry representatives may be able to develop a more equitable method."

Comment: "Replace 173-460-090(4)(iii through vi) with: Characterization of pathways and daily intake for the increase in toxic air pollutants that exceed the ASIL as a result of this modification. Characterization of risk for the increase in toxic air pollutants that exceed the ASIL as a result of this modification. The increase in cancer risk for all toxic air pollutants that exceed the ASIL as a result of this modification."

**19) Class B tier II**

Whether to provide for class B TAPs in tier II. Presently, the Tier II process only explicitly addresses the cancer risk from Class A TAPs.

**20) modify applicability and exemptions**

Whether to change the applicability and exemptions criteria of WAC 173-460. These changes would be substantive.

Comment: "Source categories listed in your draft proposal should not be exempted from the rule. Instead, these source categories should be reviewed for generic control technologies with generic ambient analyses."

a) radionuclides

Comment "In WAC 173-400-100(1)(d), recommend that the phrase "..other than Subpart M ( National Emissions for Asbestos) or a Maximum. . . ." be extended to read "..other than Subpart H (National Emission Standards for Emissions of Radionuclides Other Than Radon From Department of Energy Facilities) and Subpart M ( National Emissions for Asbestos) or a Maximum. . . ." Our concern is that registration and new source review for radionuclide emission sources from DOE facilities is also regulated by the Department of Health under WAC 246-247-010 and -060. This appears to be an unnecessary and unintended duplication. In addition, new toxic air pollutant sources that would otherwise be exempt from new source review under -460-040, appear to be required to file an NOC [see -460-040(1)(a) and -46-030(1)(b)(ii)] only because the new source emits radionuclides subject to Subpart H."

b) exempt R&D and laboratories

Whether to exempt R&D and laboratories. They use small amounts of many chemicals in unpredictable ways. E.g., Hanford and universities.

Comment: "In regard to R&D facilities, PSAPCA does exempt fume hoods not designed to prevent or reduce air contaminant emissions and laboratory equipment used exclusively for chemical or physical analysis. However, we have permitted large R&D operations at the UW when a scrubber was installed."

**21) clarify NSR requirement for existing sources and modifications**

Whether to clarify NSR requirement for existing sources and modifications. What is the problem, and how could it be fixed?

Comment: "Does replacement of an old cyclone with a new cyclone constitute a substantial alteration or a similar parts replacement? Does "substantially alter" mean the same thing as "modification"?

- "Substantial alteration" needs to be clearly defined.
- "Similar parts replacement" needs to be clearly defined."

Comment:
The current WAC 173-460-040 (1) (b) and (c) that defines how modified units are subject to new source review can be interpreted in two ways. One way to look at it is to apply new source review (i.e. ambient impact analysis, TBACT, etc.) to just the unit being modified and the increased emissions from the unit being modified. Another way to interpret this section would be to conduct new source review on the unit being modified, but to include emission increases from the entire facility that result from the modification. For example, adding a process unit to a

refinery which produces a high benzene concentrate product stream subjects the new process unit to new source review. Using the second interpretation would require a review of the associated increases in benzene from all downstream emission points such as valves, flanges, pumps, compressors, and storage tanks. It has not been our policy (NWAPA) to impose BACT (or TBACT) on a unit that has not been "modified", however, in the example I gave, the additional benzene emissions were large enough to require a second tier analysis of the modification. I believe the intent of the original rule was to limit the review to the modified unit. Therefore, I would suggest the following changes:

WAC 173-460-040 (1)

(b) The notice of construction and new source review applies only to the new or modified affected emission unit(s) and the air contaminants whose emissions would increase as a result of the emitted from the new or modified emission unit(s).

(c) New source review of a modification shall be limited to the emission unit or units proposed to be modified and the toxic air contaminants whose emissions would increase as a result of the modification.

Unless of course the intent is to review all emission increases that result from a modification, which is how the PSD program is intended to function.

Comment: "In regard to clarifying new source review requirements for existing sources and modification, we see no end to this discussion. PSAPCA considers this to be part of the permit review to determine what constitutes a modification and how much of the facility operation is affected by the modification. It is difficult to define or resolve these issues in a rulemaking. We recommend leaving this to good judgment by the permit engineer."

**22) emission estimates based on inventory records and mass balance assumptions**

Whether emission estimates should be explicitly be allowed to be based on inventory records and mass balance assumptions.

**23) clarify federal enforceability**

Whether to clarify federal enforceability.

**24) clarify local authority**

Whether to clarify local authority.

Comment: "173-400-110(1) appears to usurp local air authority if the local chooses not to submit its rules for inclusion into the SIP. For example, our rule may exempt activities or units that the local rule doesn't, yet our rule says that our rule applies, so the exemption should apply. One caution: there was a reason the offending language was added in the 11th hour. It was meant to address a concern that I think EPA had."

Comment: "We concur that all new source review should be consolidated. PSAPCA includes our toxics review as one component of our new source review program in Regulation I, Article 6. PSAPCA's approach is to determine that an operation needs to be permitted, either because of criteria or toxic air pollutant emissions, then determine BACT, then determine if there is any ambient impacts (toxics or criteria pollutants). New source review should be an integrated approach. However, WAC 173-400-110 currently applies statewide unless an authority has adopted and is implementing its own new source review regulation and those regulations are incorporated into the state implementation plan (SIP). As we have discussed, the state implementation plan is intended to address criteria pollutant issues, so this applicability statement may not be appropriate for the toxics review. You may want to exclude the toxics review procedures, especially for 2nd and 3rd Tier Analyses, from the reference to the SIP. We suggest that as you combine these regulations, you consider whether each section should appropriately be submitted as part of the SIP. EPA could probably provide guidance on this issue."

**25) fees**

Whether to change "ten thousand dollars" to "up to ten thousand dollars." This will allow Ecology to charge less than the maximum for simple modifications and/or administrative modifications. The amount charged to process permit applications should reflect the amount of resources expended by Ecology.

## EXTERNAL COORDINATION

### *Stakeholder Strategy*

Outreach to potential advisory committee members resulted in mixed reactions. These included non-response, “understaffed,” “keep me informed,” and “sign me up.” Those willing and able to participate did not comprise a complete cross-section of interests. Therefor, an advisory committee is not presently warranted.

Those who have expressed interest should have ongoing opportunities to contribute, from the present scoping phase through adoption. This opportunity could be enhanced through an on-line information and a comment form posted through the AQP homepage. The rule writer should also disseminate information and updates through E-mail and U.S. mail.

Various special interest meetings could be held with the various stakeholders. For example, sessions have already been held at the quarterly permit engineers’ meetings. It may also be appropriate to offer stakeholders the opportunity to meet in person to engage in dialogue with each other.

It might be possible to develop a mailing list of people or entities who expressed an interest in the subject during the last revision to the rule. The rule writer could provide information to people on the mailing list, and solicit involvement.

The rule amendments should be handled in phases. The first would consist of the considerable editorial effort of combining toxic and criteria NSR into one chapter. This editorial effort would

necessitate resolving some substantive issues, but would avoid changing existing NSR. The second phase would address proposals for substantive changes to NSR, the foremost being *de minimis* toxic thresholds. These substantive changes would be made to the edited text, and the result would be filed with the CR-102.