

ATTACHMENT

NEW SOURCE REVIEW (NSR) EQUIVALENCY DEMONSTRATION

A Comparison of Delaware’s Regulation 1125 “Requirements for Preconstruction Review”¹ with 40 CFR 51.165, 40 CFR 51.166 (both 7/1/07 edition) and the Clean Air Act (CAA) demonstrating that the requirements of Regulation 1125 are equivalent to and at least as stringent as these federal NSR requirements.

The federal CAA and EPA rules provide for state agencies to adopt environmental measures that are at least as stringent as the corresponding federal measures and, in fact, requires the EPA to approve any more stringent measures in any State Implementation Plan (SIP) submission^{2, 3}. States developing their own rules are required to submit an “Equivalency Demonstration” showing how their rule(s) is at least as stringent as the target federal rule. In requiring an equivalency demonstration from states in support of their existing NSR rule(s) or a new state rule(s) other than the EPA Reforms, the EPA has not provided guidance as to what format this demonstration should take. Despite this lack of guidance, Delaware believes this document demonstrates that current Delaware NSR requirements, as codified primarily in Regulation No. 1125 “Requirements for Preconstruction Review” of the State of Delaware “Regulations Governing the Control of Air Pollution,” are at least as stringent as the federal NSR requirements⁴.

This document is organized into the following five parts:

¹ [http:// regulations.delaware.gov/AminCode/title7/1000/1100/1125.shtml](http://regulations.delaware.gov/AminCode/title7/1000/1100/1125.shtml).

² Section 116 of the CAA states, in pertinent part, “[N]othing in this Act shall preclude or deny the right of any State or political subdivision thereof to adopt or enforce (1) any standard or limitation respecting emissions of air pollutants or (2) any requirement respecting control or abatement of air pollution; except that if an emission standard or limitation is in effect under an applicable implementation plan or under section 111 or section 112 of this title, such State or political subdivision may not adopt or enforce any emission standard or limitation which is less stringent than the standard or limitation under such plan or section.”

³ 67 FR 80186 on page 80241 clearly supports EPA’s acceptance of state NSR rules different from the Reforms “...State and local jurisdictions have significant freedom to customize their NSR programs. Ever since our current NSR regulations were adopted in 1980, we have taken the position that States may meet the requirements of Part 51 “with different but equivalent regulations.” 45 FR 52676.” Later on the same page “...if a State decides it does not want to implement any of the new applicability provisions, that State will need to show that its existing program is at least as stringent as our revised base program.”

⁴ Delaware believes that if a state provision results in more proposed major stationary source modifications being subject to the requirements of NSR permitting, and thus installing emissions controls or adopting operating restrictions that reduce emissions below what they would be absent NSR permitting of the subject modification or change, then that provision is more stringent than a comparable federal NSR rule provision which does not require installation of controls or adoption of operating restrictions. Also, if, in comparing the impacts of two rules, it appears both rules result in essentially equivalent emissions reductions, the rules may be considered equivalent.

- **Background:** The Rapidly Changing And Uncertain Legal Environment Under Which This Demonstration Is Made.
- **Delaware NSR Rules:** Regulation No. 1125, “Requirements for Preconstruction Review,” Of The State Of Delaware “Regulations Governing the Control of Air Pollution.”
- **The Demonstration:** Delaware’s Program Is At Least As Stringent As The Federal NSR Program.
- **Conclusion:** Delaware’s Program Is More Stringent Than The Federal NSR Program.
- **Afterword:** Additional Considerations In This Equivalency Demonstration.

Background: The Rapidly Changing And Uncertain Legal Environment Under Which This Demonstration Is Made.

On December 31, 2002 and on October 27, 2003 the EPA published at 67 FR 80186⁵ and at 68 FR 61248⁶, respectively, final rules that changed the facility modification provisions of the federal NSR program⁷. EPA took these actions after almost a decade of review and discussion with stakeholders. The federal rules for newly constructed major facilities were not revised. The final rule published on December 31, 2002 is generally referred to herein as the “EPA Reforms,” and the final rule published on October 27, 2003, a Routine Maintenance, Repair and Replacement Rule, is generally referred to herein as the “Equipment Replacement Provision (ERP).”

Both of these EPA final rules were contested by stakeholders, significant provisions of those final rules were modified or struck down by court action, and some new related rules have been proposed by EPA. Specifically:

- The EPA Reforms consisted of five specific new or revised provisions that were intended to address perceived shortcomings of prior NSR rules⁸. These were (1) a baseline

⁵. “Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR); Final Rule” 12/31/02 <http://www.epa.gov/fedrgstr/EPA-AIR/2002/December/Day-31/a31899.pdf>

⁶. “Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR): Equipment Replacement Provision of the Routine Maintenance, Repair and Replacement Exclusion; Final Rule,” 10/27/03 <http://www.epa.gov/fedrgstr/EPA-AIR/2003/October/Day-27/a26320.pdf>

⁷. The EPA Reforms modified several aspects of the federal rules for determining whether a physical change at an existing major stationary source would be considered a major modification, and thus whether the substantive requirements for triggering submission of a permit application would apply.

⁸ EPA’s perceived shortcomings of the prior NSR rules which spurred the promulgation of the EPA Reforms are

emissions test for non-electric generating units allowing up to a 10-year look back to establish a baseline for pre-change emissions levels, (2) use of projected-actual emissions to estimate post-change emissions, while maintaining the prior potential-to-emit (PTE) test as an optional provision, (3) a plant-wide applicability limit (PAL), (4) a Clean Unit Test provision and, (5) a Pollution Control Project exclusion. The EPA reforms were challenged in court by a number of states⁹ and in June 2005 both the Clean Unit Test and Pollution Control Project exclusion provisions were vacated by the U.S. Court of Appeals for the DC Circuit¹⁰. At the same time, the Court remanded to EPA certain recordkeeping and reporting requirements to the extent that sources were not required to keep records unless they met three criteria, including a “reasonable possibility” that a project may result in a significant emissions increase. EPA has since revised the federal NSR rules by removing the vacated EPA Reforms provisions (72 FR 32526 – 6/13/07).

- The ERP established rules which would exclude from NSR permitting equipment replacement activities which; involve replacement with identical or functionally equivalent equipment and, (a) do not change basic design parameters of the process unit, (b) do not cause the unit to exceed any emissions limit, and (c) for which the cost does not exceed 20% of the replacement cost of the process unit. This rule was stayed by the court on December 24, 2003¹¹. EPA granted Reconsideration in July of 2004¹² and

described in an 11/22/02 EPA press release, “After a comprehensive review of the program, EPA issued a Report to the President on NSR in June 2002. This report concluded that the program as currently administered has impeded or resulted in the cancellation of projects that would maintain or improve the reliability, efficiency or safety of existing power plants and refineries. EPA also concluded that, at existing industrial facilities outside the energy sector, NSR discourages projects that improve capacity or efficiency and do not increase emissions. Instead of being a tool to help improve air quality, the report indicated that NSR has stood in the way of making numerous environmental improvements at many facilities across the nation. Based on these findings, EPA recommended a series of improvements to help address these problems. The final and proposed rules implement these recommendations.” The last sentence refers to a final rule (the EPA Reforms published in the Federal Register on December 31, 2002) and a proposed rule (the ERP published in the Federal Register on the same date – the final version of the ERP was published on October 27, 2003). Delaware does not agree with EPA’s conclusions (a view shared by many stakeholders and the General Accounting Office) which will be discussed later in this document.

⁹ When the EPA Reforms were published in the Federal Register, many states, environmental organizations and public citizens expressed concern the rules would increase emissions as there were many opportunities for sources to “game” the system and avoid NSR permitting. A number of states (including Delaware) contested the EPA Reforms based on their belief that these rules were not consistent with the CAA.

Petitioners brief, Case No. 02-1387, State of New York, et al, vs. United States Environmental Protection Agency, United States Court of Appeals for the District of Columbia Circuit, October 18, 2004.

¹⁰ Opinion, United States Court of Appeals for the District of Columbia Circuit, Case No. 02-1387, State of New York vs. U. S. Environmental Protection Agency, decided June 24, 2005.
<http://pacer.cadc.uscourts.gov/docs/common/opinions/200506/02-1387a.pdf>

¹¹ Equipment Replacement Provision (68 FR 61248) motion for stay, United States Court of Appeals for the District of Columbia Circuit, Docket Number 03-1380, State of New York vs. United States Environmental Protection Agency, “Environmental Petitioner’s Motion for Stay Pending Review.”

concluded in June of 2005 that no changes to the ERP were necessary¹³. The rule was then vacated by the U.S. Court of Appeals of the D.C. Circuit on March 17, 2006¹⁴ and a subsequent appeal to the Supreme Court was rejected. The EPA has yet to revise the federal rule to reflect the Court's action. As such, the ERP is not addressed in this equivalency demonstration.

- In addition, EPA proposed rules for (1) debottlenecking, aggregation and project netting¹⁵ (9/14/06), (2) clarification of the “reasonable possibility” in recordkeeping and reporting of the EPA Reforms¹⁶ (3/8/07), and (3) establishing an hourly emissions test for electric generating units (EGU's) in determining if a change resulted in a net significant emissions increase¹⁷ (5/8/07). Because none of these rules have emerged from the proposed rule stage they are not addressed in this equivalency demonstration.

To support the EPA Reforms and to explain the EPA's basis for asserting that the changes were more stringent than EPA's pre-Reforms rules, the EPA published a “Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules¹⁸,” hereinafter the “Supplemental Analysis.” The Supplemental Analysis reports that:

Order, United States Court of Appeals for the District of Columbia, Case Number 03-1380, State of New York vs. Environmental Protection Agency, December 24, 2003 “FURTHER ORDERED that the motions to stay the Equipment Replacement rule at issue in No. 03-1380 et al be granted.”

¹² 69 FR 40278 “Prevention of Significant Deterioration (PSD) and Non-Attainment New Source Review (NSR); Equipment Replacement Provision of the Routine Maintenance, Repair and Replacement Exclusion; Reconsideration; Final Rule, July 1, 2004

¹³ 70 FR 33838 “Prevention of Significant Deterioration (PSD) and Non-attainment New Source Review (NSR): Equipment Replacement Provision of the Routine Maintenance, Repair and Replacement Exclusion: Reconsideration, June 10, 2005

¹⁴ Opinion, United States Court of Appeals for the District of Columbia Circuit, No. 03 -1380, State of New York vs. Environmental Protection Agency, decided March 17, 2006.

¹⁵ 71 FR 54235 “Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Debottlenecking, Aggregation, and Project Netting”, Proposed Rule, September 14, 2006.

¹⁶ 72 FR 10445 “ Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR): Reasonable Possibility in Recordkeeping” Proposed Rule, March 8, 2007.

¹⁷ 70 FR 61081 “Prevention of Significant Deterioration, Nonattainment New Source Review, and New Source Performance Standards: Emissions Test for Electric Generating Units”, Proposed Rule, October 29, 2005.

72 FR 26202 “Supplemental Notice of Proposed Rulemaking for Prevention of Significant Deterioration and Nonattainment New Source Review: Emission Increases for Electric Generating Units,” Proposed Rule, May 8, 2007.

¹⁸ New Source Review (NSR) Improvements “ Supplemental Analysis of the Environmental Impact of the 2002 Final NSR Improvement Rules” United States Environmental Protection Agency, November 21, 2002. <http://www.epa.gov/nsr/documents/nsr-analysis.pdf>

“... collectively, the five NSR Improvements that the Agency is finalizing will be environmentally beneficial compared to the current program, and will improve air quality by reducing emissions from industrial facilities. The improvements in air quality will result in health and welfare benefits from reduced concentrations of pollutants regulated by the NSR program, primarily criteria pollutants. These benefits are relatively small compared to those of other air regulatory programs, but will result in a net environmental benefit compared to the current rule. For example, EPA’s analysis of PALs finds that there are likely to be reductions in emissions of Volatile Organic Compounds (VOC) in the range of 3,400 to 17,000 tons per year from just three industrial categories. The agency believes that, overall, the use of PALs will actually reduce emissions by a greater amount, once additional categories and pollutants are considered. The analysis also finds that the Clean Unit Test and the exclusion for Pollution Control Projects will result in emissions reductions compared to the current program. Similarly, the analysis finds that the actual-to-projected-actual test is likely to be environmentally beneficial, but only to a small extent. The final reform, the change in the emissions baseline, will affect a very small number of facilities. Although it may allow for a small number of sources to avoid permitting because of the availability of a higher baseline, a small number of sources will also now be subject to a more stringent baseline. Thus, the analysis concludes that the overall consequences of the baseline change will be negligible.”

This indicates that of the five EPA Reforms provisions, the EPA concluded that the actual-to-projected-actual test and the emission baseline change provisions provided small or negligible environmental improvements, and they attributed most of the environmental benefit to the PAL, Clean Unit Test, and the exclusion for Pollution Control Projects.

As discussed above the EPA Reforms now are significantly different from the final rule published on December 31, 2002 due to later court action. The Pollution Control Project exclusion and the Clean Unit Test are no longer a part of the EPA Reforms. The elimination of these provisions from the Reforms eliminates, according to the Supplemental Analysis quote above, two of the more important emissions reduction initiatives from the Reforms. Given this, and that Delaware’s NSR program was SIP approved by the EPA prior to the finalization of the EPA Reforms¹⁹, this demonstration addresses only the portions of the EPA Reforms currently in effect; (1) a baseline emissions test for non-electric generating units allowing up to a 10-year look back to establish pre-change emissions levels; (2) use of projected-actual emissions to estimate post-change emissions, while making the prior PTE test an optional provision; and (3) PALs. In addition, several non-EPA Reforms differences between Regulation No. 1125 and the federal NSR regulations are discussed (see below), as these differences are relevant to the demonstration that Delaware’s program is, overall, at least as stringent as the provisions of the federal NSR rules at 40 CFR 51.165 and 40 CFR 51.166.

¹⁹ 66 FR 9209 “Approval and Promulgation of Air Quality Implementation Plans; Delaware; Revisions to New Source Review” Direct Final Rule, February 7, 2001. This document reflects EPA’s full approval of Delaware’s NSR program.

Delaware NSR Rules: Regulation No. 1125, “Requirements for Preconstruction Review,” Of The State Of Delaware “Regulations Governing the Control of Air Pollution.”²⁰

Delaware is made up of three counties. The two northern-most counties in Delaware were designated as severe non-attainment, and the third as marginal non-attainment with regard to the 1-hour ozone National Ambient Air Quality Standard (NAAQS), and all of Delaware is part of the ozone transport region established by Section 184 of the CAA. Now, all of Delaware is designated as moderate non-attainment with regard to the 8-hour ozone NAAQS. Also, EPA has designated New Castle County as non-attainment with respect to the annual PM_{2.5} NAAQS. As such, Delaware Regulation No. 1125 contains severe ozone non-attainment area provisions for Kent and New Castle County, moderate ozone non-attainment area provisions for Sussex County, and attainment area provisions for all other regulated NSR pollutants²¹.

Delaware’s major source NSR requirements [the Emissions Offset Provision (EOP) and Prevention of Significant Deterioration (PSD)] are substantially embodied in Regulation 1125 “Requirements for Preconstruction Review,” which, except for two following significant exceptions, essentially tracks the pre-Reforms federal rules

- Delaware has not adopted the WEPCO (Wisconsin Electric Power Company) revision establishing a 5-year look back for determining actual emissions for electricity generating units (EGU’s). All sources are treated the same and use the most recent 2-year period of operation to establish pre-change actual emissions unless the source demonstrates to the Department’s satisfaction that some other 2-year period is more representative of normal operation. Emissions must be corrected for any rule revisions passed since the selected period of normal operation.
- Delaware retained the dual-source definition of a major stationary source in the EOP section of Regulation 1125, even though the EPA offered states the ability to relax their NSR rules upon a demonstration that they can maintain environmental protection without this provision. Delaware did not relax its regulation because it needed the environmental protection afforded by the more stringent “dual source” definition.²²

²⁰ Delaware’s Prevention of Significant Deterioration and Non-attainment New Source Review rules comprise Delaware’s primary means of regulating emissions from the construction and modification of major stationary sources. They are the main technology-forcing air quality regulations included in the State’s regulations.

²¹ PM_{2.5} is, relative to NSR, currently regulated under EPA policy. Will be updated once EPA finalizes federal rule changes.

²² The following two references show the EPA establishment of the “dual source” option by revision of the definition of a stationary source in 1980 and subsequently in 1981 the revision to allow sources to use only the plantwide definition (existing prior to August 7, 1980) if it did not interfere with reasonable further progress and timely attainment of the relevant national ambient air quality standards.

- 45 FR 52676 “Requirements for Preparation, Adoption and Submittal of Implementation Plans; Approval and Promulgation of Implementation Plans”, Final Rules, August 7, 1980.
- 46 FR 50766 “Requirements for Preparation, Adoption and Submittal of Implementation Plans and Approval and Promulgation of Implementation Plans”, Final Rule, October 14, 1981.

Delaware operates a rigorous construction and operating permits program. All Delaware sources constructing or installing new equipment or new facilities, or making modifications to existing equipment or facilities which are not specifically exempted in Regulation 1102 "Permits"²³, must submit a construction permit application to DNREC, and must receive a valid construction permit before commencing construction. In addition, an operating permit is required prior to the commencement of operations under Regulation No. 1102. Major sources and major modifications also must meet the additional requirements of Regulation 1125. Also, sources that fall below the major source threshold of Regulation 1125 and that exceed, in general, a 5 ton per year threshold, undergo a state enforceable only technology review under Regulation 1125, Section 4.

The close working relationship between sources and DNREC environmental professionals in a small state like Delaware and the need to apply for a permit for most construction and operation activities helps insure that misjudgments as to NSR applicability are unlikely to occur and/or will come to light during construction permit review so that requirements for NSR permitting will be thoroughly explored. In addition, although EPA requires a formal inspection of all major stationary sources every other year and of synthetic minor sources every three years, Delaware historically has made these formal inspections every year. Also, the Air Quality Managements Engineering & Compliance Branch personnel are on-site more often than yearly for non-routine discussions, etc., and generally are quite familiar with source activities insuring that all construction activities are open to review.

As a small state, Delaware does not process many major NSR permits. There are 64 major stationary sources in Delaware. Many other sources find they can avoid NSR permitting by taking restrictions (such as hours of operations) thus becoming a synthetic minor source.

Currently Delaware processes an average of one NSR permit per year. There is no evidence that sources are avoiding NSR by "gaming" the system or simply shelving projects that would trigger such permitting and accepting the resultant inefficient operation of their facilities. There are few permits issued for EGU's primarily because the older EGU's restrict their construction activity to exempted NSR permitting categories such as routine maintenance and like-kind equipment replacement. However, despite NSR requirements, Delaware recently has adopted Regulation No. 1146, "EGU Multi-Pollutant Regulation," which requires that BACT level controls be installed on each and every coal- or residual oil-fired unit in the State.

The Demonstration: Delaware's Program Is At Least As Stringent As The Federal NSR Program.

This demonstration shows that despite and because of six major Delaware/federal NSR rule "differences," Delaware's NSR requirements are equivalent to and at least as stringent as, and in fact are more stringent than, the federal NSR rules.

²³ Regulation 1102, "Permits," of the State of Delaware "Regulations Governing the Control of Air Pollution," <http://regulations.delaware.gov/AdminCode/title7/1000/1100/1102.shtml>.

As discussed above, due to the court action vacating some aspects of the Reforms, there are only three of the five original provisions of the EPA Reforms remaining to be considered in this Equivalency Demonstration:

1. the 10-year, unrestricted look back to determine the 24-month period to represent pre-change “actual emissions” (“baseline actual emissions” in the EPA Reforms terminology) which is then used with post-change emissions in determining if a significant emissions increase has occurred as a result of the change (the actual-to-projected-actual test);
2. the use of projected-actual emissions for post-change emissions in addition to the already allowed PTE and
3. the PAL.

These three provisions of the Reforms are central to this equivalency demonstration.

In addition, as indicted above, there are three other differences between the Delaware NSR requirements and the federal NSR rules which will be discussed in this demonstration:

4. the WEPCO rule restricting the development of baseline emissions to a 5-year look back for EGU’s;
5. the “dual source” definition of a major stationary source applicable to non-attainment area modifications, and
6. the “demand exclusion” (another WEPCO-based rule provision extended to non-EGU sources in the Reforms).

Each of these six differences will be discussed.

(1) Baseline Emissions Calculation

Delaware’s Regulation No. 1125 requires the use of the most recent 2-year period preceding the change or modification to determine pre-change “actual” emissions, or “baseline actual emissions” as termed in the EPA Reforms, unless the source can demonstrate that another period (not restricted to any time period) is more representative of normal operation²⁴. The period of normal operation includes the absence of such occurrences as labor relations problems and accidents, as well as periods of higher production rate. The emissions from the selected period (approved by DNREC) must be adjusted to reflect subsequent operating revisions (including voluntary installation of controls) or rule induced emissions reductions. This is generally the same as the pre-December 31, 2002 federal rule with the exception that EGU’s and non-EGU’s are treated the same under Delaware Regulation No. 1125 (see WEPCO discussion below). Any major stationary source may suggest to DNREC that the most recent 2-year period prior to the proposed physical change or change in method of operation is not representative of normal

²⁴ Under current Delaware NSR rules, the source must be able to demonstrate to DNREC that the 2-year period immediately preceding the proposed physical change or change in method of operation is not representative of normal operation in order to propose another time period. In doing so, the source is free to propose the most recent 2-year period that does meet the requirements of normal operation, which recognizes such factors as accidents, work stoppages and production rate in determining normal operation. The source is constrained from arbitrarily selecting the period of highest emissions.

operation and that a different period can be demonstrated to be more representative of normal operation. DNREC can approve or reject the alternative time period.

In contrast the EPA Reforms allow an unrestricted 10-year look back from the time a change or modification commences to establish the baseline actual emissions for use in calculating the emissions increase resulting from the change or modification. The look back is unrestricted in that no longer is the source required to look back for a period of normal operation nor is the source required to justify a basis for selecting the period for baseline actual emissions. The source would likely select the period based solely on emissions (i.e., they would select the period of highest emissions, in the prior 10 years). Federally, EGU's are limited to a 5-year look back (as originally developed for the WEPCO rule – see below).

The above indicates that Regulation No. 1125 is more stringent than the EPA Reforms relative to baseline emissions calculations. Because the source, under Regulation No. 1125, is constrained from indiscriminately selecting the period of highest emissions, and the source under the EPA Reforms is not, and selection of the highest emissions rate is in the sources best interest to avoid NSR permitting, the Delaware requirements are more stringent than the federal rule in determining baseline emissions²⁵.

EPA indicates that developing hard numbers based on actual permits is not possible and that EPA records do not have 10-year emission histories. Delaware offers the following two studies:

- The Environmental Integrity Project of the Rockefeller Family Fund issued a draft report based on a review of state permits, entitled “Reform or Rollback? – How EPA’s Changes to New Source Review Affect Air Pollution in 12 States.”²⁶

This report clearly shows the use of an unrestricted 10-year look back will result in sources being able to select periods of higher emissions exempting many modifications from major NSR. In Delaware alone the additional allowable increases in emissions without triggering NSR was determined to be for NO_x 13,801 tons/year (tpy), for SO₂

25 During development of the Reforms, much was made by the EPA and by some stakeholders that NSR permitting rules then in force contained provisions that acted as disincentives for sources to make modifications that decrease emissions but that, for other reasons, could/would trigger NSR permitting. Some sources viewed the entire NSR program as arduous due to the length of the permitting procedure (claiming it sometimes took many years) and the unreasonableness of requiring the addition of controls for modifications that were (or should be) exempted from NSR permitting under exclusions for routine maintenance. The EPA supported the view of these commenter's and suggested that it had been persuaded that stakeholders would likely pursue more environmentally beneficial source modifications if the program and permitting procedures were less onerous and more predictable. Delaware disagrees with this view. Although Delaware believes many sources will put off installing expensive pollution control devices until they are required to install them, Delaware does not believe sources will avoid making modifications if the result will improve operating efficiency, safety and/or attainable production rates. In other words, Delaware believes that the market will drive the behavior of sources. To do otherwise is a more costly alternative not economically beneficial to source owners or stockholders. Although EPA appears to have been persuaded to reform the NSR rules based on colloquial “evidence” from sources who prefer not to install controls and would like there to be fewer circumstances where the NSR rules require installation of pollution control equipment, Delaware is not persuaded by these self-serving statements of regulated sources.

26 <http://www.rffund.org/eip/docs/ReformOrRollback.pdf>

13,847 tpy and for VOC's 3,426 tpy. In other words, Delaware's major sources, by using an opportunistic 10-year look back to select the highest emissions period for the baseline actual emissions of proposed physical changes, as opposed to using the most recent 24-month period (that would trigger NSR permitting), could avoid NSR permitting and the installation of emission reduction controls for any of the increases shown above.

- Delaware did a review in 2003 of one major Delaware facility to determine how it would contribute to emissions increases if the new baseline methodology were used to determine applicability of future projects for major NSR. Source data declines rapidly in quality as one goes out in time and, in this case, six years was as far out as one could go. The most recent 2-year period (2001-2000) gave a baseline of 3,800 tpy NO_x, 34,500 tpy SO₂ and 880 tpy VOC. Using the NSR Reforms rule approach and selecting 1999-1998 as the 24-month period, a baseline of 5,275 tpy NO_x, 37,500 tpy SO₂ and 1,374 tpy VOC was calculated. Based on the Reform rule approach, there is the potential for a modification emitting 1,475 tpy NO_x (5,275 – 3,800) above current performance for this facility not to be subject to NSR (and 3,000 tpy SO₂ and 494 tpy VOC). Clearly a potentially large uncontrolled emissions increase for Delaware. Since NSR is the regulatory program that would require BACT or LAER level pollution control technology to be installed and offsets to be obtained, amending Delaware's rule to conform with EPA's Reforms would result in increased emissions resulting from sources failing to install state of the art pollution control equipment or to obtain offsets.

These two studies clearly show that, contrary to EPA's qualitative review of the situation, a large number of facilities may be impacted by the "high 2 in 10" approach, and that the potential uncontrolled emissions increases could be substantial, further confirming Delaware's conclusion that the calculation of baseline actual emissions under Regulation 1125 is more stringent than the determination of baseline actual emissions under the EPA Reforms version of the federal NSR rules.

In addition to the look back period, Delaware also believes allowing the inclusion of emissions from start-ups, shutdowns and malfunctions (SSM) in determining baseline emissions as set out in the EPA Reforms would result in increased emissions compared to excluding these as is currently required in Delaware Regulation No. 1125.

- In continuous process plants (e.g. oil refineries and large chemical plants), start-ups and shutdowns may be periods of great operating instability during which pollutant emissions are characteristically significantly higher than during normal operations. Gaseous effluent streams are often flared resulting in the emission of large quantities of NO_x, SO₂, and other pollutants normally abated by control devices which are less likely to perform properly during these unstable conditions. Also, during malfunctions, process streams are out of control and emission can increase significantly. For an in-depth discussion of these aspects of start-ups, shutdowns and malfunctions see "Accidents Will Happen" by the Environmental Integrity Project, published in October of 2002 and "Bright Lines or Loopholes" also by EIP, published December of 2002.

- Since the EPA Reforms allow a 10-year look back, without any restrictions, it is in the sources best interest to select a period representing the highest emissions rate (after correction for any subsequent process revisions or rule induced emissions reductions) to insure pre-change emissions – the baseline actual emissions – are at the highest possible rate. Including SSM emissions in the baseline [and forecasting minor (if any) SSM in post-change emissions] would certainly allow the source to “game” a proposed physical change to the utmost. This helps insure the resultant emissions change calculation – post-change emissions minus pre-change emissions - will have the best chance to be below the significant net emissions level and thus avoid NSR permitting.²⁷

In the Supplemental Analysis, Appendix F, page F-2 the EPA states: ***“The EPA anticipates that the primary benefit of this change will be to eliminate uncertainty and delay over which period is most representative.”*** Although EPA goes on to state that the purpose of the Supplemental Analysis is solely to ***“assess the environmental impact of the change,”*** this comment likely was made to support one of EPA’s major conjecture’s in promulgating the EPA Reforms - that the prior federal NSR rules were unnecessarily complex and the uncertainty and delay in establishing an agreed upon solution between the source and reviewing authority as to what constituted, for example, “a representative period of normal operation” was a major disincentive for sources to pursue environmentally beneficial projects. This, of course, according to EPA, resulted in higher local emissions due to sources’ avoidance of physical changes that would trigger long delays in NSR permitting and/or uncertainty as to the applicability of NSR permitting which adversely impacted sources’ planning process. In Delaware we are unaware of any difficulty in working with sources to establish an agreed upon period of “normal operation,” nor do we support the contention that such reviews contribute to “excessive” delays in NSR permitting. The close relationship that DNREC professionals have with the 64 major sources in the state would have brought such delays and concerns to the forefront if they were indeed a problem resulting in deferral of needed projects.

Delaware also notes on page 2 of the Supplemental Analysis that the EPA states, ***“The final reform, the change in the emissions baseline, will affect a very small number of facilities. Although it may allow for a small number of sources to avoid permitting because of the availability of a higher baseline, a small number of sources will also now be subject to a more stringent baseline. Thus, the analysis concludes that the overall consequences of the baseline change will be negligible.”*** From the EPA’s analysis we could rightly conclude a comparison of the baseline emissions federal rule provision to the Delaware actual emissions definition yields little or no difference, and then conclude that the Delaware rule provisions for determining actual emissions is at least as stringent as the EPA Reforms method of determining baseline emissions. Either way we examine the determination of baseline actual emissions in the two rules we must conclude that Regulation 1125 cannot be less stringent than the federal NSR rules, Also, see further related discussion under the PAL discussion below.

(2) Post-change Emissions Calculation

²⁷ The Reforms do not require the notification of the reviewing authority when a less than significant emissions difference results from this calculation, which results in the source avoiding NSR permitting. We did not consider this factor in determining the stringency of Delaware Regulation 1125.

In addition to maintaining the prior federal rules option of setting post-change emissions equal to the PTE (on the theory that a changed facility has not yet operated and the actual emissions associated with the changed process configuration is not known), the EPA Reforms established a second option. Under this second option a source may determine the projected-actual emissions but, must keep certain records²⁸.

Generally, one would assume that setting post-change emissions equal to PTE would result in a higher post-change emissions level than estimation of a “projected”-future-actual emissions level. However, EPA has retained the option for a source to select PTE. It would make no sense to include the use of PTE in the federal rule if EPA believed the use of PTE was not at least as stringent as the other option in the federal rule, projected-actual emissions. Since the Delaware rule uses the PTE method, this must be as stringent as the Reforms new method of calculating the post-change emissions.

Since determination of pre-change emissions under the Delaware rule is at least as stringent as the Reforms and determination of the post-change emissions is at least as stringent as the Reforms, the calculation of significant emissions (the arithmetic difference between the two) logically also is as stringent as the Reforms. Performing any contemporaneous period netting calculations remains the same under either set of rules, thus determination of net significant emissions change is at least as stringent under Delaware Regulation 1125 as under the federal rule.

Delaware also notes that in the Supplemental Analysis (see quote above; page 5 this document) EPA says; “...*the analysis finds that the actual-to-projected-actual test is likely to be environmentally beneficial, but only to a small extent.*” EPA drew the same conclusion for establishing the baseline actual emissions. – “**we conclude that any overall consequences would be negligible.**” (page 14, Supplemental Analysis). This must mean, due to circumstances controlling the utilization of the Reforms, that the impact of these provisions discussed above (baseline actual emissions and post-change emissions) on the important equation (post change – pre-change emissions) will yield an emissions change which is also negligible or environmentally beneficial only to a small extent. Delaware believes this is not only not so but that the impact of these two provisions have a significant impact on NSR permitting. As shown under **(1) Baseline Emissions Calculation** (starting on page 8) and later in this document, Delaware believes using an unrestricted 10-year look back will allow many (not few as the EPA would have us believe) sources to chose a period of higher emissions to establish baseline actual emissions. This will, of course, tend to reduce the likelihood that a modification or change in the method of operation would trigger NSR permitting thresholds. There is no concrete justification for EPA’s assertion that few sources (see the Supplemental Analysis, where guesswork, not science or state permitting data was used) would be able to use the 10-year look back. Delaware is not alone in this view. As shown in the discussion of related studies reported on page 9 of this document, the Environmental Integrity Project (EIP) (in a rigorous 12-state study using actual state permitting data) clearly proved that a 10-year look back would allow huge amounts of criteria pollutants to be emitted without benefit of the abatement controls required by NSR

²⁸ It is in this area that the court disagreed with EPA’s discussion of “reasonable possibility,” remanded the section to EPA for revision (see footnote 10) and EPA issued the March 8, 2007 proposed rule (see footnote 16).

because of the availability of the unrestricted 10-year look back. Also reported on page 10 are the results of a similar Delaware review of a major source that confirms the EIP conclusions and shows potentially large uncontrolled emissions that, if realized, would undoubtedly require an intensive search for other, smaller emitters to control (coatings, gas cans, consumer products, etc) to reach and maintain attainment of the ground-level ozone NAAQS. EPA has never refuted the EIP study. Sources, under the Reforms have an additional trump to play in avoiding NSR permitting. Setting baseline emissions is only half the game. The other half is setting the expected post-change emissions. Here it is most advantageous for sources to present a low emissions value so net emissions are as low as possible to improve the chances of avoiding NSR permitting.

No source would ignore any legally viable approach to setting the pre- and post-change emissions to the most appropriate level. The Reforms afford sources a generous route to such levels and Delaware's Regulation 1125 does not. This analysis would permit proclaiming Delaware Regulation 1125 is significantly more stringent than the federal NSR rule.

Since the calculation of a significant net emissions increase was, in effect, a minor matter, it was made even more so by the Court ordered revision of the Reforms package.

(3) Plant-wide Applicability Limit (PAL)

The EPA PAL term is for 10 years and is renewable. During this 10-year period, there is no requirement to reduce emissions and hence the PAL, even though new technology may render such emissions reduction both technically and economically viable. The PAL is determined by using the average emissions level of any consecutive 24-month operating period during the past 10 years. On this basis a PAL, near the end of its term, may be operating at an emissions level representative of almost 20-year old technology.

The baseline to establish the EPA PAL is calculated in the same manner as the baseline emissions for determining if a modification is a major modification and thus subject to NSR permitting. This means a 10-year look back and addition of emissions from start-ups, shutdowns and malfunctions (see discussion above).

It is interesting to note, in the EPA studies used to determine the likely benefit of a PAL, as reported in the Supplemental Analysis (Appendix B page 1), EPA opted to use the most recent 2-year period for determining baseline emissions which, of course, becomes part of the PAL level. EPA did not mention why they did not use the highest 2-years in 10, but, justified their action by saying *"We note that baseline may be calculated using periods of utilization of up to 10 years ago. However, we expect that the recent baseline is valid because, as EPA has separately discussed in detail, very few sources would qualify for a higher baseline going back 10 years."* This refers to the (very) qualitative "analysis" made by the EPA using estimated percentages (and no background documentation), reported on pages 13 & 14 as well as Appendix F of the Supplemental Analysis. Although this work relates to determining "actual baseline emissions," since the PAL cap is determined in the same manner, the work is directly applicable to assessing the impact of PAL cap determination on the federal PAL performance. This "analysis" concludes with *"The above analysis allows us to qualitatively deduce that the number of*

sources potentially affected by the change in baseline is relatively small and that the potential effects can go in either direction."

Delaware strongly disagrees with this conclusion, as reported in the two studies also dealing with calculation of baseline emissions which, as detailed above, is directly applicable to a PAL. The impact of using a 10-year look back will raise uncontrolled emissions by shielding certain modifications from NSR permitting and the addition of pollution abatement controls. Delaware believes that in the EPA PAL STUDY using the most recent 2-year period preceding the establishment of a PAL rather than the highest 2 in 10 years approach which sources under the Reforms are allowed to do, has the effect of minimizing the emissions limit set for the PAL and maximizing the likely emissions reductions available from the PAL. If the most recent 2-year emissions levels are close to the current emissions levels (which is likely) the PAL will have little "room" between the PAL limit and the source operating level, hence (in the study) almost any emissions increase from a physical change would require the addition of controls and would add to the questionable "emissions reductions" from PAL's quoted by EPA in the Supplemental Analysis and on page 5 of this document.

EPA specifically made the point that most major sources have a multitude of smaller, less than significance level projects that do not trigger NSR (except perhaps as may occasionally be counted in contemporaneous period netting) and that under a PAL these projects cannot happen without the addition of controls, because the "headroom" would be too small to accommodate a multitude of such projects. As EPA points out on page 7 of the Supplemental Analysis, ***"Under the PAL approach, these increases would not be allowed because the plantwide emissions are capped regardless of the size of the changes underneath the cap."*** This is erroneous thinking on the part of EPA as the method of determining the PAL cap (which is the same as determining actual baseline emissions; 10-year look back; emissions from start-ups, shutdowns, malfunctions; and all) will allow sources the unfettered opportunity to search out periods of high emissions levels to set their cap. EPA is dead wrong in assuming that few sources will be able to use the 10-year look back (why propose it as a reform if it cannot be used?). Delaware studies and the work by the Environmental Integrity Project (footnote 26) clearly show EPA's error. There is no way a source would refrain from seeking and obtaining that advantage. A PAL with such narrow "headroom" as to make these series of small or insignificant projects impossible to do without NSR permitting or seeking an increase in the PAL cap would surely be a strong disincentive to utilize PAL's.

Using a 10-year look back in the study to "set" the PAL would give the source ample opportunity to select a period of high emissions upon which to base the PAL, thus ensuring the most favorable situation for the source to avoid NSR permitting by not exceeding the PAL.

Delaware has the authority to issue PAL permits under its existing Regulation No. 1125. Delaware has found that the setting of a PAL limit is best handled on a case-by-case basis, as opposed to "shoe horning" a one fits all policy. Delaware believes that under this approach both environmental benefit and industry flexibility can both be maximized. The general strategy

behind the three PAL's issued in Delaware to date,²⁹ and Delaware's overall PAL policy is as follows;

- Use the most recent 2-year period to establish the emissions baseline or some other consecutive 24-month period if it can be shown to be more representative of normal operation.^{30 31 32}
- Do not include emissions from start-ups, shutdowns or malfunctions in determining the baseline.
- Do not automatically add a significance level of emissions to the baseline.
- Do adjust the baseline for any regulatory action since the baseline date and for other source actions that warrant an agreed upon revision to baseline emissions [shutdowns before a PAL starts, new units added for which a 24-month period is not available (use projected-actual emissions)].

²⁹ Delaware established a Plant-wide Applicability Limit (PAL) policy in the early 1990's administering the PAL on a case-by-case basis. DaimlerChrysler, Dupont-Edgemoor and Dupont-Experimental Station have been granted Delaware PALs. Although not explicitly codified in Regulation 1125, the language of that regulation and the language establishing the provisions for a particular sources PAL in their Title V permit (Regulation 30) clearly delineate how each PAL works. In the Supplemental Analysis, EPA used the Delaware PAL (along with PAL policies from five other states) as an example of flexible permitting supporting the Reforms proposal of a federal PAL.

³⁰ Including emissions from start-ups, shutdowns and malfunctions will further "inflate" the PAL, helping insure many proposed modifications (for which projected-actual emissions likely will show little if any emissions from start-ups, shutdowns and malfunctions) will not exceed the PAL and thus trigger major NSR permitting.

³¹ The Delaware PAL is based on the most recent 2-year period of operation, although another period may be used if the source can demonstrate that such period is more representative of normal operation. This "baseline" period is modified to reflect rule changes since the adopted period and does not include emissions associated with startup, shutdowns or malfunctions. New units which have not operated or have operated for insufficient time to provide a history of emissions are included at the average emissions rate for the 2-year period just prior to the PAL effective date or at zero emissions. The significance amount for the pollutant in question is not automatically added to the PAL level.

³² Delaware believes a 10-year, unrestricted look back will permit source owners to use emissions data from remote periods of high emissions in establishing the PAL level, and sources will go to great lengths to insure the selected period survives scrutiny. Using the most recent 2-year period in the EPA study helps insure their calculations show modest, if any, emissions increases by establishing a PAL. In fact, it allows EPA to posit that PAL's will provide impressive emissions reductions (See Supplemental Analysis page 2) that are likely not there as sources will use data insuring a higher PAL, as that is in their best interest, and thus lower reductions would result.. Although EPA blithely maintains that hardly any source will be able to qualify for an extended 10-year look back to establish baseline emissions for the NSR applicability test (did the change result in an emissions increase?) or to establish a high PAL (so why change the baseline if no one can use it?), numerous non-EPA groups [Environmental Integrity Project Report (see page 9 of this document) and the Delaware study discussed earlier (see page 10 of this document)] have established that the new baseline emissions determination method does indeed provide sources with substantial "room" to make physical changes resulting in substantial increases in emissions without triggering NSR permitting.

- Reviewing by permitting authority on a case-by-case basis, proposed or anticipated emissions reductions for individual process steps may result in establishing emissions limits for those process steps within the PAL.
- A list of pre-approved changes/modifications may be prepared allowing the source to make these changes without additional permitting activity and without additional public notice.³³
- Any other modifications or addition of new emissions units within the PAL, will require Regulation 1102 permitting activity (including public notice), but will not require NSR permitting as long as the PAL is not exceeded, toxics are addressed and BACT is incorporated in the installation.
- The PAL term is for 5 years and can be renewed (maybe at a lower emissions level).³⁴
- A PAL is a privilege not a right and Delaware reserves the right to refuse a PAL or cancel a PAL if for any reason Delaware determines the source is environmentally unreliable or unable to handle the technological aspects of administering a PAL.³⁵

Since Delaware does not include emissions from start-up, shutdown and malfunctions nor fugitive emissions; determines the PAL through the same look back process as is used for the baseline; does not automatically add the significance level; requires that if a major modification is made, not exceeding the PAL, BACT must be installed; and requires that all newly constructed minor facilities added to the plant-wide source covered by the PAL must install BACT or LAER, the Delaware PAL is more stringent than the federal EPA Reforms PAL. Further, since the granting of a PAL in Delaware is at the discretion of the Department, and each PAL is developed on a case-by-case basis, and is subject to public review and comment, to include EPA review and comment, maximum flexibility and environmental protection may be designed into the process.

(4) WEPCO Rule

The WEPCO rule restricts the development of baseline emissions to a 5-year look back for EGU's. This stems from a court decision made in an NSR case involving the Wisconsin Electric

³³ The Delaware PAL permit (as discussed in Appendix B of the Supplemental Analysis) allows advanced approvals for a number of Regulation 1102 "Permits" projects which allows the source to propose these projects when establishing or renewing the Title V permit, thus streamlining activity under the PAL.

³⁴ A Delaware PAL has a term of 5 years. DNREC reserves the right to deny a PAL or to deny renewal of a PAL if the Department believes the source has demonstrated a lack of environmental stewardship or does not have the resources to administer the PAL. Generally, PAL renewal requires review to determine if the PAL emissions cap level should be modified to reflect recent performance.

³⁵ The PAL may not be most appropriate for every source as evidenced by its lack of use in states that have established procedures for a PAL (see Connecticut Equivalency Demonstration) and in Delaware where only three PAL's have been established since they were first offered in the mid-1990's.

Power Company. At the time of the court decision which effectively implemented the WEPCO rule, states were given the opportunity to adopt or reject the WEPCO rule. By so doing, the EPA gave *de facto* approval to consider using the WEPCO rule or not using the WEPCO rule as equivalent, therefore the Delaware rule which does not use the WEPCO rule is at least as stringent as the federal rules.

(5) Dual Source Option

On August 7, 1980, EPA published a rule which defined a stationary source, for NSR purposes, as a “building, structure, facility or installation.”²² The rule split this definition of source into two levels, 1) the entire plant, and 2) a smaller portion of the plant, hence the term “dual source definition.” This was done by defining, separate from the terms “building, structure, facility,” the term “installation” as “an identifiable piece of process, combustion or incineration equipment.” This more stringent approach was designed by EPA to afford additional safeguards in non-attainment areas so that all significant emission units are well-controlled (i.e., LAER), regardless of whether or not there are other contemporaneous emission decreases at the facility.

On October 14, 1981 EPA amended the 1980 rule to allow states to either maintain the dual source definition of a stationary source, or to revise their programs to use only the plantwide definition. EPA required states intending to relax their programs by using only the plantwide definition demonstrate continued protection of the environment. Subsequently, many states revised their NSR rules to use only the plantwide source definition. Others, such as Delaware did not change their rules, as they needed the environmental protection afforded by the more stringent “dual source” definition.

Since, by definition, the dual source option is more stringent than the EPA approach, the Delaware rule use of the dual source option is more stringent than the federal rule in this area. In fact, many of the few major NSR permits that Delaware issues, which have resulted in the installation of significant emission controls and emission offsets, stem from the dual source definition.

(6) Demand Exclusion

After the WEPCO court decision, EPA promulgated a rule that gave utilities, when calculating projected-actual emissions expected from a physical change or change in the method of operation, the ability to exclude emissions from increased demand the utility could have accommodated considering the EGU’s operating capacity during the 24-month operating period selected to represent baseline emissions without regard to the physical change or change in method of operation. In other words, accommodating the increased demand did not require the physical change or change in method of operation. Delaware chose not to adopt this federal NSR program revision and continued to treat EGU’s and non-EGU’s in the same manner under Regulation 1125 (then termed Regulation 25).

The Reforms extended the demand exclusion to non-EGU’s. Under Delaware’s regulation, EGU’s and non-EGU’s may, with DNREC agreement, propose a different 24-month period for baseline emissions, if the 24-month period just prior to the proposed physical change or change

in the method of operation is not representative of normal operation. In Delaware, normal operation may include operation at higher rates up to or equal to maximum production. This in effect, gives the source the ability, all other things being equal, to choose for an emissions baseline period a 24-month period which includes the maximum production rate. This, in essence, functions as a “demand exclusion” when calculating the emissions increase due to a physical change or change in method of operation. If, for some reason, the source cannot look back to such an operating period to establish baseline emissions, then such demand effects will not be excluded and the resultant calculation of emissions related to the physical change or change in method of operation will be greater than what would be calculated under the federal rule, thus making the Delaware rule more stringent than the federal rule. In the case where the Delaware source could look back to a period of greater or maximum operation in establishing baseline emissions demand is excluded and the Delaware rule is as stringent as the federal rule.

Delaware notes there are smaller sources in Delaware that operate on a reduced schedule but have allowable emissions based on their 24/7 potential-to-emit and this capacity is never used. Delaware believes clean air is best served if the demand exclusion is not used in such cases to avoid NSR permitting.

Delaware believes it is again appropriate to comment that including provisions in the Delaware rule that are more stringent than the federal rule is not viewed as a disincentive for sources to pursue projects that will require NSR permitting. If projects are required to improve a source’s operating efficiency, safety, or to restore capacity lost to equipment degradation, it is in the best interest of the source to complete such projects to insure low-cost operation. Owners and stockholders would not settle for less.

Conclusion: Delaware’s Program Is More Stringent Than The Federal NSR Program.

This document demonstrates that Delaware’s NSR program is, overall, more stringent than the EPA target program. Relative to the six differences discussed in detail above, Delaware has demonstrated that its program is at least as stringent as, and in some areas more stringent than the EPA program. It follows that, collectively and overall, that DE program is more stringent.

Afterword: Additional Considerations In This Equivalency Demonstration.

In preparing this Equivalency Demonstration, Delaware reviewed EPA’s conclusions drawn from the Supplemental Analysis that the Reforms are more stringent than the NSR federal rules then in effect. EPA arrived at this conclusion based on all five provisions identified above being included in the Reforms, but, this conclusion is now known to be seriously flawed. The vacatur of the Pollution Control Project exclusion and the Clean Unit Test, both of which were billed as significant elements of the Reforms for reducing emissions and reducing disincentives, has invalidated EPA’s evaluation of the stringency of the Reforms. What is left is the PAL, as the baseline emissions look back and projected-actual emission estimates are essentially emissions neutral, according to the EPA.

Delaware showed, on page 13 of this document, that there are serious questions concerning the validity of EPA’s conclusion as to the emissions reductions one could attribute to the PAL.

Also, the entire validity of the Supplemental Analysis was questioned by a Government Accounting Office (GAO) study³⁶ which found that the Supplemental Analysis was based largely on anecdotal evidence that did not adequately represent the revised rules effect on energy efficiency projects industry wide, or their impact on overall emissions. EPA, in a separate communication in the GAO report, agreed the report was accurate and agreed with the GAO's conclusions and recommendations. This GAO conclusion was made on the full five-provision Reforms and not the abbreviated form that now exists after court action. No one knows what equivalency position (positive, neutral or negative) the EPA or the GAO would take if they now reviewed the abbreviated, three-provision Reforms.

Delaware believes the Reforms did not adequately address stakeholder concerns expressed over the ten-year period during which EPA considered revisions to their base NSR rule package. Stakeholders were primarily concerned, EPA said, that the complexity of the pre-Reforms rules made interpretation of applicability too uncertain and was a disincentive for pursuing certain projects that were likely to be environmentally beneficial or have positive energy efficiency or operational efficiency results. EPA's conclusions as to stakeholder concerns, as we now know, were significantly downgraded by the GAO study (and the GAO report conclusions were agreed to by EPA). The Reforms, in Delaware's opinion (and many others shared this view as expressed in the voluminous comments received on the EPA Docket and during public hearings) introduced a new set of uncertainties with obfuscated terminology, lack of specificity and ill-defined loopholes that will, result in a continuation of stakeholder uncertainties and will lead to increased emissions as the installation of pollution controls and the obtaining of emissions offsets required by NSR permitting will be significantly reduced.

Another GAO report "Clean Air Act - Key Stakeholders' Views on Revisions to the New Source Review Program" GAO-04-274, February, 2004 which reports on a GAO survey of 44 state environmental officials and concluded that although the respondents agreed the Reforms would ease permitting for sources, it would come at the expense of increased emissions of harmful air pollutants thereby hindering areas' efforts to meet air quality standards and potentially exacerbating public health risks. EPA itself predicted the number of NSR permits that sources would have obtained under the prior NSR rules will be cut in half under the Reforms. Presumably, with the adoption of the Reforms, those beneficial projects stakeholders shelved will be brought forth because they will not trigger NSR permitting and will result in emission reductions.

The court saw fit to vacate the Pollution Control Project exclusion and the Clean Unit Test. Delaware looked upon these provisions, particularly the Pollution Control Project exclusion, as allowing increases in emissions for little gain due to exclusion of certain increases in emissions from NSR permitting. EPA's position seemed principally to lie in stakeholder anecdotal "evidence" that projects that could make significant reductions in say NOx and provide improved operational efficiency and energy efficiency usually were not undertaken if collateral increases in other emissions resulted in complicated NSR permitting. The Pollution Control Project exclusion excluded those collateral emissions increases from NSR permitting.

³⁶ "Clean Air Act - EPA Should Use Available Data to Monitor the Effects of Its Revisions to the New Source Review Program", GAO-03-947, August, 2003

So, we are left with a shaky definition of the stringency of the abbreviated Reforms (in comparison with the prior federal NSR rules) and a questionable technical support document to determine the stringency of the Delaware NSR rules compared to the Reforms-based federal NSR rules. Delaware believes that we have shown unequivocally that Regulation 1125 is no less stringent than and is most likely more stringent than the comparable federal Reform-based NSR rules.