

Region 2 Environmental Justice Best Practices in CAA Permitting

Attachment 2: Existing Tools and Best Practices:

1. Environmental Justice Considerations for Major Modifications to PSD Permits
2. Environmental Justice Analysis for Clustered Sources
3. Public Availability Session
4. Use of Cumulative Source Modeling Analyses in EJ Decision Making under the PSD Permitting Program

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Attachment 2: Existing Tools and Best Practices

Contact Information

Office and/Region: EPA Region 2

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Tool /Best Practice Information

Name of Tool/Best Practice: **Environmental Justice Considerations for Major Modifications to PSD Permits**

Description: While locating an alternate site is not practical for an existing major source undergoing a major modification, there are other additional considerations which could be made in order to further protect potential environmental justice communities. PSD applicability due to modifications at existing major sources is allowed by regulation to be based on the “net emission increases” which considers emission increases and decreases at the facility over time. In some cases the emission decreases may be as far back as 10 years ago. The SIL analysis for a major modification is also traditionally based on the “net emission increase” from the facility. If the impacts from the net emission increase is less than the SIL, the multi-source analysis is not required thereby potentially missing a disproportionate or adverse impact from the existing facilities. While this netting of emission is acceptable for PSD permitting, it may not make sense to a potential EJ community that has not been exposed to the emission decreases in years. In other words, the newly impacted community is not impacted by a “net emission increase” but rather new emissions. In addition, many times the new emissions impact a different community than the old emissions due to different stacks locations, or flow characteristics. This could be adverted by modeling the new emission scenario with out taking credit for emission decreases in order to ensure that there are no adverse or disproportionate impacts from either the new source or from existing sources.

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Tool /Best Practice Information

Name of Tool/Best Practice: **Environmental Justice Analysis for Clustered Sources**

Description: The memorandum recommends that the New York State Department of Environmental Conservation (NYSDEC) model the air quality impacts of a particular pollutant not only from the new proposed source but also cumulatively from the other existing sources when there are many existing or other proposed sources clustered in the same geographic area. This ensures that a possible violation of a health based NAAQS or PSD increment is not missed even when the new source could not cause or contribute to the violation since its impacts are less than the Significant Impact Levels (SILs).

See: Memorandum from EPA Region 2 to New York State Dept. Environmental Conservation, April 4, 2000, "Environmental Justice Analysis for Clustered Sources".

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Tool /Best Practice Information

Name of Tool/Best Practice: **Public Availability Session**

Description: For cases where the reviewing agency believes there may be potential EJ concerns, public availability sessions are recommended. This enhance public outreach is not the formal public hearing but rather informal one-on-one, question-and-answer and listening sessions. This should occur as early in the permitting process as possible but not later than the public hearing. This empowers the community by allowing them to be heard, be more educated about the project, and make more informed comments during the formal comment period (which could be used in appeals). It also informs the reviewing authority of sensitive issues which should be considered in the permitting process. If the community is multi-lingual, effort should be made to facilitate the communication in that language for example in the notifications and fact sheets should be multi-lingual. It is also recommended to have a translator present at the session. At a minimum, notification should be done in newspapers, or directly through interested parties/stake holders per 40 CFR 124. Notifications process could also include phone calls and door to door announcements.

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Tool /Best Practice Information

Name of Tool/Best Practice: **Use of Cumulative Source Modeling Analyses in EJ Decision Making under the PSD Permitting Program.**

Description:

Under the authority of Executive Order 12898 (<http://www.epa.gov/fedreg/eo/eo12898.htm>) Region 2 recommends that a cumulative source modeling analysis be performed during the PSD review process of a proposed new source in a community with potential EJ concerns even when such an analysis is not otherwise required. The Region's EJ review protocol requires applicants to perform monitoring and/or modeling of existing conditions beyond the baseline analysis dictated under national guidelines. As a result, EPA is able to obtain information it otherwise would not have had and has been able to take additional steps to increase the protection of the impacted areas while also allowing the new source to move forward (provided it meets all other Clean Air Act requirements.)

Background:

The Clean Air Act requires that major new facilities receive a Prevention of Significant Deterioration (PSD) of air quality permit. As part of this process, they must demonstrate that new emissions do not add to an area's existing air pollution burden such as concentrations that exceed the National Ambient Air Quality Standards (NAAQS), ambient air quality levels of specified pollutants established to protect public health or welfare. Different permit review procedures apply whether an area is in compliance with the NAAQS or not. EPA further protects areas in compliance with the NAAQS through promulgation of the "PSD increments" so that they remain compliant and avoid large increases in pollution. PSD increments are incremental increases, above an established baseline, in the ambient concentration of specific pollutants allowed. The increment is designed to protect the NAAQS by limiting the amount of new pollution introduced to an area while still allowing for economic growth.

Both the NAAQS and Increment analyses are cumulative source modeling analyses. Both require calculation of a worst case ambient concentration based on the combined effects of the emissions from the new and existing sources, their stack parameters, meteorology and terrain of the surrounding the area. But even before a cumulative source modeling analysis is done, EPA determines whether the new proposed source has the potential to significantly cause or

contribute to an exceedance of the NAAQS or increment by itself. In order to determine this, EPA established Significant Impact Levels (SILs). The SILs are small screening levels that EPA considers negligible concentrations when compared to the NAAQS or PSD increment. The SIL is also used to assess whether a particular source “significantly causes or contributes” to an exceedance of the NAAQS or increment should an exceedance be identified. As a matter of practice, EPA allows new sources to forgo the cumulative source modeling analysis if the modeled concentrations from the source alone are less than the SIL because by definition it could not *significantly* cause or contribute to an exceedance (provided that the existing conditions are not less than an SIL level away from the NAAQS or increment.)

Region 2 has found that routinely allowing a proposed new source to forgo the cumulative source modeling analysis creates a potential that the cumulative impacts of existing facilities that may have inferior pollution controls or were grandfathered through regulation, may be overlooked. Region 2 recommends applicants perform a cumulative source modeling analysis as part of the PSD permit application where there are potential EJ communities.