

Fact Sheet

EPA rule will allow more pollution in our national parks & wilderness areas

SUMMARY: The U.S. Environmental Protection Agency (EPA) is attempting to weaken the laws that protect air quality in some of America's most treasured national parks and wilderness areas. A proposed EPA rule, now under final review at the Office of Management and Budget, would allow industries seeking to locate near national parks and wilderness areas to circumvent pollution limits established by Congress to protect these areas. As a result, there could be more power plants and factories emitting more air pollution into "areas of special natural, recreational, scenic or historic value" that Congress sought to preserve and protect for future generations.

The Clean Air Act protects air quality in national parks and wilderness areas

In 1977 Congress amended the Clean Air Act and designated certain federal lands as **class I areas**, giving them the greatest level of protection under the Act. There are 158 class I areas, including 48 National Parks, 21 Fish & Wildlife refuges, and 88 Forest Service wilderness areas.

To protect the air in class I areas, Congress created the <u>prevention of significant</u> <u>deterioration</u> or <u>PSD</u> program. PSD seeks to "preserve, protect, and enhance the air quality in national parks, national wilderness areas, national monuments, national seashores, and other areas of special ... natural, recreational, scenic or historic value." *Clean Air Act Sec. 160*.

Under PSD, Congress established limits (known as <u>increments</u>) on additional amounts of pollution in class I areas over <u>baseline</u> conditions that existed in 1977 when PSD was enacted. Increments are in place for emissions of sulfur dioxide, particulate matter, and nitrogen oxides. Because Congress sought to protect air quality not just from long-term pollution increases, but also from fluctuations and "spikes" that occur at certain times of year (e.g., peak summer energy demand), it created both <u>annual</u> and <u>short-term</u> (3 and 24 hours) increments for these pollutants.

Since Congress wants class I areas to have the cleanest air in the country, these parks and wilderness areas have the smallest increments, or allowable amounts of new pollution. Most other areas of the country are <u>class II areas</u>, and their new pollution increments are about 4-20 times higher. By creating more "room" for new pollution in class II areas, the law seeks to steer new pollution sources away from class I areas.

A major new pollution source like a power plant may not locate near a class I area if it would increase pollution over the class I increments. The plant must do a study (known as an **increment analysis**) to show how much pollution is already in the class I area and how much additional pollution it will add.

In very limited circumstances, a new pollution source may be granted a <u>variance</u> allowing it to exceed class I increments if its emissions will not adversely impact air quality in the class I area. The source must, however, comply with alternative, higher increments similar to the class II increments.

EPA's rule will allow more air pollution in national parks and wilderness areas

EPA is seeking to change the way increment analyses are conducted for class I areas. Four changes in particular will allow facilities seeking to locate near class I areas to manipulate the data to make it appear as if the air is cleaner than it actually is. These changes will open the door to new pollution in national parks and wilderness areas.

(1) Hiding pollution spikes from regulators

Pollution levels in class I areas can vary significantly over the course of a day, week, month and year. For instance higher pollution can occur during daytime when more commercial activities take place, and during summer months, when power plants increase operations to meet air conditioning energy demand. Congress created short-term pollution increments to protect class I areas from these periods of higher emissions.

EPA's proposed rule would undermine short-term increments by turning them into annual average pollution limits. A facility looking to locate near a class I area could average the hourly and daily emissions of all area pollution sources over the course of a year, thus hiding pollution spikes that can cause real harm in class I areas or even exceed the short-term increment limits. Having created a false picture of actual pollution levels in the class I area, the new facility could then claim the right to emit far more pollution than otherwise would be allowed.

(2) Ignoring major polluters in class I areas

Under current rules, a pollution source that has received a variance to exceed a class I increment will nonetheless still have its emissions counted when new sources are seeking to add pollution in the class I area. This makes sense because a variance source, by definition, is known to be a major contributor of pollution in the class I area.

Under EPA's proposed rule, the emissions from any pollution source operating under a variance would not be included in an increment analysis. When calculating pollution levels in a class I area, a new facility could simply pretend that those sources don't

exist. By ignoring these emissions, a new facility can claim there is more "room" for new pollution, thus degrading class I air quality to an even greater extent.

(3) Allowing phony pollution accounting methods

Under current rules, emissions from existing facilities that impact a class I area are established by looking at the most recent two years of operating data. The proposed rule allows actual emissions to be computed based on any time period that is claimed to be "more representative" of normal source operations. The alternative time period could even be two non-consecutive 12-month periods picked from anytime in the past. This opens the door to phony pollution accounting by new facilities that have a vested interest in producing the lowest possible pollution estimates for class I areas they are seeking to locate near.

(4) Opening the door to 50 different standards

Air pollution does not respect state boundaries, and class I areas may be polluted by sources in many different states. It's therefore important that the methods for estimating class I pollution levels are the most accurate and are consistent from state to state.

EPA's proposal opens the door to 50 different standards for estimating class I pollution levels: Emissions "...shall be calculated based on information that, *in the judgment of the reviewing authority*, provides the most reliable, consistent and representative indication of the emissions from a unit or group of units in an increment consumption analysis...." Some states are likely to use methods that make the air in class I areas appear cleaner than it actually is, but EPA's rule provides no check against such practices.

EPA's Regional Offices and the National Park Service object strongly to these changes (see attached quotes from NPS and EPA Regional Offices). However their concerns have been largely ignored by political appointees at EPA and the White House Office of Management and Budget.

MORE INFO

Mark Wenzler, Clean Air & Climate Program Director, National Parks Conservation Association, 202-454-3335, mwenzler@npca.org

The National Park Service and EPA Regional Offices have strongly criticized EPA's proposed changes to Class I area rule.

They say the rule squanders an opportunity to strengthen the program, opens the door to abusive and inaccurate estimates of existing pollution levels in class I areas, and leaves these protected areas more vulnerable to new pollution. The following are excerpts of comments developed by NPS and EPA regional offices during the development of the rule proposal.

National Park Service

"The [Clean Air] Act does not ... allow for **shopping about for emissions data** from multiple time periods that may be far-removed from the baseline date." NPS

"By allowing a different period to be chosen for each unit to represent actual emissions as of the baseline date, EPA is **adding to the complexity and the potential gaming** of an already complex task ... [because] it makes PSD baseline concentration(s) up for interpretation by every applicant." NPS

The new EPA approach "represents a 180-degree about-face from" recent EPA guidance. NPS

"use of annual average emissions would **not detect the peak impacts of a facility** that previously operated a few hours each day for the entire year and then increases ... operation[s]" NPS

"The *protection of short term PSD increments cannot be assured* using annual average emission rates." NPS

The proposed EPA methodology "provides *the lowest possible degree of protection* of short-term increments and it is usually the 24-hour increment that is the most critical" for protecting air quality. NPS

The proposed rule "ignores the reality that some sources, such as EGUs, often have peak production in response to external factors and may well peak concurrently." NPS

"Allowing the use of the annual emissions rate rather than a source's maximum emissions rate could seriously underestimate the change in concentration for the 24-hour or 3-hour time periods." NPS

"The EPA proposal would now exclude [sources that have received variances] from all future Class I increment analyses. This in essence would allow future sources to more easily show that the Class I increments are being met, when in fact the total incremental concentrations could be well above the levels set by Congress to 'Prevention [sic] Significant Deterioration' of air quality in our national parks." NPS

EPA Region 1

"PSD permit applicants are always modeled at maximum allowable [emissions] because EPA's regulations require it and actual emissions would be difficult to forecast" EPA/R1

"EPA should make a technical support document or regulatory impact analysis available" to justify its changes. EPA/R1

"the current draft may actually muddle matters more...." EPA/R1

"the draft appears to allow the use of annual emission rates to assess short-term increment consumption. This will fail when, for example, a source is permitted to operate seasonally or is permitted to operate 8760 hours per but typically operates a much lower number of hours." EPA/R1

EPA Region 2

"The protection of short term PSD increments *cannot be assured* using annual average emissions rates." EPA/R2

EPA Region 3

"The proposed addition to the definition of Actual Emissions ... is **grossly inadequate**" and "opens the door to totally **frivolous documentation**" of a source's emissions. EPA/R3

"The proposed acceptance of evaluating compliance with 3-hour and 24-hour increments by ... 'dividing an annual emission rate by the number of 24-hour or 3-hour time periods in a year' *provides the lowest possible degree of protection* of short term increments and it is usually the 24-hour increment that is the most critical." EPA/R3

This proposal "makes the explicit, and probably **false**, **assumption** that the source did or will operate for all 365 days or 2620 3-hour periods in a year." EPA/R3

"The argument, in the preamble, that it is unlikely that multiple sources will experience maximum emissions on the same dates is **specious** [and] **ignores reality**" EPA/R3

"The exclusion [from the baseline of certain sources that have received variances] gives a **permanent** 'pass' to sources that happen to obtain a variance regardless of subsequent events [or that are] granted based upon error or mischief." EPA/R3

EPA Region 4

"the limited review time was not sufficient to provide comments on the complete proposed rule nor has it allowed a more appropriate detailed review to better ensure the proposed rule text clearly and accurately clarifies the increment modeling issues." EPA/R4

"Discounting the importance of the NSR Workshop Manual in providing guidance and EPA policy since 1990 is a mistake. The document has been used by EPA, consultants, and permit applicants as the basis for PSD permitting." EPA/R4

"The application of the concept of 'normal operations' to the PSD baseline concentration(s) does not appear appropriate as it makes *PSD baseline concentration(s) up for interpretation by every applicant*." EPA/R4

EPA Region 5

EPA's contention that annual emission are a more accurate measure of increment consumption than maximum emissions "implies that an analysis, or field study work, etc. has been done showing concentration change results compared to a known baseline. If this is the case, the studies should be cited." EPA/R5

"in the case where hotspots are due to single sources, the use of average short-term rates will likely underestimate expected actual short-term concentration increases." EPA/R5

EPA Region 7

EPA is arguing that it can use annual emissions as an accurate measure of increment consumtion. But "the argument …lacks foundation" and "will likely mask the peak short term concentrations of pollutants." EPA/R7

"Dating back only to 2005, the EPA stated that use of annualized emission rates likely underestimates short-term impacts. In the Regional Haze Regulations and Guidelines for Best Available Retrofit Technology (BART) Determinations, EPA opined that the use of an annualized emission rate potentially underestimate visibility impacts." EPA/R7

"In most source categories with variable operation rates, it is entirely reasonable to assume that higher operation levels than the level represented by the annual average. By annualizing a short-term emission rate, the assumption is then being made that the annualized rate is representative of normal short-term source operations. The fact that higher source operation levels are likely to exist is neglected, which will result in underestimation of short-term concentrations. EPA/R7

EPA Region 9

"the proposed revisions to the regulatory definitions and procedures for calculating increment consumption would **allow state and local authorities with excessive discretion**" resulting in "a **significant underestimation of actual increment consumption.**" EPA/R9

"Allowing the use of the annual emissions rate rather than a source's maximum emissions rate could **seriously underestimate the change in concentration** for the 24-hour or 3-hour time periods." EPA/R9

"allowing unlimited discretion to state and local agencies to define the 24-month period a source must use" to estimate maximum emissions "will result in underestimating actual increment consumption" and "is contrary to allowing informed public participation in the process." EPA/R9

"We are also opposed to the draft proposed provision ... which provides ... 'that the reviewing authority may select the data and emissions methodology that it judges to be most appropriate for estimating actual emissions for each increment analysis...." Current regulations "allow for use of reasonable, representative, rational and verifiable methodologies on a case-by-case basis after consultation between the source, state or local agency, and EPA Regional Office." Therefore this proposal "may undermine the consultation with the EPA Regional Offices ... and could ultimately leave sources at risk as well as allowing air quality deterioration." EPA/R9

The preamble states that a PSD permit applicant is not required to release "proprietary data and/or software that may be used in the development of model inputs." "We believe that the *public should be entitled to review all of the data* used to analyze increment consumption, and should also be able to understand how the model is treating data." EPA/R9

"this proposal ... would *jeopardize protection of PSD increments and limit the public's ability to be involved* contrary to the provisions of CAA Section 160." EPA/R9

EPA Region 10

"Region 10 is **very disappointed** with this draft package." "Rather than addressing the issues and giving clear guidance to permitting authorities and permit applicants, this draft proposal would **further confuse the issues**." EPA/R10.

EPA Region 10 notes dozens of inaccuracies in how the proposal describes the legal requirements of the PSD program, describing the document as "full of errors." EPA/R10.

"Because of this *fundamental misunderstanding* of the permit process and the lack of understanding of how variances work, this rulemaking *misses the mark* on the appropriate solution to the issue of increment consumption for sources with variances." EPA/R10

There needs to be a "hierarchy" of methods for estimating emissions. Without one, the "*lowest common denominator*" will prevail. EPA/R10.

"The discussion of actual emission rates used to model short term increment compliance ... fails to discuss the fundamental question which is what was intended to be protected as a result of establishing short-term increments." EPA/R10

"Region 10 **strongly objects** to the new language allowing for actual emissions to be calculated using non-consecutive months. This language would **allow a source to 'cherry-pick'** individual months over a 12 to 20-year period to establish baseline actual emissions." EPA/R10

"Region 10 strongly objects to [the proposed provision] which allows for the use of either one of two entirely different emissions inventories ... for short-term increment analyses. The two inventories can be different by as much as two orders of magnitude ... and will therefore produce entirely different results for each permitting action or increment consumption analysis." EPA/R10

Region 10 gives two examples of how the proposed method for estimating actual emissions could fail to protect class I areas: "For example, use of maximum emission rates to evaluate increment consumption for a peaking unit that changes to a base-load unit will show no increment consumption (since there would be no increase in its maximum emission rate) when the increase in operation from a few days to year-round may actually have resulted in the area going from pristine to nonattainment. In the same manner, use of annual average emissions would not detect the peak impacts of a facility that previously

operated a few hours each day for the entire year and then increases daily hours of operation but only operates seasonally." EPA/R10

Final Agency Review Comments From EPA Regional Offices

EPA regional offices were given an opportunity to comment on the final rule before it was sent to OMB for review. Half of EPA's 10 Regional Administrators formally dissented from the final rule, while four other regional offices submitted critical comments. The regional offices believe that most of their concerns raised during the development of the proposed rule were not addressed in the final rule. The following are excerpts of their comments.

EPA Region 1

the final rule may increase inconsistencies that now trouble the PSD program

EPA Region 2

Region 2 does not believe that one of the options for determining the short term emission data is technically defensible.

[The final rule] could significantly underestimate the emission and therefore underestimate the actual impacts.

we do not agree that using annual average emissions for short term impacts is an improvement over the method that is in the [existing] guidance ... [which] has been successfully implemented for many years. We believe that the proposed approach ... for defining the baseline or current year concentrations is inappropriate and could lead to "gaming" the increment calculation.

the rule would allow the source to arbitrarily pick and choose which years to model. It could allow sources to pick a year solely because it is most beneficial to the outcome of the modeling. We believe this is not consistent with the intent of Congress.

allowing the use of proprietary models without requiring that the workings of the model be disclosed for both the reviewing agency and the public could erode the credibility of the Agency's permitting actions. There is a general theme in the rule that allows discretion at too many steps of the increment calculation.

EPA Region 4

Region 4 non-concurs with this proposed final rulemaking

...there remain a number of revisions to the increment calculating procedures that would reduce consistency, accuracy and public review as provided in EPA's current guidance and regulations and could allow greater deterioration of air quality in clean areas rather than preventing significant deterioration. The proposed final rule does not provide complete, technically sound, and clear regulations needed to ensure consistent PSD increment assessments nationwide.

EPA Region 5

the draft Final Rulemaking does not address our comments on the methodology allowed for estimating emissions

[the final rule] removes clear recommendations from previous guidance and standard practices and simply gives individual States broad discretion

Dividing annual emissions by a short-term averaging time period does not provide a representative short-term emission rate for most sources.

Using annual emissions smooths out the actual emission peaks and valleys and could result in the modeling significantly underestimating the actual maximum short-term impacts for many source categories. That means that compliance with the short-term PSD increments cannot be assured, the proposed approach for generating increment consumption emissions allows too much discretion. It would encourage "shopping" for a favorable 2-year period. Such shopping would cast doubt on whether the modeling truly gives a reliable, conservative analysis of the increment consumption.

If the Agency eliminates the [NSR Workshop] manual as a statement of EPA guidance on how to conduct BACT and air quality analyses under PSD, it will create a vacuum that will leave each PSD applicant and each permitting agency with an opportunity to devise its own protocol; there will be no chance for national consistency, no reliable benchmark for a court to determine if an analysis is adequate and less certainty for applicants when they present a protocol to a permit authority.

The concerns noted above are significant enough to support nonconcurrence.

EPA Region 6

EPA Region 6 believes that our comments ... have not been adequately addressed during the final rule development process.

Our main concern continues to be that this action allows short-term emission rates to be estimated from annualized average emission rates. This estimation will result in a significant underprediction of the actual impact and lead to worsening air quality.

In EPA Region 6, as with many other areas of the country, short-term standards/increments are the ones most likely to be exceeded.

To change the guidance would undermine many of the permits issued in our Region. From our experience, the use of annual averaged emissions is often significantly different for many industrial emissions, including coal burning power plants and the resultant impacts of annual averaged values would not be protective of short-term increments. It has also been our experience that short-term increment issues have driven the level of controls for some facilities and resulted in overall less emissions from a project. This affect would be weakened by the use of an annual average emission rate.

By annualizing a short-term emission rate, the assumption is then being made that the annualized rate is representative of normal short-term source operations. The fact that higher source operation levels are likely to exist is neglected, which will result in underestimation of short-term concentrations.

EPA Region 7

Region 7 analysis of this procedure has shown the short-term increments can be significantly underestimated as a result and could change the outcome of increment modeling results which affect air pollution control decisions in PSD permits. The long term impact of this change to the PSD rules could result in permitted emissions causing or contributing to violations of the short-term PSD increments and national ambient air quality standards (NAAQS).

Since the inception of this rule, Region 7 has expressed its concern that codification of any procedures which allow for the use of long-term emission rates when modeling against short-term increments would not be reflective of the goal of the PSD program – to minimize the degradation of air quality and preserve the existing air quality in areas of the country that currently enjoy clean air.

EPA Region 8

I am providing you with my decision to non-concur on the Refinements of Increment Modeling Procedures rulemaking. As discussed below, Region 8 has had long-standing concerns with the inappropriate discretion the rulemaking would provide a reviewing authority for calculating increment consumption.

Averaging the concentrations over longer time periods eliminates short-tenn concentration peaks, which the 3-hour and 24-hour average increments are meant to protect.

the PSD program is intended to prevent air quality degradation from all sources measured from a specific date (the baseline date). If source emissions were calculated using different time periods the emission estimates would not match with what the sources were contributing to the ambient concentration in the baseline year. However, the Refinements of Increment Modeling Procedures rulemaking would allow emissions to be based on a different time period than the 24 months preceding a baseline date (including the use of periods after the baseline date) if it is determined by the reviewing authority that such a period is more representative of normal source operation. This inappropriate discretion would allow baseline emission estimates to be calculated in the same way [Region 8 has previously objected to].

EPA Region 9

Region 9 nonconcurs on the Increment Modeling rule, at the level of the Air Division Director.

The proposed revisions to the regulatory definitions and procedures for calculating increment consumption would likely result in significant underestimation of emissions, and cause greater deterioration of air quality.

[The final rule] could seriously underestimate short-term increment consumption, by a factor of two or more.

the "actual emissions" definition is the unlimited discretion that state and local agencies would be provided for defining the 24-month period a source must use as a basis. The rule would not establish any criteria for justifying use of a particular period. This would likely result in periods chosen that would be favorable to sources (e.g. in terms of coal sulfur content) and in greater deterioration of air quality.

[The final rule] would undermine the consultation with the EPA Regional offices on the advisability of allowing a particular methodology, and also the ability of the public to challenge questionable approaches. We are concerned that limiting EPA Regional office and public involvement could ultimately leave sources at risk as well as allowing air quality deterioration.

we believe that this rule would jeopardize protection of the PSD increments and limit the EPA's and the public's involvement in the permitting process.

EPA Region 10

Region 10 non-concurs with this draft final rulemaking. This non-concurrence represents the position of Regional Administrator Elin Miller.

there are still several "fatal flaws" with this rulemaking. These flaws are ones that we raised previously and which, in our opinion, have not been adequately addressed. The result of these flaws is that the revised rule would substantially weaken EPA's current regulations and would effectively allow for nearly unfettered deterioration of air quality in clean areas rather than preventing significant deterioration of air quality as required by Part C of Title I of the Act.

In PSD permit decisions, there must be a "bright line" test as to whether the proposed new major stationary source or major modification does, or does not, cause or contribute to concentrations that exceed the maximum allowable increase.

applicants would have complete discretion to construct baseline and current actual emission inventories that completely mask the real change in emissions since the baseline date.

allowing the permit applicant to manipulate the emissions inventories in this manner completely undermines the entire increment program.

using allowable emissions to establish the baseline concentration for PSD increment consumption analyses is NOT conservative as this will overestimate the baseline emissions and hence underestimate the amount of increment consumption.

We continue to believe that all software code and data should be available to the public in order for there to be an independent review of a permitting authority's decision to authorize the construction or modification based on the results of a modeling analysis ... [but the final rule] does not ensure that information that should clearly be available to the public, such as onsite meteorological data collected for the permit application, would actually be available to the public for review.