



Supplemental Environmental Analysis of EPA's New Source Review (NSR) Improvements Final Rule

Summary of EPA's Analysis of the Anticipated Environmental Effects Associated with its New Source Review Improvement Final Rule

- The overall effect of the final rule will be a net benefit to the environment.
- Four of the five provisions in the final rule will result in environmental benefits, and the other provision has no significant effect.
- As a result, the much-needed improvements to NSR, and the economic benefits that result, will be achieved in harmony with – not contrary to – EPA's goal of continuing progress toward cleaner air.

About the Analysis

- The analysis uses quantitative information where possible, but also notes limitations on EPA's ability to quantify impacts of the rule. EPA used qualitative information to supplement the analysis where such limitations are present.
- EPA conducted the analysis to examine the air pollution benefits associated with the final rule. It was not used as the basis for the rule. The complete justification for the rule is outlined in the rule's preamble and other supporting information.

Specifics About the Findings of the Analysis

- The analysis shows that, compared to the current NSR rules, the NSR Improvement rule will result in reductions in emissions of air pollution. These reductions will be relatively small compared to other Clean Air Act programs and to the NSR program as a whole.
 - Because the NSR Improvement rule does not significantly alter the rules for coal fired power plants, and does not affect the NSR provisions for new sources and new units, its overall impact is relatively small.
 - The rule also results in economic benefits that stem from improved flexibility, increased certainty, and reduced administrative burden. These benefits are important, but were not quantified as part of this environmental analysis.
- The reductions will primarily reduce levels of common pollutants like those that cause ground-level ozone, or smog. These reductions will result in health and welfare benefits such as lower incidences of premature mortality, asthma, and other respiratory diseases and damage. Smaller reductions in hazardous air pollutants, ozone-depleting substances, and other pollutants will also occur.
- Specifically, for each of the rule's five provisions, the analysis concludes the following:

- **Plantwide Applicability Limits (PALs)** will result in tens of thousands of tons per year of Volatile Organic Compounds (VOC) reductions from just three industrial categories where PALs are likely to be used heavily.
 - Overall reductions will be greater because it is likely that PALs will be adopted for more source categories and pollutants than those analyzed.
- The **Clean Unit Test** will be environmentally neutral for most sources, but some sources will likely control earlier or more extensively than under current rules, and, as a result, a net benefit will occur.
 - The amount of this benefit is uncertain nationally, but will likely be significant in individual cases, like the estimated 9,300 ton/year reduction in smog-causing volatile organic compounds seen in one example.
- The **Pollution Control Project Exclusion** will lead to a small increase in the number of environmentally beneficial projects because it removes NSR barriers to such projects. The amount of this benefit is uncertain nationally, but will likely be relatively small.
- The change in **actual emissions baseline** will not have a significant environmental impact. A small number of existing emissions units may get higher baselines under the NSR Improvement rule and potentially avoid NSR, but other units may get more stringent baselines due to the requirement to adjust the baseline downward to account for any new emissions limits at that unit.
 - Its overall impact will be small because the baseline change in the rule does not affect new sources, new units built at existing sources, electric utilities, and many modified sources.
- The change to an **actual-to-projected-actual** test will have a net environmental benefit, but a relatively small one. The benefit stems from removing: (1) the NSR program's incentive to keep actual emissions high before making a change, and (2) NSR's barriers to projects that will actually reduce emissions. The amount of this benefit nationally is uncertain.
 - Its impact would be small because the baseline change does not affect either of the following: (1) new sources, new units built at existing industrial facilities, and electric utilities, or (2) any modifications at existing facilities that actually result in increased emissions.
 - Historically under the NSR rule, virtually all other sources take "permit limits" to avoid NSR. The EPA analysis concludes that the benefits from this aspect of the program are likewise unaffected because such sources must still assure that actual emissions do not significantly increase.