Air Permitting Streamlining Techniques and Approaches for Greenhouse Gases

A Report to the U.S. Environmental Protection Agency

from the

Clean Air Act Advisory Committee

Permits, New Source Reviews and Toxics Subcommittee

GHG Permit Streamlining Workgroup

Final Report

September 14, 2012

Disclaimer

The observations presented in this report were developed by the Clean Air Act Advisory Committee GHG Permit Streamlining Workgroup. This work constitutes a contribution from various stakeholders including industrial, tribal, environmental and state/local consortia. The observations in this report reflect a compilation of information from the workgroup members and do not necessarily state or reflect the opinions or recommendations of the United States Government, the overall workgroup or any of the organizations represented by the workgroup members.

It is important to note that while the workgroup included representation from all stakeholders, the input received by the workgroup from individuals other than the workgroup members on possible streamlining approaches was primarily from groups representing industry stakeholders. Therefore, this document simply presents input received from those stakeholders, and this input does not reflect what all members of the workgroup necessarily agree to or recommend. This document merely conveys to EPA the information gathered as part of the charge of this workgroup. The workgroup is not able to make recommendations regarding possible streamlining techniques at this time.

Acknowledgements

The following organizations and individuals are recognized for their valuable contribution to the Air Permitting Streamlining Techniques and Approaches for Greenhouse Gases Report.

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- Rob Kaufmann, National Environmental Development Association's Clean Air Project (NEDA/CAP)
- Robert Wyman, Partner, Latham and Watkins LLP

Many thanks for their valuable contribution and dedication to the fruition of this report are given to all of the Workgroup members, especially those who Co-chaired the Workgroup: Juan Santiago (EPA), Andy Ginsburg (ODEQ), and Mohsen Nazemi (SCAQMD), and those who Chaired the Sub-workgroups: John Paul (DPR), Mohsen Nazemi (SCAQMD), Vince Hellwig (MDEQ), and John Holmes (AEMS, LLC).

A special thanks to Jessica Montanez (EPA) who did an excellent job in coordinating and distributing information for the workgroup and sub-workgroups conference calls and in assisting and coordinating the preparation of this report.

Executive Summary

The GHG Permit Streamlining Workgroup was formed in March 2012 under the Clean Air Act Advisory Committee's Permits, New Source Review, and Toxics Subcommittee. The workgroup was charged with identifying and evaluating various potential approaches and options for streamlining the preconstruction (PSD) and operating (Title V) permit programs used for permitting of GHG sources. EPA committed to explore streamlining options as the agency considered lowering the emission threshold for GHG permitting. Since the workgroup was formed, EPA decided not to lower the permitting threshold when the agency promulgated Step 3 of the GHG Tailoring Rule on June 29, 2012. Nevertheless, EPA, state and local permit authorities, tribal agencies and many industry stakeholders remain interested in permit streamlining to reduce the burden of implementing and complying with the current permitting programs while retaining its environmental benefit. Environmental stakeholders[1] along with the stakeholders listed above agree that streamlining measures may be helpful in enabling the implementation of the PSD program for smaller sources of GHGs at the point in the future when the Tailoring rule applicability thresholds are adjusted downwards by the Agency.

Because of the wide diversity of permit streamlining topics, the workgroup formed four topic-specific sub-workgroups. The sub-workgroups were:

- Sub-workgroup 1 – Streamlining PSD Permitting under the "Major for One, Major for All" Policy. This sub-workgroup explored streamlining options to address the fact that non-GHG pollutants that would otherwise not be subject to PSD permitting become subject to PSD when a source triggers PSD solely due to its GHG emissions causing it to become a "new major stationary source."
- Sub-workgroup 2 – Streamlining PSD Permitting for GHG-Only Sources. This sub-workgroup explored streamlining options that could exclude certain lower-emitting GHG sources from PSD permitting and simplify the process for establishing control technology and other requirements in any PSD permitting action that does not trigger PSD for non-GHG pollutants.
- Sub-workgroup 3 – Streamlining Title V Permitting for "Empty Permits" and "Hollow Permits." This sub-workgroup explored streamlining options for sources that trigger Title V permitting solely due to their GHG emissions but are not subject to any substantive requirements related to their GHG emissions.
- Sub-workgroup 4 – Streamlining the Permitting Plant-wide Applicability Limit (PAL) Issuance Process. This sub-workgroup explored streamlining options that could remove barriers to more widespread use of PALs, which themselves can be an option for streamlining GHG permitting.

[1] Any references to environmental stakeholders in this report only refer to the Clean Air Task Force and no other environmental stakeholders.

Observations

The GHG Permit Streamlining Workgroup was charged with identifying potential streamlining methods, identifying barriers to use of these methods, recommending a prioritized list of streamlining methods for further development by EPA, and recommending an implementation approach for each method. The workgroup was able to identify potential streamlining methods but was unable to fully analyze the options due to time and resource constraints. As a result, this report is a compilation of information and observations gathered by the workgroup, but it does not include recommendations on, or a prioritized list of streamlining methods or approaches to address implementation issues.

Each of the four sub-workgroups compiled a list of potential streamlining options, which are summarized in the body of this report and detailed in the appendices. These options fall into the following categories:

- Options to exempt smaller sources from PSD or title V permitting;
- Options to permit groups of sources (as opposed to issuing individual permits);
- Options to simplify the establishment of control technology standards;
- Options to improve the permitting process;
- Options to simplify permit conditions for sources without substantive requirements;
- Options to defer permitting requirements for title V sources without substantive requirements;
- Options to reduce barriers to wider use of PALs.

Given that EPA already has a substantial amount of information about the streamlining options compiled in this report, the workgroup suggests that EPA consider soliciting stakeholder feedback on the options through a public notice and comment rulemaking. Most of the streamlining options compiled in this report would require rulemaking under section 307(d) of the CAA; moreover, because of the diversity of views about the benefits and costs of the various options, the workgroup believes that a public notice and comment rulemaking will be more useful than convening another stakeholder group to evaluate the options. The workgroup did not discuss the timing of such action.

Acronyms

API	American Petroleum Institute
BACT	Best Available Control Technology
BTU	British Termal Unit
CAA	Clean Air Act
CAAAC	Clean Air Act Advisory Committee
CCS	Carbon Capture and Storage
CHP	Combined Heat and Power
CFR	Code of Federal Regulations
CH_4	Methane
CO	Carbon Monoxide
CO_2	Carbon Dioxide
CO_2e	Carbon Dioxide Equivalents
EJ	Environmental Justice
EPA	US Environmental Protection Agency
ESA	Endangered Species Act
FAP	Flexible Air Permits
FR	Federal Register
GHG	Greenhouse Gases
GWP	Global Warming Potential
HAPs	Hazardous Air Pollutants
HFCs	Hydrofluorocarbons
LACSD	Los Angeles County Sanitation District
LAER	Lowest Achievable Emission Rate (LAER)
LFG	Landfill Gas
NAAQS	National Ambient Air Quality Standards
NACAA	National Association of Clean Air Agencies
NEDA/CAP	National Environmental Development Association's Clean Air Project
NESHAPs	National Emissions Standards for Hazardous Air Pollutants
NHPA	National Historic Preservation Act
NSR	New Source Review
N_2O	Nitrous Oxide
Non-GHG	Non-Greenhouse Gases
NOx	Nitrogen Oxides
O&G	Oil and Gas
PAL	Plant-wide Applicability Limit or Plant-wide Applicability Limitations
PFC	Perfluorocarbons
PSD	Prevention of Significant Deterioration
PTE	Potential to Emit
SCAQMD	South Coast Air Quality Management District
SER	Significant Emission Rate
SIL	Significant Impact Level
SIP	State Implementation Plan
SO_2	Sulfur Dioxide
SF_6	Sulfur Hexafluoride
Tailoring Rule	Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule
Title V	Title V of the Clean Air Act – Federal Operating Permits Program
Tpy	Tons per year

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The Clean Air Act

The Clean Air Act (CAA) is a federal law designed to reduce air pollution in the entire United States. Under the CAA, EPA can set limits to control the pollution of various air pollutants including emissions coming from industrial facilities such as power plants, chemical plants and paper mills. Individual states or tribes may have stronger air pollution laws, but they may not have weaker pollution limits than those set by EPA.

EPA Regulations

All federal regulations are codified annually in the U.S. Code of Federal Regulations (CFR). EPA's regulations are included in Title 40: Protection of the Environment. the New Source Review (NSR) regulations are primarily located in 40 CFR sections 51.165, 51.166 and 52.21. The title V regulations are primarily located in 40 CFR parts 70 and 71.

Introduction to Air Permitting

Permits are enforceable legal documents with which an industrial facility, or other stationary source, must comply. Permits may place restrictions on what construction is allowed, what emission limits must be met and how the source may be operated. To ensure that sources comply with a permit's emission limits, a permit almost always contains monitoring, recordkeeping, and reporting requirements. Under the CAA, stationary sources of air pollution generally must apply for two types of permits: a preconstruction or New Source Review permit, and an operating or title V permit. Title V references the part of the CAA that includes the requirements for this type of permits for major sources. A description of both of these programs follows.

New Source Review Permitting

The NSR program requires industrial facilities to install modern air pollution control equipment when they are built or make a modification that increases emissions significantly. The purpose of the NSR program is to protect public health and the environment, even as new industrial facilities are built and existing facilities expand. Specifically, its purpose is to ensure that air quality does not worsen where the air is currently unhealthy to breathe (i.e. nonattainment areas) and is not significantly degraded where the air is currently clean (i.e. attainment areas). The NSR program is divided into three parts: the Prevention of Significant Deterioration (PSD) program, which applies in attainment areas; the Nonattainment NSR program, which applies in nonattainment areas; and the minor NSR program, which applies to non-major stationary sources with lower air pollutant emissions in attainment or nonattainment areas. The NSR permitting requirements include installation of Best Available Control Technology (BACT) or compliance with the Lowest Achievable Emission Rate (LAER), air quality modeling, emissions offsets and public notice.

Title V Permitting

The operating permit program consolidates all air pollution control requirements for a major stationary source into a single, comprehensive "operating permit" that covers all aspects of a source's year-to-year air pollution activities. Permit holders have to track, report, and regularly certify their compliance with these requirements. The title V operating permit program generally does not add new pollution control requirements. It is designed to increase compliance with other applicable control requirements and facilitates public participation and input in permitting decisions.

An Overview of Greenhouse Gas Permitting

On April 2, 2007, in a case titled *Massachusetts v EPA*, 549 U.S. 497 (2007), the U.S. Supreme Court found that greenhouse gases (GHGs) are air pollutants covered by the CAA. In the years that followed, EPA undertook a series of actions and rulemakings in response to that ruling to begin regulating GHGs under the CAA[2]. On May 13, 2010 and as part of these rulemakings; the EPA signed the PSD and title V GHG Tailoring Rule to tailor the applicability of the NSR/PSD and title V air permitting programs to GHG emissions. The Tailoring Rule is implemented, among other requirements, through a definition of the term "subject to regulation[3]" and by using a phased approach (75 FR 31514). Under the Tailoring Rule Step 1, only sources that were otherwise subject to PSD permitting ("anyway" sources) could trigger requirements for GHGs, if GHG increases exceed a set threshold. After July 1, 2011, under the Tailoring Rule Step 2, both "anyway" sources[4] and sources not otherwise subject to these permitting programs could trigger PSD and title V permitting for GHG. New major stationary sources and existing major stationary sources proposing a physical change or change in method of operation have to obtain PSD and title V permits if their GHG emissions are equal to or higher than certain air emissions thresholds provided in the rule and also exceed the emissions levels provided for in the CAA. For example, new facilities with GHG emissions of at least 100,000 tons per year (tpy) carbon dioxide equivalent (CO_2e)[5] and 100 or 250 tpy on a mass basis are required to obtain PSD permits for their GHG emissions. PSD "non-anyway" existing facilities with air emissions of at least 100,000 tpy CO_2e making changes that would increase GHG emissions by at least 75,000 tpy CO_2e and any increase on a mass basis become "subject to regulation" and will also have to obtain PSD permits. PSD "anyway" sources must also address GHG emissions increases of 75,000 tpy CO_2e or more. New and existing sources with GHG emissions above 100,000 tpy CO_2e must also obtain title V operating permits. As of May 21, 2012, EPA and state/local permitting authorities have issued a total of 44 GHG PSD permits.

Under the Step 1 and 2 Tailoring Rule, EPA committed to undertake another rulemaking to evaluate whether or not to lower the applicability thresholds and to explore opportunities for streamlining GHG permitting under both permitting programs. This rule, named the Tailoring Rule Step 3, was signed on June 29, 2012 (76 FR 38748). EPA did not lower the applicability thresholds under the Tailoring Rule Step 3, as the agency determined that the three criteria necessary to lower the thresholds – adequate permitting authority infrastructure, sources' ability to meet the new GHG requirements, and EPA and state programs ability to develop streamlining measures – had not been met. Nevertheless, before EPA signed the Tailoring Rule Step 3, EPA received comments on various streamlining techniques that will be analyzed in the context of a future rulemaking and announced that it had convened a GHG Permit Streamlining Workgroup in April 2012 under the Clean Air Act Advisory Committee (CAAAC) to "explore potential streamlining approaches that may make the administration of the CAA permitting programs

[2] The GHGs regulated under the CAA include six well-mixed air pollutants – CO_2, CH_4, N_2O, HFCs, PFC, and SF_6.
[3] For purposes of the PSD and Title V permitting programs, the term "subject to regulation" is defined differently and under sections 40 CFR 52.21 and 40 CFR 70.2 respectively.
[4] "Anyway" sources are subject to the PSD and title V permitting due to their emissions of non-GHG pollutants.
[5] CO_2e emissions are defined as the sum of the mass emissions of each individual GHG adjusted for its GWP.

more efficient for permitting authorities and that may potentially reduce the permitting burden for smaller GHG-emitting sources if the programs are expanded to apply to these sources." This document conveys the workgroup observations.

Workgroup Approach

Overall Workgroup Discussions

In the Steps 1, 2, and 3 PSD and title V GHG Tailoring Rules, EPA committed to explore permit streamlining approaches that make the administration of the CAA permitting programs more efficient for permitting authorities, and that potentially reduce the permitting burden for smaller GHG-emitting sources. A key factor in EPA's phased approach to GHG permitting under the CAA is the ability of permitting authorities to issue timely permits, along with the ability of sources subject to permitting to obtain and comply with those permits.

Streamlining approaches could help expedite permitting and make more efficient use of resources needed to implement the PSD and title V GHG permitting programs, if EPA proposes to expand the permitting programs to smaller sources and additional source categories of GHG emissions.

The GHG Permit Streamlining Workgroup was formed under the CAAAC Permits, New Source Review, and Toxics Subcommittee. The workgroup was asked to identify and evaluate various potential approaches and options for streamlining. As part of this effort, EPA expressed interest in exploring streamlining methods that could potentially apply to the existing PSD and Title V GHG permitting programs, and to allow for the potential expansion of the CAA permitting programs to sources with lower GHG emissions, which may never have been subject to CAA regulations.

The workgroup was convened in late March 2012 and held its first meeting on April 4, 2012. The initial charge[6] of this workgroup was to:

(1) Review the potential streamlining methods and source categories identified by EPA as potentially impacted at various GHG applicability thresholds;

(2) Identify the regulatory and policy barriers associated with further development of permit streamlining methods for each of the source categories and recommend approaches to address such barriers; and

(3) Prioritize the source categories and streamlining methods for further development by EPA and recommend an implementation approach for each method.

[6] More information about the workgroup's charge can be found in Appendix A of this report.

The initial target of the workgroup's efforts was to prepare an interim and a final report by mid August and mid September 2012, respectively, for submittal to CAAAC for their consideration and further recommendations to EPA. Both deadlines were met.

The workgroup compiled a list of permit streamlining options based on input from stakeholders and discussions during bi-weekly conference calls. However, due to time and resource constraints, the workgroup could not fully evaluate the identified options and is therefore unable to provide recommendations to CAAAC. As a result, this report is a compilation of information and observations gathered by the workgroup, but it does not include a prioritized list of streamlining methods or approaches to address implementation issues.

EPA already has information regarding potential streamlining approaches, as identified in the Tailoring Rule and through stakeholder comments on the initial Tailoring Rule and Step 3 proposals, as well as information provided in this report. The workgroup therefore suggests that EPA would be better served by utilizing the information at its disposal and encouraging stakeholder feedback through a public notice and comment rulemaking, rather than through convening another phase of this workgroup to evaluate and recommend permit streamlining options and priorities. The workgroup did not discuss the timing of such action.

The GHG Permit Streamlining Workgroup was Co-chaired by Mohsen Nazemi, Andy Ginsburg, and Juan Santiago, with support from Jessica Montanez of EPA. A complete list of workgroup members is shown in Appendix B.

Topic Based Sub-workgroup Discussions

The workgroup began discussions of various streamlining possibilities on their bi-weekly conference calls. As the discussions proceeded the workgroup decided that, in order to allow for detailed discussions of various permit streamlining options for various sources that would potentially be impacted due to their GHG emissions, it would be more practical to form topic-specific sub-workgroups. Therefore, on the April 24, 2012 conference call, the workgroup decided to form the following four sub-workgroups:

- Sub-workgroup 1 – Streamlining PSD Permitting under the "Major for One, Major for All" Policy (John Paul, Chair)
- Sub-workgroup 2 – Streamlining PSD Permitting for GHG-Only Sources (Mohsen Nazemi, Chair)
- Sub-workgroup 3 – Streamlining Title V Permitting for "Empty Permits" and "Hollow Permits" (Vince Hellwig, Chair)
- Sub-workgroup 4 – Streamlining the Permitting Plant-wide Applicability Limit (PAL) Issuance Process (John Holmes, Chair)

Each sub-workgroup decided to hold conference calls on a bi-weekly basis, on alternating weeks from the workgroup bi-weekly conference calls. The members of each sub-workgroup are listed

in the following sub-workgroup sections; however, the sub-workgroup conference calls were open to any workgroup member.

In order to optimize sub-workgroup discussions regarding PSD permitting, as many of the discussion and streamlining measures for PSD permitting could potentially apply to both, sub-workgroups 1 and 2 held combined conference calls.

Sub-workgroup 1: Streamlining PSD Permitting under the "Major for One, Major for All" Policy

SUB-WORKGROUP DESCRIPTION

The purpose of the sub-workgroup was to explore and discuss streamlining techniques and approaches that could be used to make permitting of GHG sources more efficient for sources that trigger the GHG thresholds for PSD and consequently trigger requirements for additional pollutants under EPA's "major for one, major for all policy".

Under the "major for one, major for all policy" if a source emits even one pollutant in amounts that exceed the major source thresholds, the source will be considered major, and all other pollutants emitted in non-major amounts will be reviewed for PSD applicability by using their respective Significant Emissions Rate (SER). Emissions equal to or higher than the SER make the pollutant subject to PSD.

SUB-WORKGROUP MEMBERSHIP

Chair:

John Paul, Regional Air Pollution Control Agency

Members:

Joy Wiecks, Fond du Lac Band of Lake Superior Chippewa
James Capp, Air Branch, Georgia Environmental Protection Division
Misti Duvall, National Association of Clean Air Agencies
Robert Hilton, Alstom Power
Robert Wyman, Latham and Watkins
Praveen Amar, Clean Air Task Force
Vince Hellwig, Air Quality Division, Michigan Department of Environmental Quality
Mary Turner, Waste Management

The sub-workgroup met a number of times by phone. The sub-workgroup collected and reviewed materials, and solicited specific input from several sources. The sub-workgroup also held several calls with stakeholder groups to discuss their input.

Materials reviewed by the sub-workgroup and specific stakeholder submissions include the following. Documents in **bold** are attached to this report.

- Final Rule: Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule FACT SHEET
- Proposed Rule: Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3 FACT SHEET
- The Workgroup Ground Rules
- The EPA NSR Basic Facts Sheet
- The EPA Title V Basic Facts Sheet
- **Details on Some of the GHG Streamlining Ideas – from James Capp (Appendix C)**
- **Illinois Permit-by-Rule July 12-2012 (Appendix D)**
- **Wisconsin Permit Fees (Appendix E)**
- **Illinois Regulatory Language on General Permits and Permits-by-Rule (Appendix F)**
- **Illinois 097-0095 General Permit 1-12-12 Report (Appendix G)**
- **Illinois PSD fees (Appendix H)**
- **GHG Permit Streamlining Questions and Examples States and Local Agencies (Appendix I)**
- Summary of Threshold and Greenhouse Gases (GHG) Streamlining Options Background Data under the Tailoring Rule Steps 1, 2 and 3 (EPA background document discussed during first workgroup meeting)
- Workgroup PSD Program Overview
- GHG Streamlining Information Request
- GHG Streamlining Sub-workgroup Membership Lists
- Various Industry, State, Local, and Environmental Group Comments on EPA's Tailoring Rule Step 3 Proposal
- GHG-Only Source Preamble Text in Tailoring Rule Step 3 Proposal
- **EPA Response to Comments on Tailoring Rule - Emphasis on Chapter 4-- Comments on Streamlining Options and Tools To Address the Administrative Burdens of PSD and Title V for GHGs (Appendix J)**
- **API Response to Sub-Workgroup Information Request (Appendix K)**
- **NEDA/CAP Response to Sub-workgroup Information Request (Appendix L)**
- **PSD/Title V GHG Permit Streamlining Suggestions, LACSD, June 29, 2012 (Appendix M)**
- **GHG Tribal feedback (Appendix N)**

The sub-workgroup solicited input from industry groups, environmental groups, tribal agencies, and state and local permitting agencies. We received formal input from two industry groups and one state agency (a member of the sub-workgroup). State and local agencies were briefed on two National Association of Clean Air Agency (NACAA) New Source Review and Permitting Committee conference calls, and provided examples of GHG permit fees, general permits, and permits-by-rule in response to a request from the sub-workgroup. These responses are summarized in the Appendices D-H. Tribes provided a spreadsheet of responses which is also included in the Appendix N. Some tribes have expressed concern regarding any streamlining

approach that may weaken Environmental Justice (EJ) and Endangered Species Act (ESA) review requirements. The sub-workgroup did not receive input from environmental groups besides the Clean Air Task Force. Environmental groups may have declined further input because of their earlier stated position that they believe streamlining at current applicability levels (Final Step 3 Rule did not lower the threshold levels) is not warranted.

In seeking input from various stakeholders, the sub-workgroup developed a set of five specific questions which stakeholders were asked to formally address in writing. These questions are as follows.

Assuming that a new source is proposed which would trigger PSD solely because its GHG emissions were above the threshold,

1. What is the general set of requirements triggered?
2. What are the consequences of triggering these requirements?
3. What are some likely source categories that will be brought into major source review solely because of GHG emissions?
4. Are there any streamlining options short of applicability options? I. e., once applicability is triggered, are there any streamlining options that could simplify the triggered reviews of pollutants emitted in significant amounts?
5. What are some potential alternatives to PSD (general permits, permits by rule), etc., for sources once PSD is triggered by GHG emissions?

PROBLEM STATEMENT

As discussed above under "sub-workgroup Description", the purpose of this sub-workgroup was to explore and discuss streamlining techniques and approaches that could be used to make permitting of GHG sources more efficient for sources that become "new major stationary sources" because they trigger GHG thresholds for PSD and consequently trigger requirements for additional pollutants under the EPA "Major for one, Major for all" policy.

Under the pre-GHG PSD rules, a source could be subject to PSD only when its potential to emit of one or more of the regulated NSR pollutants exceeded the major source thresholds of 100 or 250 tpy. Under the "Major for one, Major for all" policy, a new or modified source that was major for any regulated NSR pollutant was subject to PSD for each regulated NSR pollutant that increased by the applicable significance level or more. To avoid triggering PSD in this case, some facilities requested federally-enforceable synthetic minor permit limits to keep their potential to emit of regulated NSR pollutants below the major source thresholds.

Under the GHG permitting requirements and at the onset of any permitting activity, a source may now also be considered major if it has GHG emissions of at least 100,000 tpy CO_2e and 100 or 250 tpy on a mass basis. For such new sources and those existing sources proposing a 75,000 TPY emissions increase, any non-GHG pollutant with an emissions increase greater than the applicable significance levels is now also subject to PSD requirements under the "Major for one, Major for all" policy even if none of its non-GHG pollutant emissions are at major levels.

OBSERVATIONS

State and local permitting agencies are operating with limited and decreasing resources. Early indications are that states and local agencies are currently able to handle all new permitting requirements for GHG major sources at the current applicability levels (which remain unchanged under the Tailoring Rule Step 3). The sub-workgroup does not have information about the impact on state and local resources necessary to properly regulate sources if threshold levels are lowered in Steps 4 and 5 of the Tailoring Rule. This is an area that needs further research.

EPA has made estimates of new permitting requirements and number of sources that would require permits at various applicability levels. If GHG permit applicability levels are lowered in Steps 4 and 5 and the number of permits increase significantly, either streamlining techniques must be adopted or state and local resources must be increased proportionately.

GHG permit streamlining options are well-known, well-documented, and well-discussed in the various documents cited above and attached to this report. In general, the options are as follows:

- PTE restrictions (permanent or phased-in)
- Permits-by-Rule
- General Permits
- Presumptive BACT
- Environmental Performance Standards with Annual Compliance Certifications
- Unit or source category specific exemptions
- Permits for equipment suppliers rather than for equipment owners/operators (certified equipment)

These streamlining options would appear to have their most appropriate application at applicability levels lower than the current 100,000/75,000 tpy thresholds. In fact, some stakeholder groups, including sub-workgroup member CATF, are on record as stating that the above-listed streamlining options are either inappropriate or unnecessary at current applicability levels (which remain unchanged under Tailoring Rule Step 3). It is the position of these stakeholders that, as EPA develops Steps 4 and 5 of the Tailoring Rule in years 2015-2016, the Agency should focus on maximizing environmental benefits related to GHGs while lowering administrative burdens for permitting authorities as it investigates including more source categories and lowering GHG permitting thresholds. Other stakeholder groups have indicated that they believe there are opportunities for streamlining at the current applicability levels. Should EPA choose to pursue any of these streamlining options, the agency should first further investigate their costs and benefits.

State and local agencies are generally supportive of the development of GHG streamlining techniques, especially with regard to minor sources. Many states and local agencies currently

use general permits and permits-by-rule, which are two of the listed streamlining techniques. States and local agencies certainly would not want federal policies, guidance, or rules to pre-empt state and local programs that are currently functioning well. With regard to other streamlining options, state and local agencies believe EPA should move forward and propose specific techniques in detail. At the time of proposal all stakeholders would then have the opportunity to provide specific comments. The sub-workgroup did not discuss the timing of such action.

Through the previous EPA proposal, there is extensive documentation of industry group comments in support of streamlining options and environmental group comments questioning the need for streamlining at current GHG permit applicability levels. An option such as presumptive BACT has been debated for years and likely would never receive consensus approval for anything but minor sources. Currently, many state and local agencies pursue and implement streamlining options they believe are appropriate for minor sources under their own permitting programs. A number of state and local agencies currently issue general permits and permits-by-rule. The sub-workgroup discussions did not add significantly to the documentation that already exists on the various options.

The sub-workgroup believes the record on potential streamlining techniques, gathered through previous proposals and comments thereto, is substantial and provides adequate basis for EPA to pursue the development and proposal of specific streamlining strategies at the point when such streamlining techniques become necessary. The sub-workgroup did not discuss the timing of such an action. Some sub-workgroup members also assert that to the extent that EPA believes potential streamlining techniques are needed for its current permitting process, it would be prudent to address those first.

Potential streamlining techniques for sources at lower applicability thresholds must also be addressed through the notice and comment rulemaking process, which would provide all affected stakeholders the opportunity to adequately examine and comment on specifics. The sub-workgroup did not discuss the timing of such action.

Formal input to the sub-workgroup, along with EPA's Response to Comments on the Tailoring Rule, are summarized below. These include:

- Details on Some of the GHG Streamlining Ideas – from James Capp (Appendix C),
- The EPA Response to Comments on Tailoring Rule—emphasis on chapter 4-- Comments on Streamlining Options and Tools To Address the Administrative Burdens of PSD and Title V for GHGs (Appendix J),
- The API response to the sub-workgroup information request (Appendix K), and
- The NEDA/CAP response to the sub-workgroup information request (Appendix L)

Details on Some of the GHG Streamlining Ideas – from James Capp (Appendix C)

James Capp is a member of this sub-workgroup, and offered the following input representing the Georgia Environmental Protection Division. James Capp is also a co-chair of the NACAA Permitting Committee. He also offered comments with regard to Title V, which are covered under the sub-workgroup 3 section of this report.

- Issue guidance that would state that the implementation of surrogate BACT emission limits for GHGs may be acceptable in some cases. For example, for combustion sources, if efficiency is determined to be BACT (i.e., end of pipe controls eliminated based on availability, feasibility, cost, etc.) and the permit would also include an output-based BACT limit for nitrogen oxides (NOx), carbon monoxide (CO), and/or sulfur dioxide (SO_2), then the NOx, CO, and/or SO_2 could also act as surrogate BACT for GHGs and eliminate a duplicative emission standard. This would be analogous to EPA's use of CO as a surrogate for organic hazardous air pollutants (HAPs), or SO_2 as a surrogate for acid gas HAPs.
- Establish *de minimis* values for PSD applicability (significant increase levels) for GHGs through public notice and comment rulemaking under 40 CFR section 52.21(b) (23) (i). The sub-workgroup did not discuss the timing of such action.
- EPA has general authority to establish *de minimis* exceptions to statutory requirements where the application of the statutory requirements would be of trivial or no environmental value. (See *Alabama Power Co. v. Costle*, 636 F.2d 323, 360-61 (D.C. Cir.1979).
- EPA could establish through guidance presumed BACT control technologies (e.g., energy efficiency) for certain types of emission units such as industrial boilers, combustion turbines and backup generators. This would be accomplished by streamlining Steps 1 through 4 of EPA's existing Top-Down BACT guidance. Steps 1 through 5 of EPA's Top Down BACT are:
    - Step 1: Identify all available control technologies.
    - Step 2: Eliminate technically infeasible options.
    - Step 3: Rank remaining control technologies.
    - Step 4: Evaluate most effective controls and document results.
    - Step 5: Select BACT.

After the control technology is determined, the BACT emission limit would be determined on a case-by-case basis. Therefore, this should be compatible with the statutory definition of BACT which requires the BACT emission limit to be established on a case-by-case basis. This would also promote consistency across the country for the control technologies that are determined to represent BACT.

The EPA Response to Comments on Tailoring rule—emphasis on chapter 4-- Comments on Streamlining Options and Tools To Address the Administrative Burdens of PSD and Title V for GHGs (Appendix J)

Quoted from chapter 4: "Section VII of the proposal preamble for the Tailoring Rule presents several PSD and title V permitting streamlining options/tools. Though we acknowledged that these techniques could not be fully developed in the near-term, we committed to aggressively pursue the development of these streamlining techniques in the first step of our overall PSD and title V GHG permitting strategy and solicited comment on our proposed streamlining techniques as well as other techniques that could be employed. This subsection presents the general comments received on the use of streamlining techniques to mitigate potential PSD and title V permitting burdens that would be associated with regulating GHGs under these permitting programs."

From this chapter, there is discussion of general support for streamlining, general concerns, mechanisms, timing, legality of proposed techniques, and then discussion (both pro and con) of the following techniques.

- Redefining "Potential to Emit"
- Presumptive BACT
- General Permits and Permits-by-Rule
- Electronic Permitting
- "Lean" Techniques for Permit Process Improvements

In the general response to comments, EPA states the following: "We agree with those commenters who support using streamlining techniques to mitigate the potential PSD and title V permitting burdens. Nothing in the opposing comments has persuaded us that we should abandon our streamlining efforts. To the contrary, the strong support for these efforts shown by many commenters reinforces our intention, as stated in the proposal, to move forward with the approaches as an integral part of our phase-in approach. However, because the uncertainty surrounding the streamlining approaches and the concerns expressed by some commenters, we are not committing to finalize rules on any particular approach, but we do plan to explore all streamlining options as expeditiously as possible, beginning immediately and proceeding throughout the phase-in period, and we encourage permitting authorities to do the same. We commit to consider a wide array of possible streamlining measures, and we commit to propose and take comment on, in the step 3 rulemaking, a set of those measures that we determine are viable to pursue further."

The sub-workgroup takes note and calls to the attention of EPA and the full CAAAC that this document contains a substantial discussion of streamlining options with stakeholder opinions and EPA responses. Elsewhere in the EPA docket on the Tailoring Rule (Docket ID EPA-HQ-OAR-

2009-0517) official comments of states and local agencies, tribal agencies, industries, environmental groups, citizens, and others on the specific topic of streamlining can be found. This docket is likely further populated by comments submitted on the Step 3 rulemaking. Within that docket is likely a wealth of information regarding streamlining options.

The American Petroleum Institute (API) response to sub-workgroup information request (Appendix K)

API responded in written form to specific questions presented by the sub-workgroup. They subsequently attended a sub-workgroup conference call and responded to members' questions. Much of the attention given to streamlining has been aimed at sources which would enter the system at lower applicability levels, but EPA has time to address these lower applicability issues now that Step 3 has been finalized and the current applicability levels maintained. The API letter makes several recommendations regarding the current process. API's response to the sub-workgroup list of questions is attached and we recommend its reading in whole. Below are several observations the sub-workgroup found of special interest.

With regard to the consequences or impacts of triggering GHG PSD, API listed:

- Schedule delays
- Investment uncertainty
- Air pollution control system upgrades

With regard to source categories brought into major source review solely because of GHG emissions, API listed:

- Upstream Oil and Gas (O&G) production facilities. These would generally be new facilities.
    - Flaring of associated gas
    - Steam-intensive production activities
- O&G gathering and mid-stream operations. These projects could either be new facilities or modifications to existing ones.
    - Compressor stations
    - Processing plants
    - CO_2 removal operations (acid gas treatment)
- Downstream O&G refining operations. These projects would generally be modifications to existing facilities.
    - Cogeneration projects
    - The addition of boilers or combustion turbines
    - Hydrogen production/adding hydrogen production capacity

API supports other general streamlining techniques such as general permits and presumptive BACT, and they offered specific examples of states which use such techniques. With regard to streamlining suggestions short of applicability, API suggested that EPA develop guidance for addressing ESA reviews, biological assessments, cultural resource reviews, and EJ reviews.

With regard to potential alternatives to PSD, API suggested enhanced minor source permitting, presumptive BACT, especially for natural gas combustion sources, a moratorium on carbon capture and storage (CCS) evaluation for all but the very largest CO_2 sources, limitations on the scope of ESA, National Historic Preservation Act (NHPA), and EJ reviews, a Potential to Emit transition policy, redefinition of "construction activities", expedited State Implementation Plan (SIP) approvals, and expedited permit reviews. Each of these suggestions are discussed in detail in the written submission.

National Environmental Development Association's Clean Air Project (NEDA/CAP) response to sub-workgroup information request (Appendix L)

NEDA/CAP members held a conference call with the sub-workgroup chair and then provided written comments in response to the sub-workgroup information request. NEDA/CAP also suggested improvements to the current process at existing applicability levels. Additionally, they pointed out what might be an unintended consequence of the GHG permitting process—that being the "reclassification" of existing minor sources (some of which may be operating under synthetic minor permits or PALs) to a major source status, solely because of GHG emissions. NEDA/CAP noted that changes at such facilities which were previously allowed will now come under federal review under PSD if such changes result in significant increases in criteria pollutants. NEDA/CAP provided very detailed comments for the sub-workgroup consideration. A summary of those comments follows.

NEDA/CAP stressed:

- Developing a strategy to minimize or eliminate permitting for pollution control projects and especially energy efficiency, combined heat and power (CHP) and natural gas projects that trigger increases in GHGs and/or that cause increases in "other" pollutants ;
- Eliminating or streamlining the analysis of CCS in BACT reviews;
- Developing a strategy to reward sources that have taken synthetic minor limits prior to becoming GHG-only major sources or will take synthetic minor limits to remain out of PSD for "other" regulated air pollutants; and,
- Paring back or eliminating PSD review of other regulated pollutants for GHG-only major sources.

With regard to source categories brought into major source review solely because of GHG emissions, NEDA/CAP listed:

- Installation of process heaters (and thermal oxidizers) at petrochemical facilities; installation of hydro-treaters and distillation equipment.
- Installation of new boilers and combustion engines at any minor facility, including but not limited to R&D facilities. Ironically any energy efficiency project, in the absence of the PSD exemption for pollution control projects, can trigger PSD for GHGs.
- Oil & Natural gas production facilities because of CO_2 and to a lesser extent methane from gas production. (The PSD aggregation and fugitive policies are particularly critical for these sources).
- Installation of in-line -dryers at large coating and/or converting facilities and in grain drying/ food processing using natural gas-fired driers.
- Fertilizer Plants
- Co-generation (Combined Heat and Power) Plants at any Major Manufacturing Facilities (ironically, if the CHP owner and operator is the owner of the plant, then emission increases from non-major PSD emission increases become an issue. Typically, the reverse has been true because if the owner/operator is not the owner, netting has not been allowed.)
- Industries that utilize refrigeration and chillers for process fluids.
- Smelting operations and other industries that have the potential to use high amounts of SF_6 to prevent electrical arcing in processes or switch gears, in the absence of policies regarding SF_6 leak rates.
- Electronics Manufacturing (SF_6 and CFCs) in etching and cleaning.
- Aluminum mills expansions/retrofits because of energy requirements for process equipment.
- Historical "synthetic minors" (including but not limited to petrochemical, home care, and electronic product plants) that curtailed their actual emissions and took caps to avoid PSD review, but have become subsequently subject to PSD for GHGs.
- Future of construction materials (board plants/saw mills) is dependent on permanent exclusion of biogenic emissions from GHG permitting. Food products and supplements, also is dependent on permanent exclusion of biogenic emissions from GHG permitting.

With regard to streamlining suggestions short of applicability, NEDA/CAP primarily suggested the revision of existing guidance and regulations so that PSD review would be confined to GHGs. For PSD sources triggered solely by GHG emissions, they recommend that other pollutant review should be required only for major source emissions; i.e. EPA should exempt the GHG source from the "major for one, major for all" policy. They also recommend restoration of the

"pollution control project exemption," for GHG-only projects and elimination of the need to examine CCS in in every GHG BACT review. The NEDA/CAP submission (Appendix L) provides details of other recommendations.

Sub-workgroup 2: Streamlining PSD Permitting for GHG-Only Sources

SUB-WORKGROUP DESCRIPTION

This sub-workgroup was formed to evaluate various approaches and options to streamline and make more efficient the permitting of sources which trigger PSD as a result of their GHG emissions exceeding the thresholds specified in the GHG Tailoring Rule. These streamlining measures could assist both permitting agencies in processing and issuing, as well as the GHG-emitting sources in applying for and obtaining permits, by making the permitting process more efficient and less burdensome.

The sub-workgroup was formed on May 10, 2012 and in order to optimize the discussions of this sub-workgroup relative to PSD permitting, all of the sub-workgroup 2 conference calls were combined with sub-workgroup 1- Streamlining PSD Permitting under the "Major for One Major for All" Policy, as many of the discussions and streamlining measures for PSD permitting could potentially apply to both sub-workgroups.

The focus of this sub-workgroup was on identifying streamlining measures which would apply to permitting of GHG-emitting sources and which as a result of increases in GHG emissions above GHG Tailoring Rule thresholds would trigger PSD permitting, but only for GHG emissions and no other pollutant. These sources include:

- New facilities with potential to emit $\geq$100,000 tpy of CO_2e and 100 or 250 tpy on a mass basis;
- Existing facilities with potential to emit $\geq$100,000 tpy CO_2e that make modifications which would increase GHG emissions by >75,000 tpy of CO_2e and any increase on a mass basis; and
- For both of the above cases in this discussion, there are no emission increases of any other PSD (attainment) pollutant above significant emission rate thresholds for all other non-GHG pollutants.

These new or modified GHG-emitting sources, however, only trigger PSD permitting due to GHG emissions and the sources' emission increases for other attainment pollutants are below the PSD significant emission rates thresholds for such pollutants. Therefore, the only pollutant subject to the PSD permitting is GHGs and PSD analysis is not triggered for any other pollutant.

SUB-WORKGROUP MEMBERSHIP

The membership for this sub-workgroup consisted of representatives from state and local permitting agencies, industry, environmental groups, tribal agencies, a private law firm and EPA. In addition to the official members of this sub-workgroup, since the sub-workgroup conference calls were combined with sub-workgroup 1, there were other participants in the sub-workgroup conference calls. The list of members and other participants in the sub-workgroup discussions are shown below.

Chair:	**Mohsen Nazemi,** South Coast Air Quality Management District
Members:	**Joy Wiecks,** Fond du Lac Band of Lake Superior Chippewa **James Capp,** Air Branch, Georgia Environmental Protection Division **Misti Duvall,** National Association of Clean Air Agencies **Robert Hilton,** Alstom Power **Robert Wyman,** Latham and Watkins
Other Participants:	**John Paul,** Regional Air Pollution Control Agency **John Holmes,** AEMS, LLC **Praveen Amar,** Clean Air Task Force **Vince Hellwig,** Michigan Department of Environmental Quality **Mary Turner,** Waste Management **Juan Santiago,** EPA – OAQPS **Jessica Montanez,** EPA – OAQPS

PROBLEM STATEMENT

As discussed above under "Sub-workgroup Description," the main focus of this sub-workgroup was to consider what streamlining measures could be applied to sources which trigger PSD permitting solely due to their potential to emit emission increases of GHGs above Tailoring Rule thresholds and do not trigger PSD analysis for any other pollutant. The concerns regarding these sources relate to the fact that although there may be increases associated with other pollutants for the new or modified source, such increases are all below major source and/or significant emission rate PSD thresholds. PSD requirements are triggered due to the increase of GHG emissions. However, some elements of PSD cannot be applied. For example, since ambient air quality standards or SILs have not been indentified for GHGs and there are no increases of non-GHG pollutants above PSD significant emission rate thresholds, there are no localized or regional impacts that are necessary to be evaluated for these sources under the PSD program.

In Step 3 of GHG Tailoring Rule, EPA decided not to lower the GHG thresholds from Steps 1 and 2. However, one of the reasons that EPA has formed the GHG Permit Streamlining Workgroup is to "explore potential streamlining approaches that may make the administration of the CAA permitting programs more efficient for permitting authorities and that may potentially reduce the permitting burden for smaller GHG-emitting sources if the programs are expanded to apply

to these sources.[7]" Also EPA has previously announced that, "[b]y the end of April 2015, EPA will complete a study on remaining GHG permitting burdens that would exist if we applied the program to smaller sources. We will consider the results of the study to complete a rule by April 30, 2016 further addressing Clean Air Act permitting for these facilities. In that rule we may decide that successful streamlining will allow us to phase in more sources, but we may also decide that certain smaller sources need to be permanently excluded from permitting.[8]"

In order to better evaluate the impact of PSD permitting for the type of sources which trigger PSD permitting solely due to GHG emissions, the chair of this sub-workgroup developed a PSD Program Overview (Appendix O), which in general includes a listing of all of the PSD permit program requirements. As evident from the list of requirements for a PSD permit, most of the steps and requirements, with the exception of application of BACT, and the opportunity for public comment or EPA review, either do not directly apply, or should not be required for the permit for such a source. Therefore, this sub-workgroup discussed potential streamlining measures that could be applied for permitting of such sources. Similar to the PSD sub-workgroup 1, the PSD sub-workgroup 2 also sought input from other stakeholders outside the GHG Permit Streamlining Workgroup and solicited input relative to the PSD Program Overview document and the list of questions prepared by the chair of sub-workgroup 1 (Appendix P). Sub-workgroup 2 also invited other stakeholders to participate in its conference calls.

OBSERVATIONS

As part of evaluating the permit streamlining options, this sub-workgroup worked closely with sub-workgroup 1, relative to the overall streamlining methods which would apply to PSD permits. At the outset, the sub-workgroup was aware of the streamlining measures that EPA had committed to evaluate and implement through the adoption of the PSD and Title V GHG Tailoring Rule (approved on May 13, 2010) and the Tailoring Rule Step 3 (approved on June 29, 2012). These streamlining measures, as identified by EPA, included the following:

- Defining PTE for Various Source Categories to Limit Emissions below PSD GHG Thresholds;
- Use of Presumptive (BACT) for GHGs;
- Establishing Procedures for General Permits & Permits by Rule for GHG Sources;
- Use of Electronic Permitting and "Lean" Techniques for GHG Permitting Improvements;
- Excluding "Empty Permits" from GHG Sources from Title V Program;
- Increase Flexibility for Use of PALs for GHGs; and
- Creating Regulatory Authority for EPA to Issue Synthetic Minor GHG Permits.

[7] EPA convened a workgroup in April 2012.

[8] Final PSD and Title V GHG Tailoring Rule Fact Sheet (May 13, 2010).

For the last two streamlining measures, EPA also proposed regulatory changes in the Proposed Step 3 Tailoring Rule.

In the Final PSD and Title V GHG Tailoring Rule Step 3 (77 FR 41051; July 12, 2012), EPA retained the current GHG thresholds, but did not implement any of the permit streamlining options listed above, with the exception of finalizing changes to allow GHG PALs to be established on a CO2e basis in addition to the already available mass basis.

EPA also indicated that permitting authorities have not had the opportunity to develop and implement streamlining approaches. The streamlining options for excluding empty permits for GHG sources from Title V and development of further flexibility for GHG PALs fall under the topics that sub-workgroups 3 and 4 were evaluating, respectively.

The discussion held by sub-workgroup 2 overlapped in many respects with sub-workgroup 1 relative to streamlining of PSD permits for GHG-emitting sources. Sub-workgroup 1 identified four (4) major documents that included potential permit streamlining options and are discussed in more detail in the sub-workgroup 1 section of this report. These include:

- The EPA Response to Comments on Tailoring rule—emphasis on chapter 4-- Comments on Streamlining Options and Tools To Address the Administrative Burdens of PSD and Title V for GHGs,
- The API response to the sub-workgroup information request,
- The NEDA/CAP response to the sub-workgroup information request, and
- The PSD/Title V GHG Permit Streamlining Suggestions, LACSD, June 29, 2012

Therefore, this section will not repeat those permit streamlining options identified in the above documents. However, it is worthwhile to add to the discussions for sub-workgroup 1, a listing of the permit streamlining suggestions provided to EPA as part of the South Coast Air Quality Management District (SCAQMD) comments on the EPA's Proposed PSD and Title V GHG Tailoring Rule Step 3 (letter dated April 20, 2012), which were discussed at the May 10, 2012 workgroup conference call and distributed to the workgroup members on May 23, 2012 (Appendix # Q). The streamlining measures recommended by SCAQMD include the use of the following for GHG-emitting sources:

1. Synthetic Minor permits;
2. Prohibitory PTE Rule to limit PTE;
3. Presumptive BACT;
4. General permits for Title V and PSD permits;
5. Plant-wide Applicability Limits based on CO2e; and
6. Title V empty and hollow permits.

In addition to the above recommendations provided by SCAQMD, a brief discussion of the recommendations provided by SCAQMD's Title V AdHoc Committee (Appendix R and S) and Los Angeles County Sanitation District (LACSD), which were distributed to the sub-workgroup members on July 11, 2012 (Appendix M) and presented by LACSD and discussed at the July 12, 2012 sub-workgroup conference call, is also provided in this report. Furthermore, the sub-workgroup received comments from tribes (which were coordinated by Joy Wiecks of Fond du Lac Band of Lake Superior Chippewa) that mostly dealt with Presumptive BACT (Appendix N), but these were not discussed by the sub-workgroup.

However, it should be noted that the permit streamlining recommendations provided to this sub-workgroup by various stakeholders and included in this report are merely listings of the recommendations and/or suggestions that were provided to EPA and/or to this sub-workgroup. Although the members of this sub-workgroup may have discussed one or more of these recommendations as part of the sub-workgroup discussions during conference calls, the sub-workgroup did not have the opportunity to discuss the merits of each recommendation, and as a result, is not endorsing the recommendations as the sub-workgroup's recommendations. The sub-workgroup was only able to compile the following permit streamlining approaches, and did not have the necessary time to evaluate the feasibility or appropriateness of each option and develop recommendations as part of this report. This would have required additional time and resource commitments to accomplish such a task. However, the sub-workgroup believes that EPA currently has a comprehensive list of options for consideration, which should be addressed through a notice and comment rulemaking process to provide an opportunity for full stakeholder evaluation and comment, at the point when such a rulemaking effort becomes appropriate. The sub-workgroup did not discuss the timing of such action.

The following list of potential permit streamlining measures provides a number of options which may help to accomplish permit streamlining approaches to reduce the administrative and economic impact of permitting of GHG-emitting sources that trigger PSD permitting solely due to their GHG emissions.

SCAQMD Comment Letter to EPA on Proposed PSD and Title V GHG Tailoring Rule Step 3, dated April 20, 2012 (Attachment Q)

There were several permit streamlining suggestions and options discussed in this letter, which are summarized in the section above and detailed in the letter. However, one of the recommendations that was also discussed at the May 10, 2012 sub-workgroup conference call is:

- **Limiting PTE through Prohibitory Rules**

  Limiting a source's potential to emit can prevent a source from becoming subject to PSD for GHGs and could also prevent a source from being classified as a title V major source for GHG permitting purposes. This can be accomplished through establishing regulatory provisions indicating that sources with actual emissions below a certain percent of the major source thresholds are minor sources. As an example, SCAQMD adopted a rule

(Rule 3008), which allowed sources with actual emissions below 50% of the major source thresholds to be considered minor sources (regardless of their PTE) and thus exempt from Title V permitting as long as they keep sufficient records of their emissions. This rule was attached to the April 20, 2012 comment letter submitted by SCAQMD. SCAQM believes that the same approach can be used for GHG-emitting sources to exempt them from the requirements of PSD permit, as well as Title V permit.

SCAQMD AdHoc Title V Committee Suggestions – (Based on material submitted in writing on June 11 and email clarifications submitted on July 11, Appendix R and S).

1. Address GHG-Only Sources under Minor NSR Program Only.
   - Few sources that would trigger PSD permitting for GHG emissions do not hold a Title V permit. These sources should be handled under minor source NSR until there is a major modification for non-GHG emissions.

2. Delay PSD Permit Elements for New Climate Warming Pollutants.
   - If EPA plans to extend GHG PSD permitting to short-lived climate warming pollutants such as black carbon, ozone, etc., EPA should delay most PSD permit elements (except BACT review and public notice) for 3 years.

3. Improve certainty of the BACT Analysis.
   a. EPA should provide software to better assess localized impacts from projects.
   b. Corollary pollutant analyses should be minimized as long as *criteria* pollutants continue to be reduced even at the expense of GHGs.
   c. EPA should provide standardized calculation sheets that can be followed by the permittee to lessen the likelihood of errors and litigation.
   d. Given that that the environmental and economic analyses involved with the top choices can be very time-consuming and complex, a maximum of two scenarios should suffice for the purpose of the application.

4. Expand Synthetic Minor Program to States with Delegated Programs.
   The states with delegated PSD program should be also able to issue synthetic minor permits for sources that desire to take a permit limit to stay out of PSD program, similar to EPA and states with a SIP-approved program.

5. Use of Flexible Air Permits (FAP) for GHG Sources might be Amenable for Various Stakeholders.
   a. One tool that might be incorporated into a FAP is a Master Energy Plan that, once approved, can be implemented by a facility as it chooses to make successive modifications.

6. Allow the use of presumptive BACT for smaller and less-complex sources.

7. Support the use of general permits for source categories with little deviation among its members.

8. Cap and Trade Program Allowances and Offsets Should Not Trigger PSD In and Of Themselves.
    a. Participation in cap and trade programs such as that established by AB32 should not in and of itself be the basis for an existing facility to need a PSD permit unless the facility emissions trigger PSD. Holding of offsets and allocations within cap and trade programs should not be considered to be potential-to-emit that factors into permitting thresholds.
    b. To prevent continuous returning of permittees to the permitting authority to change GHG numbers listed in national or state inventories or permits or cap and trade programs, GHG-related figures should not be reflected either in PSD or Title V permits in such a way as to require annual modification of the permits.

- **<u>Los Angeles County Sanitation Districts (LACSD) - Based on material submitted in writing on June 29 (Appendix M) and conference call discussion on July 12.</u>**

1. Streamline PTE calculations for sources such as landfills.
    a. Recommend that long-life projects such as landfills be phased in appropriate stages, maybe every 10-years, to avoid PSD permitting until such time as they are truly major sources. For example, while the landfill may have the potential to be in operation for many years (e.g., 100 years), the landfill operator is only planning a landfill gas collection and management system for 10 years. Is the potential to emit for the landfill 10 years or 100 years? Requiring a look out to 100 years would impact a large number of landfills and be counter to streamlining efforts.

2. Use of presumptive BACT, but:
    a. EPA should provide a menu of acceptable BACT options, not a "one size fits all" approach. For example, not all small landfills will be able to meet the same presumptive BACT requirement due to size, location and economic limitations.
    a. If an industry has a relevant NSPS that concurrently controls GHG emissions, the NSPS should be considered in the BACT analysis as at least the "BACT floor" to start the BACT determination. For example, landfill NSPS could be the final BACT for this source category.

3. Allow programmatic equivalency.
    a. EPA should investigate when, a source triggers a PSD permit solely because of GHGs, whether or not BACT can be satisfied by an existing local program that achieves specified reductions in specific time frames such as a cap and trade program. For example, a South Coast refinery would be regulated by both the AB32 Low Carbon Fuel Standard and cap-and-trade regulation.

4. Do not apply "Major for One Major for All" concept to GHG PSD permitting
    a. EPA should clarify that under no circumstances will GHG be regulated beyond BACT and public notice requirements under PSD.
    b. If EPA were to find that establishment of a NAAQS or PSD increment warrants expanding GHG PSD requirements beyond BACT, we would suggest that EPA develop a "minor" PSD program, triggered at a certain GHG emissions level (e.g., current level of 100,000 tons CO2e) where only BACT and public notice would be required.

5. Permanently exclude Biogenic CO_2 Emissions from permitting.

    a. EPA is into the second year of a three-year stay on including biogenic emissions in the GHG PSD threshold. The issue is being studied by a Science Advisory Board subpanel. If the SAB finds that biogenic emissions should be added to the threshold emission calculation, this would result in hundreds of biogenic sources potentially triggering PSD review, countering any possible streamlining efforts that will have been developed to date.

Sub-workgroup 3: Streamlining Title V Permitting for "Empty Permits" and "Hollow Permits"

WORKGROUP DESCRIPTION

The purpose of this sub-workgroup was to explore and discuss streamlining techniques and approaches that could be used to make Title V permitting of GHG sources simple and efficient. This would apply in the cases where a source was defined as major for GHG emissions only and the source would not be subject to any other major source requirements.

SUB-WORKGROUP MEMBERSHIP

Chair:	**G. Vinson Hellwig,** Air Quality Division, Michigan Department of Environmental Quality
Members:	**John Holmes,** AEMS, LLC **Mohsen Nazemi,** South Coast Air Quality Management District
Other Participants:	**John Paul,** Regional Air Pollution Control Agency **James Capp,** Georgia Department of Environmental Resources **Joy Wiecks,** Fond du Lac Band of Lake Superior Chippewa **Juan Santiago,** EPA-Office of Air Quality Planning and Standards (OAQPS) **Jessica Montanez,** EPA-OAQPS

The sub-workgroup met in person one time and a number of times by phone. We collected and

reviewed materials and solicited specific input from several sources and had several calls with stakeholders to discuss their input.

PROBLEM STATEMENT

As described previously, the operating permits program or title V program consolidates all air pollution control requirements into a single, comprehensive "operating permit" that covers all aspects of a source's air pollution activities. In some instances, however, an evaluation of the applicable air pollution control requirements for a particular source might lead to "hollow" or "empty" permits, permits for which there are no applicable GHG requirements. A "hollow" permit for a GHG major source does not contain requirements for GHGs, but contains other applicable requirements such as record-keeping and reporting requirements. While "hollow" permits may contain record-keeping and reporting requirements, these requirements would not be tied to improving compliance with any underlying emission standards or work practices. An "empty" permit is a Title V permit for which there are no applicable requirements, only general conditions. As a result, issuing "hollow" or "empty" permits provides little environmental benefit while adding significant administrative burden to sources and permitting authorities.

This workgroup was tasked with evaluating possible streamlining approaches for these types of permits. In the event that the Title V applicability threshold for GHGs is lowered, a larger number of sources requiring permits would be drawn into the Title V program.

OBSERVATIONS

Title V "empty" permits could be streamlined by using general permits, permits-by-rule, simplified permit conditions, synthetic minor permits and exemptions by rule, while "hollow" permits could be deferred from permitting. A description of each of these possible streamlining techniques follows.

1. General Permits
    a. A general permit is an expedited permit process with predetermined conditions that applies to an entire category of similar sources (e.g. boilers, process heaters). Like a permit-by-rule, a hollow general permit would contain the record-keeping, reporting and general conditions applicable to the source category. Individual sources would apply to be "assigned" to the general permit through a simple application process. The public involvement requirements of Title V would have to be satisfied through the public involvement process for adopting the general permit and/or assigning individual sources to the general permit.

2. Permits-by-Rule
    a. A permit-by-rule would establish the requirements and limits in a rule as opposed to requiring a permit application and issuance of a permit. In this case, the permitting authority would adopt a regulation that applies to a source or source category establishing all of the record-keeping, reporting and general conditions

that would otherwise be contained in a hollow permit. The public involvement requirements of Title V would have to be satisfied through the public involvement process for adopting the regulation. Affected sources would need to be identified, potentially through a notification or registration system.

3. Simplified Permit Conditions and Synthetic Minor Permits
    a. Still another case is a source that triggers Title V solely for GHG, is not subject to any requirements for GHG, but is subject to other regulations for its criteria pollutant or air toxic emissions. This could lead to a Title V permit that is hollow for GHG, but contains other applicable requirements for non-major pollutants. The sub-workgroup discussed two streamlining options for this scenario:
        i. Simplified Permit Conditions – The Title V permit would include the applicable requirements for the non-major pollutants, but would simply list GHGs as a pollutant with no GHG monitoring, record-keeping or reporting requirements.
        ii. Synthetic Minor Permits – A second option would be for the source to obtain a federally-enforceable synthetic minor permit with physical or fuel limits that will keep the GHGs emissions below the Title V threshold. An example of this is where the physical or fuel limits in the permit would also limit the GHGs emissions and keep the GHG emissions below the Title V threshold. In this situation it may be possible to do nothing more than demonstrate that the limits reduce the GHG PTE to below the major source level. This option is presently available, commonly used for other pollutants and would not require any further action by EPA.

4. Exemption-by-rule
    a. An exemption-by-rule could apply in cases when Title V is triggered because a source has PTE for GHG above the major source threshold, but its actual emissions are naturally low and expected to stay low. For this scenario, the sub-workgroup discussed three potential streamlining options based on an exemption-by-rule:
        i. Seasonal sources – The exemption-by-rule could be based on an activity with naturally low emissions due to seasonal operation. An example of this is residential and some commercial heating systems that operate only seasonally. This could be based on an average amount of fuel purchased each year.
        ii. Specific equipment – The exemption-by-rule could be based on specific equipment, such as Energy Star certified heating furnaces below a specified size or all equipment at one source below a certain combined power (BTU/hr).
        iii. Naturally low emissions – The exemption-by-rule could also be based on very low actual emissions. For example, a rule could exempt sources with emissions below 50% of the Title V threshold for GHGs under actual operating conditions and the source does not emit other pollutants that would trigger a Title V requirement. This would be a presumed minor

source. This is similar to the EPA guidance "Options for Limiting the Potential to Emit (PTE) of a Stationary Source under Section 112 and Title V of the Clean Air Act (Act)", John S. Seitz, January 25, 1995. Valid documentation of the "below 50%" threshold would be required for this to be implemented correctly.

5. Time Deferral of Title V Applications
    a. Title V applications are due within 12 months after a source becomes a major source and those permits are required to be issued within 18 months of receipt of the application. A deferral such as this would be beneficial because the additional applications would be spread out and come in over a significant period of time instead of all coming in to the agency at once. This is also consistent with EPA's current overall approach to GHG permitting, which is to gradually bring in more sources over time as the permitting authorities are able to absorb the workload, putting a priority on the largest sources and those with GHG applicable requirements.

Sub-workgroup 4: Streamlining the Permitting PAL Issuance Process

WORKGROUP DESCRIPTION

This sub-workgroup focused on ways to streamline the issuance of GHG PALs. PALs are authorized under EPA PSD and non-attainment NSR rules, and include a plant-wide limit on annual emissions that serves as a determinant of NSR/PSD applicability for projects relative to the pollutant in question. So long as a modification of the facility does not cause emissions to exceed the PAL limit for that pollutant during the term of the permit, NSR/PSD is not triggered for that pollutant for that project. PALs can be issued for any of the pollutants regulated under NSR/PSD.

The sub-workgroup members experience with PALs has been very favorable, particularly for facilities with good controls and the need for frequent process and equipment changes. The sub-workgroup also recognizes and appreciates EPA's actions in step 3 of the GHG Tailoring Rule to allow GHG PALs to be issued on either a mass basis or a CO_2e basis and to allow authorities to issue GHG PALs to GHG-only (minor) sources. However, there are still some potential areas for improvement. One of the impediments to wider use of PALs has been the administrative challenge to the permittee and to the permitting authority to establish the PALs.

The sub-workgroup carried out a two step process. The first step was to identify aspects of the PAL issuance process that are particularly time consuming or complicated (and may be uniquely so for GHGs). Once a list of problems was developed, it was circulated to the entire workgroup for comment, and revisions were made. Next, the sub-workgroup identified and evaluated potential options to streamline the steps in the PAL process that are on this list. A paper with

observations on potential solutions also was circulated for comment.

SUB-WORKGROUP MEMBERSHIP

Chair: **John Holmes**, AEMS, LLC

Members: **Mary Turner**, Waste Management

PROBLEM STATEMENT

The sub-workgroup identified five problems associated with the issuance of GHG PALs:

Problem 1: Establishing the PAL Baseline for GHGs. One particularly complicated and time consuming aspect of setting a PAL for GHGs is compiling the data needed to set the baseline. This is particularly difficult with GHGs, where there is no official history of emissions reporting. While the new GHG reporting rule sets the stage for determining emissions going forward, it is not readily applicable to historical emissions whenever the historical data needed to apply the reporting rule methods are not readily available.

Problem 2: Establishing the PAL Baseline for Landfill GHGs. Determining baseline emissions is further complicated for sources such as landfills because the source does not have a finite or totally predictable pattern for emissions. For most sources, significant air emissions are generated immediately at the time operations are initiated. For landfills, however, depending on the type of waste, moisture content of the waste, cover properties, and other conditions, it can take anywhere from several months to several years for waste to reach the methanogenic phase of landfill gas (LFG) production. As such, methane generation at a landfill is not immediate. According to EPA's LFG emissions model (LandGEM, USEPA, 1997); the typical gas generation pattern for a landfill resembles a bell curve, the peak of which occurs the year after landfill closure. And, this bell curve is subject to modification with every change to waste volume, type, moisture content, etc. Many air permitting agencies require permits to reflect "peak" emissions, even if the "peak" gas generation calculated using current conditions and current operating parameter predictions does not occur for 40 to 50 years into the future. However, because landfill emissions will follow a bell curve pattern, a past actual baseline will not and cannot reflect the peak emissions that will be generated sometime in the future from current or past operations at the landfill. Therefore, a unique solution is required for landfills when setting a realistic and useful baseline for a PAL.

Problem 3: GHG Monitoring Provisions for a GHG PAL. The PAL rules set standards for monitoring that are not present in the rest of the PSD rules, suggesting that something different from "ordinary" emissions monitoring and reporting is required (Appendix T). This raises the issues of how much monitoring and testing is appropriate and whether the resulting data will be

consistent with emission reported under the GHG reporting rule, or a whole separate record keeping and reporting is required.

Problem 4: Resetting the PAL upon Renewal. This problem is related to the uncertainty associated with what happens to the PAL limit when it is renewed. Because the rules provide little certainty about how the PAL is reset upon renewal, the resetting process may be a barrier for some sources contemplating a PAL (Appendix U).

Problem 5: Establishing a GHG PAL for a Greenfield (New) Facility A new facility should be an excellent candidate for a PAL. Emissions controls normally reflect state-of-the-art control, particularly if the facility has gone through PSD review of its GHG emissions. In addition, it is likely that a new plant will need to make a number of operational and equipment adjustments, particularly during the first 5 to 10 years of operation. It is EPA's current position that a greenfield facility cannot obtain a PAL until it has established actual emissions for use in setting the PAL. Because of the time that is needed to bring a new facility to its full operating capacity, it means that it will be years before representative actual emissions can be established. This means that PALs are not a viable option for a greenfield facility. EPA has indicated that a PAL for a greenfield facility cannot be based on the permitted emissions of a new facility because of a court decision that rejected the use of allowable emissions to determine NSR/PSD applicability for units that are well controlled, or so called "clean units". (New York v. EPA, 413 F.3d 3, 10 (D.C.Cir. 2005))

OBSERVATIONS

The sub-workgroup has identified potential options for EPA to address each of the five issues, as follows:

To address the first problem of establishing the baseline for GHG, EPA can take a number of approaches. The problem of how best to evaluate GHG emissions in the past (in the absence of a formal regulatory requirement for evaluating emissions being in place in those prior years) is not unique to PALs. To the extent sources subject to, or potentially subject to, PSD are applying the actual to future actual emissions test, they also need appropriate representations of historical GHG emissions. One possible solution is for EPA to issue guidance, for use in evaluating PSD applicability and setting PALs that addresses the best ways to evaluate historical and future emissions of GHGs, until such time as sources have ten years of data created on a consistent basis in a regulatory context, as is the case for the criteria pollutants. That EPA guidance could address the following points:

- When are parties expected to use the methods in the GHG reporting rule to evaluate historical GHG emissions under PSD?
- When the necessary historical data do not exist to apply those methods, when are parties to either estimate those data or rely on other methods?
- What other methods might be used?

- To the extent the reporting rule does not address certain GHGs or GHG sources, what methods should be considered?
- Under a PAL, if the GHG reporting rule cannot and has not been used to set the PAL, should PAL tracking use the same methods (for consistency) as were used to set the PAL?
- In those instances, when and how should the transition to GHG reporting rule methods occur?

With regard to the problem of identifying a workable baseline for landfill GHG emissions relative to its expected and permitted increase in emissions over time, one possible solution is for EPA to consider issuing a PAL that increases over time, consistent with the trajectory of emissions of the landfill over time. For example, EPA landfill emissions models can be used to forecast the change in actual emissions over time that are inherent to the operation of the landfill, starting with recent actual emissions. The PAL could be increased over time in a manner that is related to the amounts of material placed in the landfill (over time), based on the design of the landfill at the time the original PAL is established and excluding any emissions increases due to physical changes or changes in the method of operation of the landfill.

With regard to the challenge of establishing GHG monitoring requirements for PALs, one possible solution is for EPA to issue guidance that could apply both to setting and tracking compliance with PALs. First, EPA could indicate whether conformance with the methods in the reporting rule is presumptively adequate for these purposes. If they are not presumptively adequate, what are the issues that permit writers need to address beyond the reporting rule. Second, EPA should indicate what specific methods are preferred when filling in the gaps that exist in the reporting rule. Last, EPA should indicate if and when it is appropriate to deviate from this guidance to provide consistency (apples-to-apples) comparisons of historical and future or current emissions when another emissions determining method was used to establish a baseline. Because the same issues arise in other permitting contexts, this guidance could apply not only to setting and tracking PALs but also to determining compliance with synthetic minor permit limits or determining the applicability of PSD. If the broader application is undertaken, EPA may prefer to do so through rulemaking. The sub-workgroup did not discuss the timing of such action.

With regard to the problems associated with PAL renewal, one possible solution is for EPA to clarify the rule language on resetting the PAL at the time of renewal. Alternately, if the permitting agency and the permittee are willing and able to provide more clarity on how the PAL is reset after ten years and they can do that consistent with the PAL rules and with appropriate public involvement at the time the PAL is issued, the procedure could be specified in the initial PAL permit. EPA guidance on this issue could be helpful.

Last, one option discussed by the sub-workgroup would be for EPA consider setting initial PALs for greenfield facilities on their PTE. This approach to establishing a greenfield facility PAL could rely on the current definition of "Baseline Actual Emissions" at 40 CFR 52.21 (b) (47). Paragraph (b)(47)(iii) of this definition says: "For a new emissions unit, the baseline actual emissions for purposes of determining the emissions increase that will result from the initial construction and operation of such unit shall equal zero and thereafter for other purposes, shall equal the unit's

potential to emit." Paragraph (b) (47) (iv) says: "For a PAL for a stationary source, the baseline actual emissions shall be calculated …for new emissions units in accordance with the procedures in paragraph (b) (47) (iii) of this section." Therefore, immediately after the initial construction and operation, this definition could enable EPA to determine that, for purposes of a PAL at a greenfield facility, the baseline actual emissions of all the units, which are all "new," is equal to their potential to emit. The PAL would be set consistent with this definition of baseline actual emissions being equal to the PTE of the greenfield facility, which in turn reflects the facility's allowable emissions. The PAL could be later reduced if the PTE of the Greenfield facility is later reduced.

Appendix

Appendix A: GHG Permit Streamlining Workgroup Charge: Permits, New Source Reviews and Toxics Subcommittee; Clean Air Act Advisory Committee

Background

In the GHG Tailoring Rule, EPA committed to explore permit streamlining approaches that make the administration of the CAA permitting programs more efficient for permitting authorities, and that potentially reduce the permitting burden for smaller GHG-emitting sources. EPA is particularly interested in exploring streamlining methods that allow for the expansion of the CAA permitting programs to sources that fall on the lower end of the applicability spectrum, and that may never have been subject to CAA regulations.

Problem Statement

Permit streamlining techniques and approaches are a key component of GHG permitting under the CAA. As discussed in the Tailoring Rule and the recently published "Step 3" rule, a key factor in EPA's phased-in approach to GHG permitting under the CAA is the ability of permitting authorities to issue timely permits and for sources subject to permitting to obtain and comply with those permits. Streamlining approaches that could help expedite permitting and make more efficient use of resources need to be developed to allow expansion of the permitting programs to smaller sources of GHG emissions.

Charge

The charge to the Permit Streamlining (PS) Workgroup is to:

1. Review the potential streamlining methods and source categories identified by EPA as potentially impacted at various GHG applicability thresholds. The workgroup should then confirm, expand, or narrow both the scope of streamlining methods EPA should explore further, and the source categories that may be well-suited either individually, or collectively (e.g. based on equipment types, raw material inputs, and/or process parameters) for each streamlining approach; and discuss the attributes of these categories that make them well-suited for the streamlining approach. The workgroup should think broadly when considering potential streamlining methods EPA should explore further, including outside traditional CAA constructs.

2. Identify the regulatory and policy barriers associated with further development of permit streamlining methods for each of the source categories, and recommend approaches to address such barriers; and

3. Prioritize the source categories and streamlining methods for further development by EPA and recommend an implementation approach for each method (e.g. guidance, rule, model language, etc.).

Some examples of potential outcomes that could result from streamlining include, but are not limited to: reducing the time or resource burden of developing or processing permit applications; simplifying potential to emit calculations; creating novel, environmentally-sound approaches for assuring compliance with emissions limitation requirements; improving regulatory understanding and compliance including delivery of outreach programs; provide alternate, and less burdensome permitting pathways (e.g. prohibitory rules).

Duration

The workgroup will begin in April 2012 and complete its work by October 2012.

Anticipated Outcomes from the Workgroup Process

A progress report (2-month) is to be presented, and a draft interim (6-month) and draft final (7-month) written report are to be delivered and deliberated upon by the CAAAC for submission to the US EPA.

- A progress report should be presented in PowerPoint or other format in April 2012, and should outline the ongoing work of the subcommittee.

- The draft interim report should be completed on or before August 15, 2012, and should be approximately 25 pages (or less). The draft report should suggest target groups for developing streamlining methods, and should identify recommended streamlining methods for each group The report should also explain the attributes of each group that make the group well-suited for applying streamlining methods, and also indicate whether the approach would streamline the major NSR and/or title V permitting processes.

- The draft final report is due on or before September 15, 2012 and should also be approximately 25 pages (or less) and include a recommended priority for EPA to further develop the identified streamlining methods for one or more target groups. The report may also address the issues and potential barriers associated with further development of permit streamlining methods, and recommend implementation strategies by, for example, recommending that EPA issue guidance, a rulemaking, a model rule, or engage another approach to facilitate adoption of the method by permitting authorities and GHG-emitting sources.

Appendix B: List of Workgroup Members

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Appendix C: Details on Some of the GHG Streamlining Ideas – from James Capp

1. "Empty Permits" - Expand "Empty Permit" concept to **defer** sources from Title V if applicability based solely on GHG PTE and there are no applicable requirements for GHGs
    - This should be viewed as a deferral or transitional phase where the source is moving from being a minor source to being a major source. This would not be an exemption. Since Title V applications are due within 12 months of becoming a major source and those permits are required to be issued within 18 months of receipt of the application, a deferral such as this would be beneficial because the additional applications would come in over a significant period of time instead of all coming in to the agency at once. This is also consistent with EPA's current overall approach to GHG permitting, which is to gradually bring in more sources over time as the permitting authorities are able to absorb the workload, putting a priority on the largest sources and those with GHG applicable requirements.
    - The necessary change to the regulatory text would be very simple. Revise current definition of "subject to regulation" for GHGs in 40 CFR 70.2 as follows:
        - "Greenhouse gases (GHGs), the air pollutant defined in §86.1818–12(a) of this chapter as the aggregate group of six greenhouse gases: carbon dioxide, nitrous oxide, methane, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride, shall not be subject to regulation unless, as of July 1, 2011, the GHG emissions are at a stationary source emitting or having the potential to emit 100,000 tpy [or whatever the threshold is lowered to] CO2equivalent emissions and are subject to at least one applicable requirement for GHGs."

2. PSD
    - Issue guidance that would state that the implementation of surrogate BACT emission limits for GHGs may be acceptable in some cases. For example, for combustion sources, if efficiency is determined to be BACT (i.e. end of pipe controls eliminated based on availability, feasibility, cost, etc.) and the permit would also include an output based BACT limit for NOx, CO, and/or SO2, then the NOx, CO, and/or SO2 could also act as surrogate BACT for GHGs and eliminate a duplicative emission standard. This would be analogous to EPA's use of CO as a surrogate for organic HAPs, or SO2 as a surrogate for acid gas HAPs.
    - Establish de minimis values for PSD applicability (significant increase levels) for GHGs through public notice and comment rulemaking under 40 CFR 52.21(b)(23)(i).
        - The EPA has general authority to establish de minimis exceptions to statutory requirements where the application of the statutory requirements would be of trivial or no value environmentally. (See Alabama Power Co.. v. Costle, 636 F.2d 323, 360-61 (D.C. Cir.1979).
    - EPA could establish through guidance presumed BACT control technologies (for example energy efficiency) for certain types of emission units. This would be streamlining Steps 1 through 4 of EPA's existing Top-Down BACT guidance (Steps 1

through 5 of EPA's Top-Down BACT guidance are listed below) for those types of emission units (sources such as industrial boilers, combustion turbines, backup generators). After the control technology is determined, the BACT emission limit would be determined on a case-by-case basis. Therefore, this should be compatible with the statutory definition of BACT which requires the BACT emission limit to be established on a case-by-case basis. This would also promote consistency across the country for the control technologies that are determined to represent BACT.

- Step 1: Identify all available control technologies.
- Step 2: Eliminate technically infeasible options.
- Step 3: Rank remaining control technologies.
- Step 4: Evaluate most effective controls and document results.
- Step 5: Select BACT.

Appendix D: Illinois Permit-by-Rule (July 12, 2012)

Status Report on Permits by Rule
The Illinois Environmental Protection Act was amended on July 12, 2011 to include a new Section on Permits by Rule as follow:

Sec. 39.12. Permits by rule.
(a) Except as otherwise prohibited by federal law or regulation, the Board may adopt rules providing for permits by rule for classes of facilities or equipment, provided that the permits by rule are consistent with federal and State laws and regulations. Proposals for permits by rule authorized under this Section may be filed by any person in accordance with Title VII of this Act.
(b) Board rules adopted under this Section shall include, but not be limited to, standards as may be necessary to accomplish the intent of this Act and rules adopted under this Act and the terms and conditions for obtaining a permit by rule under this Section, which shall include, but not be limited to, the following as prerequisites to obtaining a permit by rule: (i) the submittal of a notice of intent to be subject to the permit by rule and (ii) the payment of applicable permitting fees.
(c) Within one year after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, identify types of permits for which permits by rule would be appropriate and consistent with State and federal law and regulations. The types of permits may include, but shall not be limited to, permits for open burning, certain package boilers and heaters using only natural gas or refinery gas, and certain internal combustion engines.
(d) Persons obtaining a permit by rule shall be subject to the same permitting fees that apply to persons obtaining individual permits.
(e) No person that has obtained a permit by rule shall violate this Act, rules adopted under this Act, or the terms and conditions of the permit by rule.
(Source: P.A. 97-95, eff. 7-12-11.)

The Agency and Bureaus within the Agency conducted meetings with the Illinois Environmental Regulatory Group (IERG) representing the regulated community to fulfill its responsibility under this law. A summary of each Bureau's action as of July 12, 2012 (within one year) is provided below:

Bureau of Air
The Bureau of Air permit staff met with IERG on several occasions to identify types of activities that could be covered under a permit by rule provision. The categories that have been identified that are in development:

1. Certain "Open Burning" activities as required; focusing on small ecological burns and facility fire training
2. Construction Permits at major CAAPP sources. Initial classes of sources of to be considered for Permit by Rule:
    i. "Certain boilers and heaters using nat. gas or refinery gas" as required

ii. "Certain Internal Combustion Engines", as required
iii. Replacement of identical reactor components
iv. Central vacuum systems at manufacturing plants
v. Natural gas fired stress relief furnaces
vi. Electric powered stress relief furnaces
vii. Adding "propane" as a fuel for Certain boilers
viii. Fuel storage "on-site" for dispensing
ix. "Temporary generators"

Bureau of Water

Need Insert

Bureau of Land

On November 1, 2011, along with the Bureau of Water and the Bureau of Air, the Bureau of Land Permit Section met with IERG representatives to discuss potential candidates for possible development of permit/authorization by rule or general permits for each of the IEPA Bureau's. During the meeting there were no potential candidates identified for permit/authorization by rule beyond what was already in the regulations by either IERG or the Bureau of Land Permit Section staff. The two categories for consideration under the general permit process included indoor garbage transfer stations and smaller low volume compost facilities. In developing a general permit for these activities it may be possible to develop a streamlined registration process where an applicant could submit an application and seek coverage under a generalized permit, where both standardized conditions and general language have been established under the general permit for the predetermined categories.

Based on discussions with IERG in the November 1, 2011 meeting, the consensus was that expanding permit/authorization by rule or the development of general permits for indoor garbage transfer stations and smaller low volume compost facilities by the Bureau of Land are not immediate priorities and could be developed in the future as necessary.

Appendix E: Wisconsin Permit Fees

Chapter NR 410

AIR PERMIT, EMISSION AND INSPECTION FEES

NR 410.01 Applicability; purpose.
NR 410.02 Definitions.
NR 410.03 Application and review fees.
NR 410.04 Annual emission fee.
NR 410.05 Asbestos abatement project permit exemption review and inspection fees.
NR 410.06 Severe ozone nonattainment area major source fee.

Note: Corrections made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1996, No. 492.

NR 410.01 Applicability; purpose. (1) APPLICABILITY. This chapter applies to all owners or operators of air contaminant sources and to any other person who may be required to pay a fee under s. 285.69, Stats.

(2) PURPOSE. The purpose of this chapter is to establish, pursuant to s. 285.69, Stats., the requirements and the procedures for the payment of application fees and emission fees by persons who are required to obtain construction or operation permits for air contaminant sources, application fees by persons who request a determination of exemption from the requirement to obtain an air pollution control permit and asbestos inspection fees by persons responsible for nonresidential asbestos demolition and renovation projects.

History: Renum. from NR 410.01 and 410.02, Register, September, 1986, No. 369, eff. 10–1–86; am. Register, October, 1991, No. 430, eff. 11–1–91; am. (2), Register, May, 1993, No. 449, eff. 6–1–93; am. (2), Register, February, 1995, No. 470, eff. 3–1–95.

NR 410.02 Definitions. The definitions contained in ch. NR 400 apply to the terms used in this chapter. In addition, the following definitions apply to the terms used in this chapter:

(2) "Emissions offset" means the reduction of emissions from existing sources to compensate for the increase in emissions from the construction, reconstruction, replacement or modification and operation of the source which is the subject of the permit application.

(3) "Environmental assessment" has the meaning given in s. NR 150.02 (9).

(4) "Facility" means all stationary sources emitting air contaminants which belong to the same industrial grouping, are located on one or more contiguous or adjacent properties, and are under the control of the same person, or persons under common control. Emissions resulting from loading, unloading or stockpiling materials to or from vessels or vehicles while at a facility shall be considered as part of the facility's emissions. Air contaminant sources, other than transportation related activities, shall be considered as part of the same industrial grouping if they are classified under the same 2–digit major group as described in the Standard Industrial Classification Manual, 1987, incorporated by reference in s. NR 484.05 (1).

(5) "MACT" means maximum achievable control technology for hazardous air pollutant emissions as promulgated by the EPA under section 112 (d) of the act (42 USC 7412 (d)) or established by the department under section 112 (g) of the act (42 USC 7412 (g)).

(6) "Minor source" means any direct source which is not a major source as defined in s. NR 407.02 (4).

(7) "Non–part 70 source" has the meaning given in s. NR 407.02 (5).

(8) "Part 70 source" has the meaning given in s. NR 407.02 (6).

History: Cr. Register, April, 1984, No. 340, eff. 5–1–84; renum. from NR 410.03, Register, September, 1986, No. 369, eff. 10–1–86; renum. (1), (4) and (5) to be NR 400.02 (54e), (53e) and (53i), am. (3), r. (7), Register, April, 1988, No. 388, eff. 5–1–88; cr. (4), Register, May, 1993, No. 449, eff. 6–1–93; am. (intro.), Register, February, 1995, No. 470, eff. 3–1–95; cr. (5), r. and recr. (6), Register, June, 1995, No. 474, eff. 7–1–95; am. (4), Register, December, 1995, No. 480, eff. 1–1–96; am. (6), Register, December, 1996, No. 492, eff. 1–1–97; correction in (4) made under s. 13.93 (2m) (b) 7., Stats., Register, January, 2001, No. 541; **CR 10–047: cr.** (7), **(8) Register December 2010 No. 660, eff. 1–1–11.**

NR 410.03 Application and review fees. (1) BASIC DIRECT SOURCE FEES. (a) Each person submitting an application for an individual construction permit for a direct source shall pay the applicable basic fee in this paragraph and shall submit a $7,500 initial fee with the application. The initial fee shall be subtracted from the final fee required under this section and may not be refunded, except as provided in sub. (4). If the department determines that a permit is not required, the individual permit application shall be treated as an application or request under par. (b), and the appropriate fee under par. (b) shall be charged. In the event that an applicant chooses to apply for coverage under either a general or registration construction permit, the individual permit application shall be treated as an application or request under par. (am) or (as) and the appropriate fee under par. (am) or (as) shall be charged. The basic fees are as follows:

1. $3,000 if the application is not reviewed under ch. NR 405 or 408, and the application is for a new facility or for an emissions unit to be located at a minor source.

2. $7,500, for a modification not defined as major in s. NR 405.02 (21) or 408.02 (20), when the application is for an emissions unit to be located at a major source as defined in s. NR 407.02 (4).

3. $12,000, for a major modification as defined in s. NR 405.02 (21) or 408.02 (20), unless the emissions unit is a major stationary source as defined in s. NR 405.02 (22) or a major source as defined in s. NR 408.02 (21).

4. $16,000, for a major stationary source as defined in s. NR 405.02 (22) or a major source as defined in s. NR 408.02 (21).

Note: Subdivision 4. applies to both construction of a new facility and to construction of an emissions unit which itself constitutes a major source and is to be located at an existing facility.

8. $12,000, per air contaminant regulated under a plant–wide applicability limitation, when establishing a plant–wide applicability limitation under s. NR 406.035 (1).

9. $6,000 for the increase of a plant–wide applicability limitation under s. NR 405.18 (11) or 408.11 (11).

10. $6,000 for the distribution of allowable limits upon expiration of a plant–wide applicability limitation under s. NR 406.035 (2).

(ae) Each person requesting a revision of a construction permit shall pay a fee of $1,500 which shall be submitted with the request, unless the only reason for the revision is to make the source eligible for a registration operation permit.

Note: Once a construction permit has expired, it may no longer be revised, and the permit holder must obtain a new construction permit before proceeding.

(am) Each person applying for coverage under a general construction permit issued for a part 70 source under s. NR 406.16 shall pay a fee of $3,000 which shall be submitted with the application for coverage.

(as) Each person applying for coverage under a registration construction permit issued for a part 70 source under s. NR 406.17 shall pay a fee of $1,500 which shall be submitted with the application for coverage.

(b) Each person submitting a claim of, or an application for exemption, or otherwise requesting a determination of exemption under ch. NR 406 shall pay the following applicable fee which shall be submitted with the claim, application, or request:

1. $1,250, for a determination of exemption under s. NR 406.04 (1) (i).

2. $1,500 for a determination of exemption under s. NR 406.04 (1f) for a modification to a stationary source which is regulated by a plant−wide applicability limitation, except that if a detailed air quality modeling analysis of the projected air quality impact is completed, the fee shall be $2,400.

3. $5,500 for a determination of exemption under s. NR 406.04 (1k), except that if a detailed air quality modeling analysis of the projected air quality impact is completed, the fee shall be $6,500.

3m. Any person submitting a claim for a construction permit exemption under s. NR 406.04 (1q) shall pay a fee of $1,250 which shall be submitted with the claim.

4. $500 for a determination of exemption under s. NR 406.04 not included in subd. 1. to 3m.

(bm) Any person requesting a waiver of construction permit requirements under s. 285.60 (5m), Stats., or s. NR 406.03 (2) shall submit under s. 285.69 (1d), Stats., a $300 fee with the request. The fee is non−refundable.

(c) The basic fees in par. (a) shall be reduced by $150 if the permit applicant publishes the class 1 newspaper notice required under s. 285.61 (5) (c), Stats.

(e) When a construction permit application is received for a source where the basic emissions unit, which is not a portable source, is to be installed at one specified facility and, in the same application, a request is also made to issue construction permits to allow installation of the same basic emissions unit at other facilities at different locations and all the facilities for which construction permits are requested are under common ownership or control, the permit applicant shall pay the basic fee specified in par. (a) plus the additional fees in sub. (2). The fee for each additional construction permit at different locations shall be $1,000 each, plus the fees in sub. (2) except when the action specified in sub. (2) has been completed for one location and a separate action as set forth in sub. (2) is not required for each additional permit at each different location. When an action covered under sub. (2) must be completed for applications at more than one location, the fee in sub. (2) shall be charged for each time the action is completed.

(2) ADDITIONAL DIRECT SOURCE FEES. Each person submitting an application for an individual construction permit for a direct source shall pay all the following additional fees which apply:

(a) $800 per basic emissions unit if review and analysis of 2 or more basic emissions units is required.

(b) $2,500, if an analysis of alternatives under s. NR 408.08 (2) is required.

(c) $5,000, if an emission offset under ch. NR 408 or the determination of a net emissions increase under ch. NR 405 is required.

(d) $4,500, for each case−by−case determination of maximum achievable control technology (MACT), best available control technology (BACT) or lowest achievable emission rate (LAER). This does not apply to BACT or LAER determinations made under ch. NR 445.

(e) $1,000, for a minor source or minor modification to a major source whose projected air quality impact requires a detailed air quality modeling analysis.

(f) $4,500, for any source, other than a minor source or minor modification to a major source, whose projected air quality impact requires a detailed air quality modeling analysis.

(g) $1,000, if the source is subject to an emission limitation under chs. NR 446 to 469, or if the permit establishes an emission limit for a hazardous air contaminant listed in Table A, B or C of s. NR 445.07.

(h) If the construction permit requires emission testing, $2,500 for the first air contaminant tested and $1,250 for each additional air contaminant tested up to a maximum of $6,000. If the department later finds that some or all of the tests are not required, the corresponding fees shall be refunded.

(i) $1,500, if an environmental assessment under ch. NR 150 is required.

(j) $1,500, if a public hearing is held at the request of the applicant or the applicant's agent.

(k) $600 for each basic emissions unit at a source which requires an emission limit determination under s. NR 424.03 (2) (c).

(L) $2,000 for each case−by−case determination of best available control technology (BACT) or lowest achievable emission rate (LAER) required under ch. NR 445. If the department makes a single BACT or LAER determination addressing the control of multiple air contaminants, the source shall be billed for only one BACT or LAER determination under this paragraph.

(m) $3,500, if specific permit conditions limiting the potential to emit are required to make the source a minor source or to make the modification a minor modification.

(n) $$3,500, for a medical waste incinerator requiring review of a needs and siting analysis under s. 285.63 (10), Stats.

(o) If the applicant requests, in writing, that the permit be issued in a shorter time interval than the time interval allowed under s. 285.61, Stats., and the department is able to comply with the request:

1. $5,000, for an application not subject to review under ch. NR 405 or 408 if the permit is issued within 50 days of receipt of a complete application.

2. $7,500, for an application reviewed under ch. NR 405 or 408 if the permit is issued within 60 days of receipt of a complete application.

3. $4,000, for an application reviewed under ch. NR 405 or 408 if the permit is issued within 61 to 90 days of receipt of a complete application.

(3) INDIRECT SOURCE FEES. (a) Each person who applies for and is issued a construction permit for an indirect source shall pay the following amounts:

1. $5,750 if the permit application is for an indirect source.

2. An additional $2,500 if the permit application is for an indirect source which requires an environmental assessment under ch. NR 150.

(b) When the permit applicant requests in writing that the permit be issued in a shorter time interval than the total time interval allowed under s. 285.61, Stats., and the department is able to comply with the request, one of the following additional fees shall apply:

1. $3,000 for an application for an indirect source if the permit is issued within 60 days of receipt of a complete application.

2. $1,500 for an application for an indirect source if the permit is issued within 61 to 90 days of receipt of a complete application.

(c) Any person requiring a determination of exemption under s. NR 411.04 (2) (c) shall pay a fee of $275.

(d) The fee under par. (a) shall be reduced by $150 if the permit applicant publishes the class 1 newspaper notice required under s. 285.61 (5) (c), Stats.

(e) Any person who applies for a construction permit for an indirect source shall submit $1,000 with the application. This $1,000 may not be refunded unless the department determines that a permit is not required. When a fee is required under par. (c), only the amount not required under par. (c) will be refunded.

Note: Chapter NR 411 was repealed as the result of 2011 Wis. Act 121 removing department authority to require permits for indirect sources and to charge fees under this subsection.

(4) PAYMENT AND REFUNDS. (a) When the amount due with an application or request is less than the final fee, the department shall bill the applicant for the balance due when a final decision is issued or upon a determination that no further action will be taken on the application. For a determination of no further action, the final fee shall include an amount for work completed under subs. (1) to (2), except that the final fee for a small business, as defined in s. 227.114, Stats., shall only be the initial amount due with the application or request. The balance due shall be paid within 30 days of the date of the billing statement.

(b) The department may refund all of, or a portion of, the fee submitted with an application or request for a direct source, in the following situations and amounts:

1. If, upon review of an individual permit application for a direct source, the department determines that the source is exempt from the need to obtain the permit, the difference between the initial application fee and the appropriate amount in sub. (1) (b).

2. If an applicant for an individual permit for a direct source that is a part 70 source requests that the application be processed as an application for coverage under either a general or registration construction permit, the difference between the initial fee submitted with the individual permit application and the appropriate amount in sub. (1) (am) or (as).

3. If the initial application fee is greater than the final fee, the difference between the application and final fees.

4. If an applicant for an individual permit for a direct source that is a non−part 70 source requests that the application be processed as an application for coverage under either a general or registration construction permit, the full initial fee submitted with the individual permit application.

History: Cr. Register, April, 1984, No. 340, eff. 5−1−84; renum. from NR 410.04, Register, September, 1986, No. 369, eff. 10−1−86; r. and recr. Register, April, 1988, No. 388, eff. 5−1−88; am. (2) (g), Register, September, 1988, No. 393, eff. 10−1−88; am. (2) (i), Register, April, 1989, No. 400, eff. 5−1−89; corrections in (intro.), (1) (b) (intro.) and 1., (2) (intro.) made under s. 13.93 (2m) (b) 7., Stats., Register, April, 1989; am. (intro.), (1) (b) (intro.) and 1., renum. (1) (b) 2. to be 4., cr. (1) (b) 2. and 3., Register, October, 1991, No. 430, eff. 11−1−91; am. (intro.), (1) (b) (intro.), (d), (e) and (3), r. (1) (a) 2. and (1) (b) 4., Register, May, 1993, No. 449, eff. 6−1−93; am. (intro.), (1) (b) (intro.), r. (1) (b) 1. to 3., Register, February, 1995, No. 470, eff. 3−1−95; am. (intro.), (2) (intro.), (a) to (f), (i), r. and recr. (1) and (2) (h), r. (2) (j), renum. (2) (k) to (m) and (3) to be (2) (j), (k) and (o) and (4) and am. (2) (j), (k) and (o), cr. (2) (i) to (n) and (3), Register, June, 1995, No. 474, eff. 7−1−95; correction in (2) (k) made under s. 13.93 (2m) (b) 7., Stats., Register, December, 1995, No. 480, eff. 1−1−96; am. (1) (a) 2., Register, December, 1996, No. 492, eff. 1−1−97; am. (intro.), (1) (a), (b) and (d), (2) and (4), Register, December, 1999, No. 528, eff. 7−1−00; correction in (2) (g) made under s. 13.93 (2m) (b) 7., Stats., Register October 2003 No. 574, CR 02−097; am. (2) (g) Register June 2004 No. 582, eff. 7−1−04; CR 04−107; am. (1) (a) 5., cr. (1) (a) 6. and 7. Register August 2005 No. 596, eff. 9−1−05; CR 05−047; am. (1) (d), cr. (1) (f) Register May 2007 No. 617, eff. 6−1−07; CR 06−079; am. (intro.), cr. (1) (bm) Register May 2007 No. 617, eff. 6−1−07; CR 06−019; am. (intro.), cr. (1) (a) 8. to 10., (b) (intro.) and 2. to 4., renum. (1) (b) to be (1) (b) 1. and am., Register June 2007 No. 618, eff. 7−1−07; CR 07−040; am. (4) Register April 2008 No. 628, eff. 5−1−08; **CR 10−047; am. (title), (1) (a) (intro.), 1. to 4., 8. to 10., (b), (c), (2), (4) (title), r. (intro.), (1) (d), renum. (1) (a) 5., 6., 7., (f) and (4) to be (1) (ae), (am), (as), (b) 3m., and (4) (a) and am., cr. (4) (b) Register December 2010 No. 660, eff. 1−1−11; correction in (4) (a) made under s. 13.92 (4) (b) 7., Stats., Register December 2010 No. 660.**

NR 410.04 Annual emission fee. (1) FEE REQUIRED. Except as provided under sub. (3), any person who owns or operates a facility for which an operation permit is required under s. 285.60, Stats., shall pay an annual emission fee to the department at the rate specified in s. 285.69 (2), Stats.

(2) AIR CONTAMINANTS SUBJECT TO FEE. (a) Except as provided under par. (b), the annual emission fee shall be based on the annual actual emissions of the air contaminants listed in Table 1 of s. NR 438.03, as those annual actual emissions are recorded in the annual emission inventory prepared by the department under s. NR 438.03 (5).

(b) The following emissions are exempt from the emission fees required under this section:

1. Emissions from any acid rain phase I affected unit for the years 1995 through 1999.

2. Except as provided under sub. (4), emissions in excess of 5,000 tons per year of any air contaminant from any one facility.

3. Emissions of carbon monoxide and carbon dioxide.

4. Emission reduction credits reported as actual emissions.

5. Emissions of acetone, sec−butanol, tert−butanol, n−butyl acetate, chlorobromomethane, diethyl ketone, ethyl acetate, isobutyl acetate, methyl acetate, methyl acetylene, octane (all isomers), pentane (all isomers) and vinylidine fluoride.

6. Emissions of di−n−octyl phthalate, octachlorostyrene, pentachlorobenzene, perylene, 1,2,3,4−tetrachlorobenzene, 1,2,4,5−tetrachlorobenzene and tributyl tin.

(c) For the purpose of charging fees, the following groups of air contaminants shall be considered single air contaminants:

1. Particulate matter and PM_{10}.

2. Reduced sulfur compounds, mercaptans, hydrogen sulfide and total reduced sulfur.

3. Air contaminants reported as both a hazardous air contaminant and as either a particulate or volatile organic compound. The air contaminants which are not eligible for this exemption are identified by footnote number 3 in Table 1 of s. NR 438.03.

(3) FACILITIES EXEMPT FROM ANNUAL EMISSIONS FEES. The following facilities are exempt from the requirement to pay annual emissions fees under s. 285.69 (2), Stats., and this section:

(a) Any facility whose total annual actual emissions of all air contaminants listed in Table 1 of s. NR 438.03, and annotated with footnote 3, are less than 5 tons.

(b) Indirect sources of air pollution.

(4) UTILITIES WITH ACID RAIN PHASE I AFFECTED UNITS. Notwithstanding sub. (2) (b) 2., the department shall charge fees on emissions in excess of 5,000 tons per year of any air contaminant from any facility operated by a utility that owns or operates an acid rain phase I affected unit to the extent necessary to recover the fees that would have been charged to that utility if the exemption under sub. (2) (b) 1. did not exist.

(5) PAYMENT. Annual emission fees shall be paid to the department within 30 days of receipt of the bill.

(6) DISPUTED PAYMENT. (a) The owner or operator of a facility who disputes its annual emissions fee may request, in writing, that the department review the fee. Such a request shall be filed within 30 days of receipt of the bill. The department shall review and supply to the facility, within 14 calendar days of receipt of the written request, all information used to calculate the annual emissions fee. If the facility continues to dispute the fee, it shall supply to the department, within 14 calendar days after receipt of this information, the reasons it disputes the fee. The facility shall be notified by the department, within 7 calendar days of receipt of this information, whether the fee will be adjusted. If the facility continues to dispute the fee, it may appeal the department's final decision pursuant to s. 285.81, Stats.

(b) The facility shall pay the amount of fee not in dispute within 30 days of receipt of the bill.

History: Cr. Register, April, 1984, No. 340, eff. 5−1−84; renum. from NR 410.05, Register, September, 1986, No. 369, eff. 10−1−86; r. and recr. Register, April, 1988, No. 388, eff. 5−1−88; r. and recr. Register, May, 1993, No. 449, eff. 6−1−93; am. (3), Register, February, 1995, No. 470, eff. 3−1−95; CR 02−146: am. (2) (b) 2. and (4) Register October 2003 No. 574, eff. 11−1−03; CR 02−097: cr. (2) (b) 5. and 6. Register June 2004 No. 582, eff. 7−1−04.

NR 410.05 Asbestos abatement project permit exemption review and inspection fees. (1) FEES REQUIRED. Any person who submits an asbestos abatement notification under ch. NR 447 shall pay the fees in subs. (2) and (3). The fees shall be submitted with the completed notification required under ch. NR 447 and are non−refundable.

(2) PERMIT EXEMPTION REVIEW FEE. Any person requiring a determination of exemption under s. NR 406.04 (1) (n) shall pay one of the following amounts:

(a) $50 for a determination of exemption if the asbestos renovation or demolition operation involves at least 260 linear feet or at least 160 square feet of regulated asbestos containing material and a combined square and linear footage of less than 1000. The

combination of square and linear footage shall be determined by adding the square footage of asbestos containing material on all areas other than pipes to the linear footage of asbestos containing material on pipes.

(b) $125 for a determination of exemption if the asbestos renovation or demolition operation involves regulated asbestos containing material with a combined square and linear footage of equal to or greater than 1000. The combination of square and linear footage shall be determined by the method given in par. (a).

(3) INSPECTION FEE. The amount of the asbestos abatement project inspection fee shall be:

(a) $135 if, in a facility being demolished, the amount of regulated asbestos containing material is less than 260 linear feet on pipes and less than 160 square feet on other facility components.

(b) $350 if the asbestos renovation or demolition operation involves at least 260 linear feet or at least 160 square feet of regulated asbestos containing material and a combined square and linear footage of less than 1000. The combination of square and linear footage shall be determined by the method given in sub. (2) (a).

(c) $575 if the asbestos renovation or demolition operation involves regulated asbestos containing material with a combined square and linear footage of equal to or greater than 1000 and less than 5000. The combination of square and linear footage shall be determined by the method given in sub. (2) (a).

(d) $1200 if the asbestos renovation or demolition operation involves regulated asbestos containing material with a combined square and linear footage of equal to or greater than 5000. The combination of square and linear footage shall be determined by the method given in sub. (2) (a).

(e) $100 if the property is to be demolished by intentional burning as a community fire safety training project.

(f) An amount equal to and in addition to the inspection fee specified in pars. (a) to (d) to inspect property for a project for which a notice of an asbestos renovation or demolition activity was not provided before the work began.

(4) NOTICE UPDATE FEE. Any person submitting an updated notice, as required by s. NR 447.07 (2), for an asbestos renovation or demolition activity when the amount of affected asbestos changes by at least 20% shall pay a fee of $100.

History: Cr. Register, February, 1995, No. 470, eff. 3–1–95; CR 01–055: am. (3) (c), Register January 2002 No. 553, eff. 2–1–02; CR 04–102: am. (2) (a), (b), (3) (a) to (c), cr. (3) (d) Register June 2005 No. 594, eff. 7–1–05; **CR 10–046: am. (3) (a) to (d), cr. (3) (e), (f), (4) Register December 2010 No. 660, eff. 1–1–11.**

NR 410.06 Severe ozone nonattainment area major source fee. (1) FEE REQUIRED. Except as provided in sub. (3), any person who owns or operates a stationary source which emits or has the potential to emit 25 tons per year of volatile organic compounds (VOCs) and which is located in Kenosha, Milwaukee, Ozaukee, Racine, Washington or Waukesha county shall pay a fee, computed in accordance with sub. (2), beginning in 2008 and in each calendar year thereafter until the county in which the stationary source is located is redesignated as an attainment area for the 1–hour ozone standard. The fee required under this section shall be paid at the time that the annual emission fee under s. NR 410.04 is paid.

(2) COMPUTATION OF FEE. (a) *Fee amount.* The fee required under sub. (1) shall equal $5,000, adjusted in accordance with par. (c), per ton of VOCs emitted by the source during the previous calendar year in excess of 80% of the baseline amount, computed under par. (b).

(b) *Baseline amount.* For purposes of this section, the baseline amount shall be computed, in accordance with any guidance which the administrator may provide, as the lower of the amount of actual VOC emissions or the VOC emissions allowed under either a permit or emission limitations applicable to the source, during calendar year 2007.

(c) *Annual adjustment.* The fee amount under par. (a) shall be adjusted annually, beginning in 1990, by the percentage, if any, by which the consumer price index, as defined in section 502(b)(3)(B)(v) of the act (42 USC 7661a (b)(3)(B)(v)), has been adjusted.

(3) EXCEPTION. No person who owns or operates a stationary source is required to pay any fee under sub. (1) with respect to emissions during any year that is treated as an extension year under section 181(a)(5) of the act (42 USC 7511(a)(5)).

History: Cr. Register, January, 2001, No. 541, eff. 2–1–01.

Appendix F: Illinois Language on General Permits and Permits-by-Rule

The State of Illinois does not have any existing general permits or permits-by-rule for GHG. The "Streamlining Bill" required them to consider both topics. The following text presents the regulatory language considered for both general permits and permits-by-rule.

Sec. 39.10. General permits.
(a) Except as otherwise prohibited by federal law or regulation, the Agency may issue general permits for the construction, installation, or operation of categories of facilities for which permits are required under this Act or Board regulation, provided that such general permits are consistent with federal and State laws and regulations. Such general permits shall include, but shall not be limited to, provisions requiring the following as prerequisites to obtaining coverage under a general permit: (i) the submittal of a notice of intent to be covered by the general permit and (ii) the payment of applicable permitting fees. The Agency may include conditions in such general permits as may be necessary to accomplish the intent of this Act and rules adopted under this Act.
(b) Within 6 months after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, identify types of permits for which general permits would be appropriate and consistent with State and federal law and regulations. The types of permits may include, but shall not be limited to, permits for nonhazardous solid waste activities, discharge of storm water from landfills, and discharge of hydrostatic test waters. Within 18 months after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, develop general permits for the types of permits identified pursuant to this subsection (b).
(c) Persons obtaining coverage under a general permit shall be subject to the same permitting fees that apply to persons obtaining individual permits.
(d) No person obtaining coverage under a general permit shall violate this Act, rules adopted under this Act, or the terms or conditions of the general permit.
(e) This Section does not apply to sources subject to Section 39.5 of this Act.
(Source: P.A. 97-95, eff. 7-12-11.)

Sec. 39.12. Permits by rule.
(a) Except as otherwise prohibited by federal law or regulation, the Board may adopt rules providing for permits by rule for classes of facilities or equipment, provided that the permits by rule are consistent with federal and State laws and regulations. Proposals for permits by rule authorized under this Section may be filed by any person in accordance with Title VII of this Act.
(b) Board rules adopted under this Section shall include, but not be limited to, standards as may be necessary to accomplish the intent of this Act and rules adopted under this Act and the terms and conditions for obtaining a permit by rule under this Section, which shall include, but not be limited to, the following as prerequisites to obtaining a permit by rule: (i) the submittal of a notice of intent to be subject to the permit by rule and (ii) the payment of applicable permitting

fees.
(c) Within one year after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, identify types of permits for which permits by rule would be appropriate and consistent with State and federal law and regulations. The types of permits may include, but shall not be limited to, permits for open burning, certain package boilers and heaters using only natural gas or refinery gas, and certain internal combustion engines.
(d) Persons obtaining a permit by rule shall be subject to the same permitting fees that apply to persons obtaining individual permits.
(e) No person that has obtained a permit by rule shall violate this Act, rules adopted under this Act, or the terms and conditions of the permit by rule.
(Source: P.A. 97-95, eff. 7-12-11.)

Appendix G: Illinois 097-0095 General Permit 1-12-12 Report

January 12, 2012
Status Report on General Permits

The Illinois Environmental Protection Act was amended on July 12, 2011 to include a new Section on General permits as follow:

Sec. 39.10. General permits.

(a) Except as otherwise prohibited by federal law or regulation, the Agency may issue general permits for the construction, installation, or operation of categories of facilities for which permits are required under this Act or Board regulation, provided that such general permits are consistent with federal and State laws and regulations. Such general permits shall include, but shall not be limited to, provisions requiring the following as prerequisites to obtaining coverage under a general permit: (i) the submittal of a notice of intent to be covered by the general permit and (ii) the payment of applicable permitting fees. The Agency may include conditions in such general permits as may be necessary to accomplish the intent of this Act and rules adopted under this Act.

(b) Within 6 months after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, identify types of permits for which general permits would be appropriate and consistent with State and federal law and regulations. The types of permits may include, but shall not be limited to, permits for nonhazardous solid waste activities, discharge of storm water from landfills, and discharge of hydrostatic test waters. Within 18 months after the effective date of this amendatory Act of the 97th General Assembly, the Agency shall, in consultation with the regulated community, develop general permits for the types of permits identified pursuant to this subsection (b).

(c) Persons obtaining coverage under a general permit shall be subject to the same permitting fees that apply to persons obtaining individual permits.

(d) No person obtaining coverage under a general permit shall violate this Act, rules adopted under this Act, or the terms or conditions of the general permit.

(e) This Section does not apply to sources subject to Section 39.5 of this Act.

(Source: P.A. 97-95, eff. 7-12-11.)

The Agency and Bureaus within the Agency conducted meetings with the Illinois Environmental Regulatory Group (IERG) representing the regulated community to fulfill its responsibility under this law. A summary of each Bureau's action as of January 12, 2012 (within six months) is provided below:

Bureau of Air

The Bureau of Air permit staff met with IERG on July 14, 2011, November 1, 2011 and December 6, 2011 to identify types of permits that could be issued for air emissions sources. The categories that have been identified that are in development:

- Concrete Batch Plants (stationary & portable)
- Petroleum Dry Cleaners
- Material (non-waste) crushers (portable only)
- Soil vapor extraction/Air strippers (alone or at true minor sources)

Bureau of Water

The Bureau of Water (BOW) permit staff met with IERG representatives on November 1, 2011 and December 6, 2011 to discuss streamlining efforts and identify what types of permits could be considered for general permits or what other BOW reviews/approval processes could be streamlined. The following permits and review processes were discussed:

- Chemical additives modifications reviews
- General permit for stormwater discharge from landfills
- General permit for hydrostatic test water discharge
- General permit for stormwater discharge from CCDD sites
- Look at Subtitle C Part 309 "clean-up"(lifetime operating permits for pretreatment facilities, permit by rule for package type treatment works, remediation work, permit by rule for oil water separators and cooling towers)
- General permit for cooling water only discharges

Bureau of Land

On November 1st, the Bureau of Land Permit Section met with IERG representatives and identified two potential candidates for possible development of general permits. The two categories are indoor garbage transfer stations and smaller low volume compost facilities. In developing a general permit for these activities it may be possible to develop a streamlined registration process where an applicant could submit an application and seek coverage under a generalized permit, where both standardized conditions and general language have been established under the general permit for the predetermined categories.

Based on discussions with IERG, the consensus was that development of general permits for indoor garbage transfer stations and smaller low volume compost facilities are not immediate priorities and could be developed in the future as necessary.

Appendix H: Illinois PSD Fees

The State of Illinois does not impose fees for GHG permitting. However, the State has established construction fees that cover all new construction permits. GHG PSD projects would be included under these fees. The regulatory text regarding Illinois construction permit fees follows.

Sec. 9.12. Construction permit fees for air pollution sources.
(a) An applicant for a new or revised air pollution construction permit shall pay a fee, as established in this Section, to the Agency at the time that he or she submits the application for a construction permit. Except as set forth below, the fee for each activity or category listed in this Section is separate and is cumulative with any other applicable fee listed in this Section.
(b) The fee amounts in this subsection (b) apply to construction permit applications relating to (i) a source subject to Section 39.5 of this Act (the Clean Air Act Permit Program); (ii) a source that, upon issuance of the requested construction permit, will become a major source subject to Section 39.5; or (iii) a source that has or will require a federally enforceable State operating permit limiting its potential to emit.
(1) Base fees for each construction permit application shall be assessed as follows:

(A) If the construction permit application relates to one or more new emission units or to a combination of new and modified emission units, a fee of $4,000 for the first new emission unit and a fee of $1,000 for each additional new or modified emission unit; provided that the total base fee under this subdivision (A) shall not exceed $10,000.

(B) If the construction permit application relates to one or more modified emission units but not to any new emission unit, a fee of $2,000 for the first modified emission unit and a fee of $1,000 for each additional modified emission unit; provided that the total base fee under this subdivision (B) shall not exceed $5,000.

(2) Supplemental fees for each construction permit application shall be assessed as follows:

(A) If, based on the construction permit application, the source will be, but is not currently, subject to Section 39.5 of this Act, a CAAPP entry fee of $5,000.

(B) If the construction permit application involves (i) a new source or emission unit subject to Section 39.2 of this Act, (ii) a commercial incinerator or other municipal waste, hazardous waste, or waste tire incinerator, (iii) a commercial power generator, or (iv) one or more other emission units designated as a complex source by Agency rulemaking, a fee of $25,000.

(C) If the construction permit application involves an emissions netting exercise or reliance on a contemporaneous emissions decrease for a pollutant to avoid application of the federal PSD program (40 CFR 52.21) or nonattainment new source review (35 Ill. Adm. Code 203), a fee of $3,000 for each such pollutant.

(D) If the construction permit application is for a new major source subject to the federal PSD program, a fee of $12,000.

(E) If the construction permit application is for a new major source subject to nonattainment new source review, a fee of $20,000.

(F) If the construction permit application is for a major modification subject to the federal PSD program, a fee of $6,000.

(G) If the construction permit application is for a major modification subject to nonattainment new source review, a fee of $12,000.

(H) (Blank).

(I) If the construction permit application review involves a determination of the Maximum Achievable Control Technology standard for a pollutant and the project is not otherwise subject to BACT or LAER for a related pollutant under the federal PSD program or nonattainment new source review, a fee of $5,000 per unit for which a determination is requested or otherwise required.

(J) (Blank).

(3) If a public hearing is held regarding the construction permit application, an administrative fee of $10,000. This fee shall be submitted at the time the applicant requests a public hearing or, if a public hearing is not requested by the applicant, then within 30 days after the applicant is informed by the Agency that a public hearing will be held.

(c) The fee amounts in this subsection (c) apply to construction permit applications relating to a source that, upon issuance of the construction permit, will not (i) be or become subject to Section 39.5 of this Act (the Clean Air Act Permit Program) or (ii) have or require a federally enforceable state operating permit limiting its potential to emit.

(1) Base fees for each construction permit application shall be assessed as follows:

(A) For a construction permit application involving a single new emission unit, a fee of $500.

(B) For a construction permit application involving more than one new emission unit, a fee of $1,000.

(C) For a construction permit application involving no more than 2 modified emission units, a fee of $500.

(D) For a construction permit application involving more than 2 modified emission units, a fee of $1,000.

(2) Supplemental fees for each construction permit application shall be assessed as follows:

(A) If the source is a new source, i.e., does not currently have an operating permit, an entry fee of $500;

(B) If the construction permit application involves (i) a new source or emission unit subject to Section 39.2 of this Act, (ii) a commercial incinerator or a municipal waste, hazardous waste, or

waste tire incinerator, (iii) a commercial power generator, or (iv) an emission unit designated as a complex source by Agency rulemaking, a fee of $15,000.

(3) If a public hearing is held regarding the construction permit application, an administrative fee of $10,000. This fee shall be submitted at the time the applicant requests a public hearing or, if a public hearing is not requested by the applicant, then within 30 days after the applicant is informed by the Agency that a public hearing will be held.

(d) If no other fee is applicable under this Section, a construction permit application addressing one or more of the following shall be subject to a filing fee of $500:

(1) A construction permit application to add or replace a control device on a permitted emission unit.

(2) A construction permit application to conduct a pilot project or trial burn for a permitted emission unit.

(3) A construction permit application for a land remediation project.

(4) (Blank).

(5) A construction permit application to revise an emissions testing methodology or the timing of required emissions testing.

(6) A construction permit application that provides for a change in the name, address, or phone number of any person identified in the permit, or for a change in the stated ownership or control, or for a similar minor administrative permit change at the source.

e) No fee shall be assessed for a request to correct an issued permit that involves only an Agency error, if the request is received within the deadline for a permit appeal to the Pollution Control Board.

(f) The applicant for a new or revised air pollution construction permit shall submit to the Agency, with the construction permit application, both a certification of the fee that he or she estimates to be due under this Section and the fee itself.

(g) Notwithstanding the requirements of subsection (a) of Section 39 of this Act, (the application for an air pollution construction permit shall not be deemed to be filed with the Agency until the Agency receives the initial air pollution construction permit application fee and the certified estimate of the fee required by this Section. Unless the Agency has received the initial air pollution construction permit application fee and the certified estimate of the fee required by this Section, the Agency is not required to review or process the application.

(h) If the Agency determines at any time that a construction permit application is subject to an additional fee under this Section that the applicant has not submitted, the Agency shall notify the applicant in writing of the amount due under this Section. The applicant shall have 60 days to remit the assessed fee to the Agency.

If the proper fee established under this Section is not submitted within 60 days after the request for further remittance:

(1) If the construction permit has not yet been issued, the Agency is not required to further review or process, and the provisions of subsection (a) of Section 39 of this Act do not apply to, the application for a construction permit until such time as the proper fee is remitted.

(2) If the construction permit has been issued, the Agency may, upon written notice, immediately revoke the construction permit.

The denial or revocation of a construction permit does not excuse the applicant from the duty of paying the fees required under this Section.

(i) The Agency may deny the issuance of a pending air pollution construction permit or the subsequent operating permit if the applicant has not paid the required fees by the date required for issuance of the permit. The denial or revocation of a permit for failure to pay a construction permit fee is subject to review by the Board pursuant to the provisions of subsection (a) of Section 40 of this Act.

(j) If the owner or operator undertakes construction without obtaining an air pollution construction permit, the fee under this Section is still required. Payment of the required fee does not preclude the Agency or the Attorney General or other authorized persons from pursuing enforcement against the applicant for failure to have an air pollution construction permit prior to commencing construction.

(k) If an air pollution construction permittee makes a fee payment under this Section from an account with insufficient funds to cover the amount of the fee payment, the Agency shall notify the permittee of the failure to pay the fee. If the permittee fails to pay the fee within 60 days after such notification, the Agency may, by written notice, immediately revoke the air pollution construction permit. Failure of the Agency to notify the permittee of the permittee's failure to make payment does not excuse or alter the duty of the permittee to comply with the provisions of this Section.

(l) The Agency may establish procedures for the collection of air pollution construction permit fees.

(m) Fees collected pursuant to this Section shall be deposited into the Environmental Protection Permit and Inspection Fund.
(Source: P.A. 97-95, eff. 7-12-11.)

Appendix I: GHG Permit Streamlining Questions and Examples from State and Local Agencies

TO: CAAAC GHG Permit Streamlining Workgroup, PSD Subgroups
From: Misti Duvall, NACAA
Date: July 17, 2012
Re: State/local GHG permit fee, general permit, and permit by rule examples

Pursuant to the discussion and request for information on our June 28, 2012 PSD subgroup call, I queried members of the NACAA New Source Review and Permitting Committees regarding the following questions:

1) Have any state/local agencies established permit fees for GHGS?
2) Any state/local examples of general permits or permits by rule?
3) Any state/local examples of presumptive BACT?

Answers and examples are summarized below, with further information provided in attachments as noted.

Question #1: Have any state/local agencies established permit fees for GHGs?

The following state/local agencies provided examples:

1) Bay Area Air Quality Management District (see attachment)
2) Illinois: the state does not have fees for GHGs, but does have construction fees that cover all new construction permits, including those for GHGs (see attachment)
3) Wisconsin (see summary below and attachment)

In the permit call yesterday, you asked for information on fees for GHG reviews. In Wisconsin we have two fees that may apply for construction permit reviews only. These are:

- s. NR 410.03(2)(d) - this is a fee of $4,500 for any BACT determination including GHG BACT
- s. NR 410.03(2)(m) - this is a fee if synthetic minor conditions are needed to avoid PSD/NSR for any pollutant including GHG's.

The applicable Adm. Code is attached.

Question #2: Any state/local examples of general permits or permits by rule? We are assuming that any state/local general permits and permits-by-rule are for minor sources only and contain sufficient PTE limitations to assure the sources covered remain as minor sources. We are also assuming that the sources covered by these general permits and permits-by-rule are small enough that they are not affected by GHG applicability at the 75,000/100,000 TPY levels. Can you confirm this is the case?

The following state/local agencies provided information:

1) Minnesota, Connecticut, and Michigan confirmed that they limit general permits and permits by rule to minor sources. Minnesota provided the following example:

Per the agenda for today's call, I am responding with information for MN in terms of our GHG permitting "by rule". We have a couple rule-based permit options for sources that limit their emissions below both Part 70 and NSR levels – and those rules now include GHG emissions.

You can find them in Minn. R. 7007, sections 7007.1110-1130 (Registration Permits) and 7007.1140-1148 (Capped Permits). They aren't technically permit-by-rule because sources still have to apply for them and they actually obtain a permit from the MPCA. But they are similar to permit-by-rule used in other states. Let me know if you have any questions.

2) Illinois: the state does not have any existing general permits or permits by rule for GHGs; however the state has a Streamlining Bill that required them to consider both topics (see attachments)

Question #3: Any state/local examples of presumptive BACT?

None provided.

Appendix J: EPA Response to Comments on Tailoring Rule – Emphasis on Chapter 4

Chapter 4. Comments on Streamlining Options and Tools To Address the Administrative Burdens of PSD and Title V for GHGs

4.1 General Comments on Permit Streamlining Options for PSD and Title V

Section VII of the proposal preamble for the Tailoring Rule presents several PSD and title V permitting streamlining options/tools. Though we acknowledged that these techniques could not be fully developed in the near-term, we committed to aggressively pursuing the development of these streamlining techniques in the first step of our overall PSD and title V GHG permitting strategy and solicited comment on our proposed streamlining techniques as well as other techniques that could be employed. This subsection presents the general comments received on the use of streamlining techniques to mitigate potential PSD and title V permitting burdens that would be associated with regulating GHGs under these permitting programs.

Comment:

Several commenters (2369, 2504, 2797, 3003, 4515, 4691, 4746, 4767, 4800, 5052, 5056, 5079, 5083, 5086, 5131, 5143, 5280, 5301, 5313, 5346, 5347, 5391, 5417, 5740, 8461) support the use of streamlining options and tools to address the administrative burdens of the PSD and title V programs for GHGs. Some supporting commenters gave suggestions about possible streamlining techniques and/or options, while others expressed concerns, or provided comments on the timing of our proposed streamlining options. Examples of these comments are provided below.

General Support

- EPA should consider any and all streamlining including the use of general permits, permits by rule, electronic permitting, workshops, on-line electronic compliance tools, and other streamlining options. (2369, 5056, 5086, 5391)
- A public process should be developed to address permit streamlining approaches to include general permits, permit by rule, and presumptive BACT for GHGs. (5301)
- The Agency should continue to pursue efforts to streamline title V and NSR permitting, including BACT determinations. (5083)

General Concerns

- While streamlining options contemplated by EPA may provide limited relief, there is still a very real concern that the Tailoring Rule will significantly increase regulatory and administrative burden (putting U.S. facilities at a competitive disadvantage) without a corresponding reduction in emissions. (5236)
- The streamlining approaches are vague: (1) there is no mechanism described in the rule for how they will be implemented, and (2) they have not been proven to work in practice. For these reasons, the commenter believes the streamlining options should be evaluated before the rule is promulgated to determine which approaches are feasible, after which the satisfactory options can be promulgated through rulemaking. (5788)

- While EPA has indicated that it intends to reevaluate the requirements for smaller sources and consider streamlined permitting options such as general permits, any such options for sources with less than 25,000 tons of GHG emissions will most likely impose substantial regulatory burdens with little, if any, environmental benefits. (5236)
- The other NSR Reform flexibility mechanisms designed to lessen the burden of PSD will not be available to streamline GHG permitting because they have not been fully adopted into many SIPs and were not designed with GHGs in mind. (5143)

Many commenters made suggestions on the mechanisms and timing to put streamlining techniques in place. Examples of these comments are provided below.

Mechanisms

- EPA should implement these options by rule and not guidance as many states cannot implement EPA guidance (2504).
- EPA should provide equipment specific permitting templates as models for monitoring, recordkeeping, and reporting requirements. (4154)
- EPA should develop streamlining techniques for common combustion sources, such as a boilers and turbines using natural gas fuel to minimize the amount of application preparation time and agency review time associated with obtaining permits for these types of sources. (5130) EPA should identify emission units fired with fuels with broad cross-sector applicability as priority sources for information compilation and publication. For example, boiler, process heaters, reciprocating engines, and combustion turbines should be considered as high priority sources. EPA should also identify priority sources based on fuel type and emission units – e.g., coal, oil and natural gas for boilers, natural gas for combustion turbines, diesel and natural gas for reciprocating engines. (4515, 4691)

Timing

- EPA's proposed streamlining techniques would not be in place in time to avoid the potentially devastating impact on their U.S. operations. (4632, 5417) One of these commenters added that these techniques will be less effective than establishing thresholds at more appropriate levels. (4632)
- EPA must provide a more detailed explanation of possible "streamlining" approaches before using them as part of the justification for adopting the Tailoring Rule. The streamlining approaches proposed by EPA are complex and likely to be controversial, thus, if EPA intends to pursue such ideas it must do so in a more deliberate and systematic way and in light of previous rulemakings, remands, and vacaturs. (5058, 4863, 5064, 5305)
- EPA should have all streamlining techniques finalized by the start of the program (i.e., before sources are regulated for GHG). (2797, 4746, 5086, 5347, 5391)
- EPA should expeditiously finalize its streamlining options. (2504, 2797, 8405)
- EPA should allow more time to resolve critical implementation issues. (5417).
- EPA should install measures to expedite permitting, such as pre-approving certain equipment or processes. (3003)

- EPA should make clear that the intent of its proposed approach is to impose, over time, some type of BACT requirement on all GHG stationary sources in the U.S. that emit or have the potential to emit GHGs above 250 tpy – that EPA's streamlining approaches do not offer a complete or permanent solution to the problems associated with regulating multitudes of sources under PSD and making even more such sources subject to title V requirements. (5317)
- EPA should structure a first phase program with minimal impact to the regulated community, allowing reasonable time for the regulatory environment surrounding climate change to mature, and during this period, EPA should work with state and other regulators to eliminate patchwork regulations, and create a greater focus on cost-effective and consistent programs to regulate GHG emissions. (4746, 4951)
- EPA should develop a first-phase threshold that reflects a true major source, but allows enough sources to enter the program so EPA can evaluate the "pros and cons" of bringing GHG into the PSD and title V programs is needed. (4863, 5064, 5305)
- EPA should phase in title V requirements over the 5-year renewal process to even out the workload. (4154)

Legality of Our Proposed Streamlining Techniques

Many commenters made general comments about the legality of our proposed streamlining techniques. Examples of these comments are given below.

- The "streamlining" procedures that EPA is considering are of questionable legality and effectiveness (5129, 5179, 5417, 5317) or conflict with the plain language of the CAA. (4118, 5140, 5278, 5317)
- One of these commenters adds that, as a minimum, EPA should postpone any actions that may trigger PSD and title V requirements for GHGs until it has invested the time necessary to conduct a more thorough assessment of the workability and defensibility of its proposals. (5317)
- Redefining PTE to mean actual emissions would allow many sources to avoid the classification as "major" emitting facilities, but the statute specifically defines the PSD and title V applicability thresholds in terms of PTE. (5129)
- There is no explicit authority in the CAA's PSD provisions for "general permits" or "presumptive BACT" determinations. In fact, as EPA acknowledges, these options would appear to conflict with the CAA section 165, which requires a "public hearing" on each PSD permit (5140, 5278, 5129), and section 169, which requires BACT to be determined for each major source on a "case-by-case" basis (5140, 5278, 5129, 5317). Two of these commenters also added that the proposed streamlining methods conflict with the CAA's air quality monitoring requirements. (5140, 5278)
- It is ironic that EPA proposed in the Tailoring Rule the utilization of standard permits (i.e., general permits) and permits-by-rule as streamlining options for PSD and title V permitting considering that EPA recently proposed to disapprove various aspects of the Texas air permitting program because EPA was adamantly opposed to the notion of using standard permits and PBRs to permit major source emissions. (5179)
- The only possibility of streamlining requires extensive and significant changes to the actual regulatory framework. (8025)

Response:

We agree with those commenters who support using streamlining techniques to mitigate the potential PSD and title V permitting burdens. Nothing in the opposing comments has persuaded us that we should abandon our streamlining efforts. To the contrary, the strong support for these efforts shown by many commenters reinforces our intention, as stated in the proposal, to move forward with the approaches as an integral part of our phase-in approach. However, because the uncertainty surrounding the streamlining approaches and the concerns expressed by some commenters, we are not committing to finalize rules on any particular approach, but we do plan to explore all streamlining options as expeditiously as possible, beginning immediately and proceeding throughout the phase-in period, and we encourage permitting authorities to do the same. We commit to consider a wide array of possible streamlining measures, and we commit to propose and take comment on, in the step 3 rulemaking, a set of those measures that we determine are viable to pursue further.

For these reasons and since we will need to collect significant category-specific data for source and emission unit types that have heretofore generally not been regulated by the CAA (e.g., furnaces, water heaters, etc.), we are not making a conclusion as to whether any streamlining options will or will not be feasible for any sources, especially smaller sources, and/or if a particular option will be available at a certain time.

We disagree, however, with the commenter that suggested that "while streamlining options contemplated by EPA may provide limited relief, there is still a very real concern that the Tailoring Rule will significantly increase regulatory and administrative burden" because while implementation of steps 1 and 2 – which will cover larger sources -- will pose implementation challenges, and some of the streamlining tools could assist with meeting these challenges, we have assessed the burdens associated with GHG permitting and have established a phase-in schedule that represents a manageable workload, even in the absence of streamlining techniques. In addition, no sources under 50,000 tpy CO_2e will be regulated before April 30, 2016. Thus, we also disagree with the commenter that stated that "EPA should make clear that the intent of its proposed approach is to impose, over time, some type of BACT requirement on all GHG stationary sources in the U.S. that emit or have the PTE GHGs above 250 tpy."

Consistent with our phase-in approach, it is important for us to consider whether, at some point during the implementation of step 2, it will become possible to administer GHG permitting programs for additional sources. For example, if EPA is able to promulgate measures that streamline programs to at least some extent, if permitting authorities increase their resources, or if implementation experience and more seasoned staff results in more effective use of scarce permitting resources, then we expect that we will be able to phase-in the application of PSD and title V to more sources by establishing step 3. We do not have enough information now to establish a final step 3, particularly because there will be significant transition occurring in the GHG permitting programs during steps 1 and 2. However, we believe that it will be possible to develop a record on which to base step 3 sometime soon after we begin to implement step 2.

Therefore, we plan to propose a rule in which we solicit comment on or propose lower thresholds for PSD and title V applicability, and we establish an enforceable commitment to finalize a rule in which we address those matters by July 1, 2012. In order to provide a year for permitting authorities and sources to prepare for any additional GHG permitting action in Step 3, we will establish that step 3 would take effect on July 1, 2013. We also commit to explore, between now and the step 3 proposal, a wide range of streamlining options. In the proposal, we will take comment on streamlining approaches we think may be viable (except to the extent we will have already issued guidance documents concerning streamlining approaches), and we will address those options in the final rule.

In addition, as part of the step 3 action, we may solicit comment on a permanent exclusion of certain sources from PSD, title V or both, based on an "absurd results" rationale. For example, we may make a final determination that under the "absurd results" doctrine, PSD and/or title V do not apply to a set of GHG sources that, although above the statutory thresholds for those programs, are too small and relatively inconsequential in terms of GHG contribution. Another type of such exclusion for the title V program could be for sources that would otherwise be required to obtain an "empty permit," that is, for example, one that would not contain any applicable requirements because there are none that apply to the source. If we promulgate a permanent exclusion, we may conclude that by that time, we will have brought into the PSD and title V programs the full set of sources that would be consistent with congressional intent (or, if congressional intent on that point is unclear, with a reasonable policy consistent with statutory requirements), and, under those circumstances, we would find that such a rule brings the tailoring process to a close. The application of the "absurd results" rationale for a permanent exclusion is discussed in more detail in section V.B. of the final rule preamble.

Regarding those comments about other possible streamlining techniques that were not part of this proposal, such as NSR reform mechanisms, we are not making a decision about finalizing these options at this time. We would likely want to explore, through a notice and comment process, which of these measures is viable to pursue further. These comments, including any opinions about the legal and policy direction we must take regarding these streamlining options, will be addressed in the action(s) where we might apply them.

4.2 Redefining "Potential to Emit"

At proposal, we proposed an approach to establish PTE calculation methods (and redefining PTE) for various categories of sources that emit GHGs. Potential to emit, or PTE, is defined as the maximum capacity of a source to emit any air pollutant under the source's physical and operational design, including legal limitations on emissions or hours of operation. Many sources have no legal limitations on operational conditions that affect their PTE calculation, such as their hours of operation, and as a result, they are treated as if they operate continuously (24 hours per day, 7 days per week, totaling 8,760 hours per year), even when they do not actually do so. As a result, basing the applicability thresholds on PTE rather than actual emissions has the potential of sweeping enormous numbers of sources into permitting programs that would otherwise not actually emit close to the applicability thresholds. Thus, many GHG emission sources will find that they can establish legally and practically enforceable limits on their operational parameters to limit their PTE, that will allow them to avoid major source status,

and thus major source permitting. Sources that do not operate anywhere near the 8,760 hours per year typically assumed in PTE calculations and whose actual emissions are below major source applicability thresholds would be candidates for such PTE limits.

We requested specific comments on experience with limiting PTE by rule rather than through individual permits, considerations in phasing-in this approach, and identification of categories that might benefit from the use of rules limiting PTE. Comments received are presented in this subsection.

Comment:

Several commenters (4298, 4513, 4696, 5078, 5079, 5111, 5130, 5183, 5224, 5711, 7026, 8461) support the idea of redefining "potential to emit." The reasons for their support include:

- The option to limit GHG PTE by rule rather than through individual permits is a good idea. (5130) Voluntarily limiting PTE would limit the PSD and title V programs to sources whose actual emissions are likely to be greater than the major source threshold for CO_2e. (4691, 5078, 5079)
- Allowing sources to refine facilities' PTE to be closer to expected actual emissions is a good idea, particularly for sources where actual emissions are demonstrated to be substantially lower than a traditional calculation of PTE would indicate. (4696, 5079, 5111, 5711) This approach will be consistent with EPA's GHG Mandatory Reporting Rule (4696, 8461) and some of the source categories that could benefit from this approach could be residential and commercial furnaces. (5711).
- If "actual" historical emissions are not used, EPA should reinstate historic policies for both the PSD and title V programs that allow sources and states to presume "synthetic minor" status for sources whose historic emissions are less than 50 percent of "major source" levels. A previous title V interpretation allowed a transition period for permitting title V sources whose historic actual emissions were less than 50 percent of major source thresholds to be treated as minor sources, regardless of their PTE. [*See* ,e.g., J. Seitz and R. Van Heuvlin, "Options for Limiting the Potential to Emit (PTE) of a Stationary Source Under Section 112 and Title V of the Clean Air Act" (Jan. 16, 1995); J. Seitz, Calculating PTE for Emergency Generators (Jan. 16, 1995); J. Seitz, Calculating Potential to Emit (PTE) and Other Guidance for Grain Handling Facilities) (Nov. 14, 1995)]. The commenter argues that these policies remain sound for both PSD and title V permitting, are within EPA's discretion, and will reduce burdens significantly during the early phases of title V and PSD permitting of GHG sources. (5111, 5470)
- EPA should evaluate opportunities to interpret and define PTE for GHG emissions such that they approach, if are not equal to, actual emissions, similar to EPA's approach to estimating PTE for emergency generators which recognizes inherent limitations in how such equipment is intended to be operated. (5224)
- EPA could establish a rule or policy establishing PTE for GHGs based on actual emissions, where sources that can demonstrate that their GHG emissions are below 75 percent of the major source thresholds could be treated as synthetic minor sources. (5224)
- In crafting PTE definitions, it will be important to allow for the entry of new technologies. Taking a functional approach should help in this regard. (5711)

- For certain equipment, a commenter supports the proposal to develop "prohibitory rules" that would preclude operation during a certain number of days per year, and allowing flexibility by offering a streamlined method to allow a source to operate for longer hours upon request to the permitting agency. (5711)
- One commenter supports the proposal to define furnaces and similar heating equipment to include the thermostat to which they are attached, which constrains them from operating in warmer weather. The commenter also suggests that a similar definition could be used for natural gas-fired water heaters, both conventional and tankless models, to recognize their intermittent operation. Tankless natural gas water heaters operated in conjunction with solar water heating could be defined to recognize the operational constraint that keeps the natural gas heater from turning on during a certain percentage of the time (based on minimum number of sunny days for example). (5711)
- Any redefinition of PTE should include provisions for crediting existing facility offsets of GHGs, especially CO_2. (5183)

Various commenters (3278, 4515, 4691, 5073, 5135, 5198) did not explicitly support or oppose the idea of redefining "potential to emit," but provide suggestions for "redefining PTE." These suggestions include:

- EPA should clarify that the proposed Tailoring Rule does not preclude a source from pursuing a source-specific PTE limitation, as opposed to general or sector-wide PTE limitations. If sector-specific PTE is defined or needs to be defined, EPA could consider average utilization profiles, especially for the natural gas industry. (4515, 4691)
- Restrictions based on expected "real-world" operating conditions may be helpful to some industries, but do not appear to be applicable to natural gas transmission facilities. Federal Energy Regulatory Commission (FERC) requires pipelines to build and operate systems that are capable of meeting peak demand days, and thus have the potential to emit far more GHGs than are emitted in practice. For that reason, FERC requirements could prevent pipelines from accepting facility-specific operational limitations, as suggested by EPA, in order to reduce PTE. In addition, with the increased use of natural gas as both a heating and cooling fuel source, natural gas providers are less able than other industries to take on seasonal limitations. (4515, 4691)

Several commenters (3916, 4120, 4238, 4239, 4696, 4860, 4949, 5129, 5306) oppose the idea of redefining "potential to emit." The reasons for their opposition include:

- The statute specifically defines the PSD and title V applicability thresholds in terms of PTE (4949, 5129, 5306) and any future efforts to reduce the scope of PSD and title V through re-defining PTE risk running afoul of the text of the CAA. (5306)
- Alterations to the current practice for calculating PTE will upset longstanding policies and procedures in NSR permitting guidance and will affect all of the regulated NSR pollutants. (3916, 4238, 4239, 4860, 4949)
- EPA's proposal of limiting PTE by undertaking federally enforceable restrictions on operating hours or design operating parameters could potentially affect natural gas facilities by contradicting compressor station's obligations to its customers under the FERC certificate. FERC regulations require compressor stations to be "available" to meet peak demand as defined in its certificate to ensure that construction and operation of natural gas facilities are in the "public convenience and necessity" and are in compliance

with all applicable regulations. Therefore, the commenter concludes that, unless EPA has an explicit exemption for such natural gas facilities to exceed its "redefined" PTE to meet FERC requirements, the EPA tailoring proposal to redefine the PTE will not be a functional option. (4120)

Response:

We are not making any final decisions on redefining PTE at this time. We will take these comments into account during the development of any streamlining techniques during step 3 of our phase-in approach.

4.3 Presumptive BACT

The proposal preamble informs that CAA section 165(a)(4) requires that sources subject to PSD implement BACT for each pollutant subject to regulation under the CAA, and that CAA section 169(3) requires that BACT emissions limits be determined on a case-by-case basis that reflects the use of state-of-the-art demonstrated control technology at the time of the permit action. We acknowledge that determining BACT for a particular source can often be a complicated, resource-intensive, time-consuming, and sometimes contentious process. In order to streamline the BACT process for GHG sources that will be brought into the PSD program, we proposed a system under which permitting authorities can make BACT determinations for common types of equipment and sources, where they can apply those determinations to individual permits with little to no additional revisions or analysis, known as "presumptive BACT." The proposal preamble solicited comment on the use of presumptive BACT limits with the PSD program, including our authority to do so, whether there is a need or value for such an approach, and suggestions for how such limits could be established, updated, and used consistently within the requirements of the CAA, or by departing as little as possible from those requirements. This subsection presents comments received on the "presumptive BACT" approach as an option to streamline the BACT determination requirement under PSD for GHG emission sources.

Comment:

Several commenters (3858, 3919, 4120, 4140, 4154, 4238, 4239, 4512, 4521, 4526, 4747, 4860, 4749, 4767, 4800, 4866, 4949, 4989, 5039, 5052, 5058, 5061, 5078, 5079, 5084, 5113, 5130, 5131, 5135, 5198, 5224, 5276, 5280, 5301, 5313, 5338, 5346, 5391, 5711, 5742, 5714, 5922, 6458, 6681, and 7935) support the use of presumptive BACT as a streamlining option. The reasons for their support include:

- Presumptive BACT could be a helpful approach to ensuring consistency in the application of PSD to stationary sources of GHGs. (5276)
- The use of presumptive BACT would be helpful for common combustion sources such as boilers, process heaters, and combustion turbines (5130).
- The use of presumptive BACT is justified for the natural gas combustion sector because of the clean and efficient characteristics of natural gas and the unavailability of "add-on" control technologies to mitigate GHGs. (5058)

- Presumptive BACT for GHG emissions from combustion sources should be temporarily defined while EPA takes the time to develop essential GHG guidance through rulemaking. This will allow states time to make adjustments to their state rules. (4521)

Supporting commenters also offer suggestions for implementing the presumptive BACT streamlining technique or for moving forward with regulating GHGs without presumptive BACT. Their suggestions include:

- EPA should pursue presumptive BACT determinations by source category (4747, 4860). One of the commenter adds that some of the source categories to include are: emergency units and seasonal combustion sources such as furnaces. (4747)
- EPA should establish fuel- and technology-specific performance based (i.e., carbon intensity) presumptive BACT standards for each category of anticipated major sources. (EPA has used a similar approach to establish "presumptive Reasonably Available Control Technology [RACT]" standards under the Control Techniques Guidelines [CTG] program under the statute). Further, the commenter adds that sources should have the option of applying presumptive BACT or case-by-case BACT. Under such a program, consistent with its precedent, EPA should evaluate a source as it is proposed and should not require a source to change fuels or alter the basic engineering design as a BACT control option or alternative. EPA would retain the authority to update any presumptive BACT standard as it gains information. Any future changes in BACT standards should not apply to sources with applications deemed complete prior to any changes in the standard. (4298)
- BACT for GHG emissions should be commercially-accepted, presently in use, and technologically complete. The commenter recommends that BACT apply at the specific source level (i.e., industrial boilers). Requiring facilities to install BACT for major modifications at the facility level would create unnecessary burdens on industrial facilities. (5236)
- The approach should be flexible enough such that the owner can still make a case-by-case BACT demonstration for a given project if needed (4140, 5113, 5130, 5131, 5313, 5714, 5922) or more stringent controls are warranted (4694, 5314). Two commenters add that sources must continue to be allowed the opportunity to address environmental, energy, and economic considerations. (5113, 5714)
- EPA should recognize and accommodate inherent differences in GHG emissions from sources within a source category due to different designs, technologies, and source configurations. (5224)
- EPA should wait until it has obtained sufficient data from the final GHG Mandatory Reporting Rule to decide which sectors EPA should prioritize in regards to presumptive BACT. Presumptive BACT for GHGs and the traditional BACT review process should rely on the use of sound data to determine which industrial sources are the largest emitters for GHGs, for which EPA should prioritize. (5922)
- EPA should apply cost-effectiveness criteria for GHG emissions in a manner that reflects commercially available technologies and that is consistent with carbon prices in existing markets and expected under currently pending federal legislation. The commenter believes that, at the present time, a carbon reduction cost-effectiveness in the range of approximately $10/ton CO_2e would be a reasonable benchmark. The cost-effectiveness range should be updated on an ongoing basis as market prices change, and EPA obtains

information regarding the cost of various carbon reduction strategies and the commercial feasibility of technology options. Furthermore, EPA should provide by regulation that the cost effectiveness range is to be applied by permitting authorities in evaluating BACT on a case-by-case basis and that control costs exceeding that range would be presumptively economically infeasible. (4298)

- EPA should set each BACT standard (whether presumptive or case by-case) on a pollutant-specific basis. The commenter adds that the applicability and BACT-setting functions will establish the performance expectations of each source. Once the permit's performance requirements are so established, then the commenter recognizes that there may be both economic and environmental benefits of providing the source the option of meeting the permit requirement by averaging (or trading) across the full range of GHGs and, as appropriate, across or outside the facility. The commenter adds that providing such compliance flexibility would provide EPA with valuable experience in a transition to a national emissions trading program because it would develop the necessary accounting protocols and enforcement tools to underpin such a program. (4298)
- Compliance flexibility will be critical to the success of the BACT program (whether presumptive or case-by-case). The commenter believes that any facility with equipment subject to BACT should have the option of demonstrating compliance with the presumptive BACT standard at the affected equipment on an annual average performance basis. The commenter adds that EPA can make a formal finding, subject to notice and comment, that available offsets exist to provide sufficient cost containment, and the facility should have the option of purchasing compliance credits from an EPA-administered reserve credit pool at a predetermined price that reflects EPA's upper bound cost-effectiveness for BACT determinations. (4298)
- Any presumptive BACT mechanism must be subject to an open and transparent process with ample opportunities for public review and comment. (5742)
- The BACT determination must include consideration of the intended purpose and use of a facility. For example, a facility being constructed or modified that is intended to serve as a peaking facility will have different emissions and economic constraints than a baseload facility, and those factors must be considered in the BACT determination process. (5079)
- Imposing even "streamlined" individual PSD permits and BACT on natural gas equipment changes but not on electric resistance equipment would effectively create a perverse incentive for customers to switch from natural gas to electric equipment. To the extent this occurs, there would cause an overall increase in GHG emissions, contrary to congressional intent to decrease emissions. (5711)
- Fuel-switching should not be considered as a control technology during BACT review with regard to new electricity generation facilities. A company proposing to build a new natural gas-fired combined cycle facility should not be required to consider wind generation in a BACT analysis. (5079)
- EPA should coordinate its thinking on BACT with the U.S. Department of Energy (DOE) on energy efficiency requirements for various kinds of energy consuming equipment. (5338)
- Landfills are particularly suited to presumptive BACT, and BACT for new sources should be congruent with the applicable NSPS subpart WWW requirements (5276, 5391) and for existing sources congruent with the Emission Guideline standards (5276).

- BACT should not be used as a means to drive technology development. (5079).
- EPA and the states must make sure that presumptive BACT determinations do not become dated, and then the burden would shift to owners and operators that did not elect one of the presumptive BACT technologies to demonstrate why none were technically feasible or economically available. (5052)
- EPA should slow down the promulgation of the rule to allow carbon capture/storage technology to develop. (5789)
- Because BACT for calcination emissions will be demonstrated to be "no additional controls," the only way a lime plant could avoid PSD review would be to make less lime, thereby eliminating the incentive to invest in energy efficiency projects. (5133) The proposed rule fails to address emissions from industries that emit CO_2 as a byproduct of the chemical reaction inherent in the process. Failure to address these process emissions is significant as more than one-half of GHG emissions from lime plants come from calcining limestone. If calcination emissions are subject to the PSD program, then lime plants will be discouraged from undertaking energy efficiency projects that would otherwise reduce GHG emissions. Energy efficiency projects reduce fuel consumption, GHG combustion emissions, and emissions of other criteria pollutants. However, some of these very same energy efficiency projects present the potential to increase lime production and, therefore, increase related calcination emissions.
    - EPA can guide the analysis of BACT by providing information that EPA currently collects in the RACT/BACT/lowest achievable emission rate (LAER) clearinghouse (RBLC) (such as type of facility, size, other pollutants, process constraints, region of the country, fuels, etc.), and sources will have to select one of the presumptive technologies or demonstrate that none is effective through the customary case-by-case analysis that is currently performed. (5052) EPA should update the RBLC that is the basis for most (if not all) BACT determinations. (4238, 5084)
    - Consistent with existing policy and regulations, BACT for GHGs should be limited to the new or modified emission units. (5079)
    - Natural gas is not an option for many large sections of the country because of the absence of infrastructure to deliver natural gas. (Commenter provides detailed rationale for this position). (5052)
    - BACT reviews should use thermal efficiency as a comparable metric because it will encourage GHG reductions. However, many factors affect thermal efficiency, and all plants experience some degradation in thermal efficiency over the life of the plant.
    - At the current time, Integrated Gasification Combined Cycle (IGCC) is not yet available as a broad and commercially-demonstrated retrofit BACT technology. (4749, 5052, 5079, 5301)
    - Carbon Capture and Sequestration (CCS) is not BACT. (5052, 5224) Another commenter agrees that CCS is not BACT currently, although it might be in the future if it is demonstrated to be technically-feasible. (5079)
    - Presumptive energy efficient BACT measures should include the following (the commenter appended very extensive information on efficiency projects): (1) Energy Audits, (2) ENERGY STAR© Products, (3) Weatherization, (4) Variable Speed/High Efficiency Motors, (5) LED Traffic Lighting for Municipalities. (5052)

- Some maintenance measures should be exempt from PSD (5052, 5078, 5079). One of these commenters adds that, at a minimum, EPA must identify a list of activities at power plants that would be presumed to be routine maintenance, repair, and replacement (RMRR) unless unique conditions demonstrate otherwise. (5078)
- The tradeoffs between regulating GHGs and criteria pollutants should be addressed. For that reason, EPA's presumptive BACT determinations must include guidance on the impacts of GHG mitigation on conventional pollutant levels. (4515, 4691, 4989, 6458)
- BACT should be allowed the flexibility to obtain emission reductions from all equipment at the facility as well as from beyond the fenceline (e.g., compliance on a generating fleet basis, use of emissions offsets, etc.). (5078)
- To satisfy the public notice requirements for PSD permits: (1) EPA can publish BACT guidance and periodic BACT updates in the *Federal Register* pursuant to the administrative procedures in section 307 of the CAA for notice-and-comment rulemaking, (2) permitting authorities can publish in the newspaper or on their websites lists of sources in the state that have applied for construction (or title V) permits and/or revisions, as is currently done by most states, and (3) EPA can publish model permits which have these BACT alternatives imbedded through notice-and-comment rulemaking, and sources could opt into the permits by rule just as current sources utilize general storm water permits and other general permits under the Clean Water Act (CWA). (5052) Another commenter (5078) adds that presumptive BACT can be developed through notice-and-comment rulemaking, but permitting authorities should allow public comment on individual permits as to whether there are significant case-specific impacts that would require adjustment of BACT for that particular source.

- Should there be no presumptive BACT established, the EPA should issue the permit without consideration of a full BACT analysis. (4120) The commenter points out that this does not mean the facility would propose older and inefficient equipment, rather, it would base presumptive BACT on existing operational and environmental considerations. For the natural gas sector, for example, a permit could be issued without a full BACT analysis as follows:
  - BACT for CO_2 emissions = Good Combustion Controls.
    - Considering there are no pilot or commercial demonstration of end-of-stack CO_2 controls (including CCS) for turbines in natural gas pipeline operations, the BACT for the unit will be good combustion practices that optimize NO_x and carbon monoxide (CO) (which are by-products of incomplete combustion) with CO_2 (which is a product of complete combustion). Good Combustion Control Practices involve parametric monitoring and controlling the operating parameters of the turbine to ensure the unit continually operates as close to optimum (minimum emission) conditions as feasible.
  - BACT for CH_4 emissions = Best Management Practices (BMPs) under EPA Gas Star or company specific programs.
    - Due to measurement concerns related to fugitive and vented CH_4 emissions, the commenter urges the EPA not to prescribe quantitative PSD limits or standards related to CH_4-related emissions. The commenter suggests that EPA could instead issue the PSD permit considering work practice programs. For CH_4

emissions, these could be the company's operating practice of reducing GHG emissions through application of BMPs related to reducing fugitive and vented CH_4 emissions or the industry-wide work practices as outlined in the Natural Gas Star program.

- Domestic U.S. Offsets = BACT for sources without presumptive BACT.
  - The commenter supports the use of offsets and the use of domestic U.S. GHG offsets as a "transitional" solution under the Tailoring Rule till EPA finalizes presumptive BACT for sources. Offsets are supported as part of the nonattainment NSR program and for control of air pollution from the outer continental shelf activities. In addition, the commenter states that using offsets as BACT would produce the same environmental result at less cost to regulated facilities, because offset projects can provide lower cost emission reductions than many of the mitigation options otherwise applicable to large sources.

Some commenters (2504, 2731, 2797, 3306, 3512, 3916, 3858, 3916, 4019, 4106, 4118, 4241, 4512, 4515, 4519, 4555, 4691, 4746, 4749, 4863, 4864, 4866, 4871, 4949, 4951, 4989, 4990, 5041, 5056, 5058, 5059, 5061, 5064, 5073, 5079, 5084, 5085, 5110, 5113, 5123, 5124, 5133, 5139, 5147, 5236, 5301, 5305, 5339, 5340, 5443, 5714, 5742, 5863, 6203, 6458, 6681, 7935, 8025, 8691, 16411) did not explicitly support or oppose the use of presumptive BACT as a streamlining option, but they did offer suggestions about the use of BACT and/or presumptive BACT in general. Examples of the types of general comments received on presumptive BACT streamlining options are included in the following bullets:

- The preamble does not provide enough detail for meaningful comment on presumptive BACT. (5113, 5714) The commenters support a public and transparent process to address BACT issues generally and presumptive BACT specifically and would encourage EPA to provide an opportunity for this public discussion.
- Though the commenter acknowledges that there is an internal workgroup working on BACT options for industry, the proposed rulemaking does not address how to establish BACT for sources subject to PSD permitting requirements for GHG emissions. The commenter asserts that it is difficult to assess the economic impacts of the rule without more-detailed information on what would constitute BACT for the metal casting industry. (5236)
- Even though the use of presumptive BACT is supported, it is an insufficient streamlining tool. The commenter questions whether EPA will be able to make presumptive BACT determinations in a timely manner (especially within the next 1-2 years), and is concerned that presumptive BACT standards will be vulnerable to legal challenge and resulting delays and uncertainty. In addition, presumptive BACT would not alleviate other time-consuming aspects of the PSD permitting process, such as the requirement for public notice and comment. Ultimately, the hope that presumptive BACT will eventually make the PSD program feasible to administer is no substitute for reasonable limits on the initial scope of the PSD program. (4515, 4691)
- The EPA should adhere to the time-tested policies and procedures for determining BACT and, thus, avoid any requirement to redefine sources in the industry. (5131)
- Statements about "presumptive BACT" in the preamble seem inconsistent with the fact that BACT is by statute supposed to be a case-by-case analysis, rather than the imposition of national emission standards. (16411)

- The application of BACT under this rule should not be expanded beyond the historical definition and interpretation of the "affected source" (4106, 5124). BACT analysis should be limited to only those sources or units which are being installed or modified under a permit. (4106)
- EPA seems to be suggesting that it could be appropriate, under the rubric of determining BACT, to tell a source what type of combustion unit it must build, or what type of fuel it may use, or how it must engineer its manufacturing operations to reduce demand for the thermal energy or electricity that the combustion unit will generate. Such expansion of the statutory requirement to assure that the BACT is used for a particular project, into an inquiry by the permitting authority into whether a plant can be designed or operated more efficiently, or whether it might be environmentally preferable for the plant to be proposing a different kind of project, would be inconsistent with EPA's statutory authority, long-standing EPA interpretations and policy, and judicial and Environmental Appeals Board (EAB) decisions. (4749)
- EPA should temporarily assume the role of establishing "technical feasibility" for GHG control technologies until commercial availability becomes a decided issue. The EPA has held that technically feasible BACT is technology which is "available" and "applicable and the states should not assume this role initially to avoid a patchwork of regulations. (4106)
- Some commenters (4989, 5301, 6681) strongly support the consideration of energy efficiency improvements as BACT for GHGs and other pollutants to avoid disincentives for efficiency improvements, especially at power plants. Presumptive BACT considerations should also include biomass projects, energy efficiency projects, and offset projects. (5301)
- EPA should consider how PSD BACT requirements might be applied and streamlined for sources subject to regional or state GHG controls and cap and trade programs. (4118, 4863, 5064, 5305)
- It is incorrect to claim that insufficient information exists to at least estimate costs and streamlining efficiencies of BACT. (5139)
- BACT development should be a priority for the Tailoring Rule (4951). EPA "recognize[s] that considerable work will be needed to determine what options exist for controlling GHG emissions from different source categories and the various types of emitting equipment they use. (6203)" If no BACT definition is provided, it will be difficult to plan for and budget for projects if a potentially significant expense is unknown. (4241)
- Other commenters point out that the fundamental question is, "What is BACT for GHGs?" The commenters are concerned that, to date, there is no answer to this question (3306, 4515, 4691, 4871, 5110, 5137), including both combustion and non-combustion sources. In addition, there are no effective or commonly used add-on controls for removing GHG emissions. (4515, 4691, 5123)
- Presumptive BACT should not include CO_2 requirements (and CO_2 should be specifically excluded from presumptive BACT requirements), because there is no BACT for CO_2. (5183)

Examples of the types of comments received presumptive BACT streamlining options for particular industry sectors are provided in the following bullets:

- Thermal destruction technology and combined heat and power should be exempt from all PSD and title V requirements. (5041)
- EPA should be consistent in its encouragement of the use of biomass as a fuel source. If EPA does not specifically exempt the carbon neutral emissions from these processes from the applicability determination, it is likely that fuel switching projects to biomass could trigger PSD review for CO_2, when EPA has been otherwise promoting the use of renewable fuels. (4749, 5073, 5313)
- EPA should consider net reductions (i.e. life-cycle analysis) of GHG emissions when establishing a presumptive BACT for waste-to-energy operations. (5305, 5742) One commenter contends that the direct emissions from waste-to-energy facilities are more than offset by the overall GHG reductions that waste-to-energy provides through three separate mechanisms: 1) by generating electrical power or steam, waste-to-energy avoids CO_2 emissions from fossil fuel- based electrical generation; 2) combustion of waste in waste-to-energy facilities eliminates the need for landfill of those wastes and effectively avoids landfill CH_4 emissions; and 3) the recovery of ferrous and nonferrous metals from municipal solid waste at waste-to-energy facilities is more energy efficient than production from raw materials. (5305) Another commenter (6458) added that treatment of waste-to-energy as a source of GHG emissions would be inconsistent with internationally accepted science and accounting procedures (commenter cited various examples of where this idea has been embraced).
- EPA should provide special considerations for the oil & gas production and chemical and refining industries through separate rulemakings with opportunity for notice and comment, in lieu of the PSD permit-by-permit BACT approach. (4106)
- There is considerable uncertainty as to what constitutes BACT for the manufacturing sector. For example, what viable technology exists for GHG control? Would BACT have to be developed for each of the GHGs or would it require a net certain percentage reduction? The commenter welcomes the opportunity to work with other interested stakeholders in establishing BACT for their industry to advocate the following: (1) Ensuring GHG BACT requirements are technically feasible and cost effective; (2) Maintaining current source definitions; (3) BACT is equipment/project specific and not facility-wide; (4) Allowing netting-out provision, including ability to use offsite "offsets;" (5) Modified "top-down" BACT analysis; (6) Expedited development of GHG Presumptive-BACT standards; and (7) PSD GHG trigger/permit applicability based on current conventional pollutant PSD Program. (8691)
- Modern NG facilities should be presumed to comply with BACT or should be exempt from BACT analysis. (4515, 4691, 4749) Natural gas pipeline combustion units minimize GHG emissions to the greatest extent feasible, and therefore already satisfy BACT standards. (4515, 4691) Gas-fired engines, such as those used in pipeline compressor stations, are designed to operate at an optimal level of efficiency given other engineering and regulatory constraints that apply to pipelines. (4515, 4691) Altering the horsepower of these engines could upset a delicate balance between pipe size and compression levels that allow interstate pipelines to operate cost-effectively. (4515, 4691) Requiring a PSD permitting process for GHGs would not yield any significant environmental benefit because there is no available add-on control technology (e.g., CCS technology is still years from being widely available), using electric pumps would result in higher emissions in most parts of the country, and firing with biogas is technically

infeasible (4515, 4691, 4749). Moreover, consideration of these alternatives would lead permitting authorities to engage in dubious second-guessing of natural gas pipeline design and engine selection, potentially leading to redefinition of the source in a way that is inconsistent with the language of the CAA and past practice in PSD proceedings. (4515, 4691)

- One of these commenters adds that BACT for GHGs must take into account the demands of the marketplace for flexible power generation. This would include: (1) Flexible technologies that can start up and be brought online quickly where peak demand is unpredictable; (2) trade-offs between criteria pollutants and GHG control; and (3) development of new technology such as the use of IGCC (or any other technology) when coal has been selected as the fuel for a source. (5147)
- Presumptive BACT or general permits for fossil-fired generating units should provide for, and focus on, measures that only address CO_2, and not all six of the GHGs (which would require a wide range of reduction measures). (5313)
- Implementation of GHG emission controls at small installation sites of engines and gas turbines with a multitude of unique application requirements is a function of two aspects (3512): (1) efficiency of the work performed at each unique site, and (2) the fuel used. To try to address this GHG BACT issue for these small sites, the commenter makes following general comments and observations concerning GHG BACT related issues:
  - The local/state GHG BACT review should not redefine the type of source being permitted or prime mover technology being proposed. A control technology must be feasible within the design elements and process configuration proposed, including the prime technology and fuel types chosen by the permittee.
  - Not all biofuels are created equally when it comes to GHG impact. EPA's recent "Renewable Fuel Standard 2" clearly showed significant differences in the GHG impacts of various renewable fuels based on the lifecycle analysis completed.
  - If the agency chooses to institute presumptive BACT analysis for GHG emissions from ethanol production facilities, the creation of an agency/industry advisory group to identify and develop realistic and cost-effective tools for the implementation is absolutely needed. (4555)
  - EPA should establish a collaborative process in developing BACT for CO_2 management, for entities which are already engaged in "best practice" management of CO_2. (4990) In addition, the impact of the application of BACT to facilities that currently sell certain off-gas streams to processors that remove and purify the CO_2 and place it into commercial applications should be addressed. (4990)
  - Streamlining should be developed for landfills. EPA should carefully develop presumptive BACT that initially aligns with current regulations, citing in particular, the NSPS for landfills that was carefully developed to reduce non-methane organic compound(s) (NMOC[s]), but also effectively reduces CH_4 emissions. Commenter continues that at a later date, presumptive BACT can be updated as EPA's re-evaluation of the landfill NSPS is completed and any resultant rulemaking finalized and asserts this approach should minimize unnecessary impacts to the landfill industry. (4863)

Examples of particular presumptive BACT streamlining mechanism suggestions submitted by commenters include the following:

- In the absence of a GHG technologies database, EPA should develop industry-specific BACT guidelines along with the rule. (2731, 4989)
- EPA should develop BACT templates at least for larger sources to streamline the permitting process. (5147)
- Guiding principles should be developed to frame the development of GHG BACT and these principles should consider and/or state that:
  - Limiting the definition of the affected source such that unaffected sources/operations are not subject to BACT. Barring downstream/debottlenecking effects, increases of GHGs at a single source within a unit should not subject an entire unit to BACT review. This approach is identical to that already employed for other criteria pollutants (5124).
  - Fundamental redesign of a unit should not be an option under BACT. BACT is the application of a control technology. The redesign of a unit to utilize different fuels or to require a different process design falls outside of the scope of a control technology. For example, BACT reviews should not force utilities and other combustion sources to "fuel switch" from coal to natural gas, which would have significant economic impacts throughout the country. EPA should continue to defer to regulatory and operational considerations in determining BACT for GHGs. (4515, 4691, 5058, 5079, 5085 5124, 5123, 5224)
  - Questions such as "why does this unit need to be built?" and "why does the design capacity need to be at X level?" are not within the purview of the BACT analysis (5124). For example, it should not be appropriate for EPA, under the rubric of determining BACT, to tell a source what type of combustion unit it must build, or what type of fuel it may use, or how it must engineer its operations to reduce demand for the thermal energy or electricity that the combustion unit will generate. (16411) Commenters believe that such expansion of the statutory requirement to assure that BACT is used for a particular project, into an inquiry by the permitting authority into whether a plant can be designed or operated more efficiently, or whether it might be environmentally-preferable for the plant to be proposing a different kind of project, would be inconsistent with EPA's statutory authority, long-standing EPA interpretations and policy, and judicial and EAB decisions.
  - Energy efficiency will be central to BACT. At this time, there are virtually no "end-of-pipe" control technologies for GHGs. BACT requirements should not force unproven or uneconomical technology, such as CCS. (5124)

Various commenters (2797, 4860, 5062, 5081, 5141, 5143, 5306, 5082, 5143, 5337, 7935, 8015) oppose the use of presumptive BACT as a streamlining option. Examples of general reasons provided by commenters for opposing presumptive BACT as a streamlining option include the following:

- Presumptive BACT may not be an effective means to address permitting burden concerns because the insufficiently flexible permitting scheme requires a flexible BACT analysis, appropriate to the particulars of a specific tool and process configurations and technologies. For that reason, it is unlikely that presumptive BACT could play a constructive role in addressing these deep and fundamental concerns, at least in the near term. (5143)

- EPA should not decide the BACT absent a notice-and-comment rulemaking. In the proposed rulemaking EPA does not address how to set the BACT for sources subject to the PSD and permitting requirements. (5062)
- EPA statements in the rule preamble about "presumptive BACT" seem inconsistent with the fact that BACT is by statute supposed to be a case-by-case analysis, rather than the imposition of national emission standards. (5141, 5306, 8015) Case-by-case BACT determination affords flexibility to consider a range of case-specific factors, such as available control options and collateral cost, energy, and environmental impacts. (5141) The diversity of process technologies within industry creates a range of case-specific factors that would likely interfere with identification of a presumptive BACT approach that would achieve the desired streamlining and permit efficiency. (5141) One of commenters is also concerned that EPA seems to be suggesting that it could be appropriate, under the rubric of determining BACT, to tell a source what type of combustion unit it must build, or what type of fuel it may use, which would be inconsistent with EPA's statutory authority, longstanding EPA interpretations and policy, and judicial and EAB decisions. (8015) One of these commenters added that presumptive BACT may therefore only be imposed on the basis of source - and pollutant-specific demonstrations of necessity such that: (1) The PSD provisions do not contemplate the use of presumptive BACT; and (2) presumptive BACT is considered only under limited circumstances. (5306)
- Establishing presumptive BACT raises various concerns (5082):
  - Would the presumptive BACT undergo public scrutiny?
  - How would presumptive BACT be established for a pollutant with no currently available feasible control technology options?
  - How would you establish BACT for combustion devices when reducing CO_2 and reducing CO (another PSD pollutant) are mutually exclusive?
  - How will EPA reconcile PSD permits where BACT for CO is catalytic conversion, which consequently causes increases in CO_2 emissions and cannot by definition be BACT for CO_2?
  - How will EPA resolve BACT for energy efficiency projects at single combustion sources which necessarily mean increases in CO_2 because to increase energy efficiency requires more efficient combustion resulting in more CO_2 emissions per hour than inefficient combustion?
  - Under PSD, would we have to consider inefficient combustion as a means of reducing CO_2 from a combustion source because that would result in the lowest emissions limitation achievable in practice?
  - It will dampen the technology forcing aspects of case-by-case BACT determinations. (4860, 5081, 7935)
  - It does not address the largest sources that would be brought under the Tailoring Rule. (2797)

Examples of the type of comments received on particular industry sector presumptive BACT streamlining concerns submitted by commenters include the following:

- The use of presumptive BACT may cause several problems for the semiconductor industry:

- To date, there are no BACT determinations for GHGs for the semiconductor industry. Moreover, even if in the near future there are BACT determinations for combustion sources, it is unlikely that there will be any near term BACT determinations for control of PFCs used in manufacturing. Because the semiconductor industry's use of PFCs is unique, the determination of BACT for PFCs will likely be slow and time consuming, at least at first. (5143)
- It is impossible for the fast moving semiconductor manufacturing industry to plan ahead and design the necessary controls when it is unknown if those controls will later be deemed to be compliant with BACT standards. Since BACT would be determined case-by-case, it is also not feasible for the semiconductor industry association to identify common BACT solutions for all of its operations, since the BACT review would be performed by different state and local agencies for semiconductor industry association member companies' different locations. (5143)
- Since the actions to reduce PFC emissions in the semiconductor industry have been voluntary, the abatement devices are not incorporated into local or state air permits; therefore, they would not be federally "enforceable" to limit the potential to emit of these GHGs. (5143)
- Most of the abatement devices used to control PFCs are point-of-use devices (e.g., burn boxes) which are connected by interlocks into each separate manufacturing tool. As such, not only are there potentially hundreds of tools that will be replaced numerous times over a 5-year period, but there are a similar number of abatement devices in use. Because the devices are connected to each tool, and hundreds are spread throughout the manufacturing facility, the application of periodic or compliance assurance monitoring (CAM) to these devices under title V would be a huge administrative burden. Similarly, compliance testing would be problematic and expensive because these devices are neither designed, nor manufactured, with traditional sampling locations or ports. Finally, because the devices are connected to the tools they support, as the tools are changed out, the control devices also will be changed frequently. As such, it will be challenging for permitting agencies to respond to changes of this nature. (5143)

- The use of presumptive BACT could be tremendously damaging to the Energy-Intensive Trade-Exposed (EITE) industry. Process emissions are inherent in the underlying chemical reactions, and by and large they can only be changed by a change in the process itself – in which case the operation becomes a different type of operation. EITEs have powerful economic incentives to manage energy and emissions using things like recycled materials, cogeneration or combined heat and power systems, process improvements, and fuel switching. The use of the most efficient production processes, and maximizing energy efficiencies are already an integral part of the production processes in the EITE industry, and should not be addressed through a regulation which includes presumptive BACT. (5337)

Opposing commenters (4238, 4239, 4860) also gave suggestions about how to address presumptive BACT. These suggestions include:

- If EPA is to pursue presumptive BACT determinations, a commenter (4860) recommends that: (1) presumptive BACT determinations should be limited to a small number of source categories; 2) timely guidance regarding presumptive BACT by source category

should be issued by EPA; and (3) that BACT determinations should be revisited by EPA on a predefined schedule of not more than 5 years.

- If EPA believes that predefining the technology is the best approach, then EPA should develop a NSPS instead. (4238, 4239)

Response:

Since many commenters had differences of opinion as to whether and how we should move forward on the use of "presumptive BACT" as a streamlining option, including policy and legal concerns, we are not finalizing this option at this time. We would likely want to explore, through a notice and comment process, if this measure is viable to pursue further. These comments, including as any concerns expressed by commenters about this approach, will be addressed in the action(s) where we might apply this streamlining option.

Nevertheless, we want to clarify that while the BACT provisions clearly contemplate that the permitting authority evaluate control strategies on a case-by-case basis, EPA recognizes the need to develop and share policy guidance and technical information for sources and permitting authorities as they begin to permit sources of newly regulated pollutants, such as GHGs. When applied in a practical matter, this additional EPA guidance and technical information should reduce the time and resource needs when evaluating BACT for newly regulated pollutants. For that reason, section IV.E.2 of the final rule preamble discusses details of the current efforts underway to issue BACT guidance.

Thus, while BACT will remain a case-by-case assessment, as it always has been under the PSD program, EPA is confident that this guidance development effort will help support a smooth transition to permitting emissions of GHGs. Furthermore, EPA will continue to work to provide the most updated information and support tools to allow permitting authorities to share and access the most updated information on GHG BACT determinations as they are made once permitting of GHGs begins. EPA remains committed to involving stakeholders in the upcoming efforts to develop guidance to help to permitting authorities in making BACT determinations for sources of GHGs.

4.4 General Permits and Permits-by-Rule

The proposal preamble notes that we have limited experience in developing general permits and permits-by-rule under the PSD program because of the predominance of the case-by-case BACT determination process. In contrast, we note that, in the title V program, general permits are specifically authorized under CAA section 504(d) and are widely-used. 40 CFR 70.6(d) specifically authorizes the use of general permits covering numerous similar sources under the title V program, and 40 CFR 70.7(h) stipulates the public participation requirements. We acknowledged that the process for a general permit can take anywhere from 2 to 3 years to be fully developed. Additionally, at proposal, we sought comment on the use of general permits within the PSD and title V programs. Comments received on the use of general permits/permits-by-rule to streamline permitting under PSD and title V are presented in this subsection.

Comment:

Various commenters (2997, 3278, 4154, 4298, 4515, 4526, 4691, 4860, 4863, 4940, 5078, 5079, 5111, 5130, 5135, 5198, 5280, 5306, 5313, 5329, 5711, 7026, 7935) support the use of general permits and/or permits-by-rule to streamline the permitting process. Some of the reasons for their support include:

- The general permits and/or a permit-by-rule option would serve to streamline the process and reduce both administrative burden and potential permitting delay. (4154, 4515, 4691, 4863, 5130, 5329, 5711, 7026, 7935) Some of these commenters added that this would be particularly helpful for semiconductor facilities (5329) and common types of control devices such as boilers, process heaters, and combustion turbines (4154, 5130) as well as commercial and residential natural gas appliances and equipment (5711).
- General permits and permits-by-rule are adequate streamlining options, but case-by-case review and the development of a site-specific permit, even if there is a general permit that would cover the site in question, should always remain an option. (4940, 5079)
- EPA should issue a standard general PSD permit for very small GHG emission sources that will effectively allow these permits to be issued within 30 to 90 days. (5417).
- General permits may prove useful in administration of a title V program for sources subject to title V solely by virtue of their GHG emissions. (4515, 4691, 5306)

Commenters (3278, 4298, 4515, 4526, 4691, 4860, 4863, 4990, 5111, 5313, 5711) also provide comments on and suggestions for developing general permits and/or permits-by-rule. These suggestions include:

- Use of general permits should be limited to a small list of source categories and that these general permits should contain output based emission limitations wherever possible. (4860)
- Using PTE limits and/or permits by rule for smaller or limited-use sources, such as emergency generators or Heating, Ventilation, & Air Conditioning (HVAC) equipment where there are practical and/or legal limitations on hours of operation or other key factors in determining a facility's true PTE. (5078, 5079)
- These general rules could take the form of operational limitations, provided such limitations provide a streamlined method to allow a source to operate for longer hours or at a greater throughput upon request to the permitting agency, and provided such limitations do not apply to energy efficiency and pollution control improvements. (4298)
- Recognizing that a sector-by-sector general permit would take time to develop, perhaps in the first 3 years of the first phase, a general PSD permit for GHG can simply have a few requirements, such as mimicking any requirements from EPA's mandatory reporting program, a listing of Class I National Parks with distances from the facility, and a generalized discussion of BACT (4863). The commenter adds that at this stage, BACT can be efficiency measures used by the project to reduce energy. (4863)
- For a limited period, initiate blanket use of general permits for "urgent" (necessary to avoid a material adverse affect on health and safety) and "small" (less than 100,000 metric tpy CO_2e) projects, and a moratorium on GHG permits for all other projects. This would maximize streamlining, diminish adverse economic impacts (and reduce the likelihood of litigation from permitted sources), and allow more time for the Clean Air

Act Advisory Committee (CAAAC) Climate Change Work Group to formulate a legally robust and administratively streamlined set of procedures. (4526)

- General permits will violate the text of the CAA if we move from a case-by-case BACT determination basis to a presumptive BACT system. For that reason, this commenter would like general permits to only be imposed on the basis of source- and pollutant-specific demonstrations of necessity such that: (1) the PSD provisions do not contemplate the use of general permits, and (2) general permits are considered only under limited circumstances. (5306, 5711) One of the commenters adds that for gas-burning sources, general permits should only be applied to those sources that could not be excluded from the PSD program under EPA's proposed approach. Even then, it should serve simply as a checklist of generally accepted technology that sources should consult to make sure they were not behind the times. (5711)
- Permits-by-rule should be allowed to exempt sources from NSR pollutant requirements for PSD because small sources captured in the program under the initial definition and subjected to PSD/title V permitting requirements might not later be considered a PSD/title V source with a revision of the definition for PTE. (3278)
- General permits could easily be developed for different categories of landfills, which should ease the burden on smaller sites that are currently not in the title V program. (4863)
- The EPA should develop an affirmative designation for sources that use administrative controls to remain below the "major source" threshold, e.g. a facility that has the potential to emit enough CO_2 to be required to obtain a permit, but sets limits on operating hours or other controls to ensure that the facility stays below the permitting threshold. Such an affirmation of administrative control could either be in the form of a general permit, permit-by-rule, or as a self-declaration kept on record at the affected site. (4990)
- Allow for a variance from a general permit on a case-by-case basis where an alternate standard is warranted. (5313)
- Employing general permits would require a fundamental change to the PSD program (4515, 4691) because:
  - General permits, while well-established, have typically been used for minor source NSR permits and a limited number of title V operating permits, not PSD, mainly because the CAA's PSD provisions require case-by-case determinations of BACT.
  - States would need to revise their SIPs to adopt this more expedient process for PSD.
  - General permits must also include presumptive BACT, which could take years to develop.
  - The paucity of technical and economic data and other supporting information related to GHG BACT will result in a significant number of challenges during the required public review process. Such legal challenges could delay permits for months or years.
- EPA should consider issuing national model PSD permits for GHG sources that contain a menu of options of potential BACT measures that sources can adopt to streamline permitting. If a source elects one of these options, then it can forgo case-by-case BACT review by adopting a presumptive BACT that already has been subject to public participation, thereby alleviating the burden of public comment on its decision. Because such general permits already will have been subject to public comment upon adoption of

the general permit into a state's law, additional public comment will not be required and the burden to regulators and the regulated community would be reduced. (5111)

- In order to streamline permit issuance by eliminating case-by-case public participation requirements, the commenter urges EPA to immediately commence rulemaking on a national general permit for title V sources pursuant to which an affected entity would provide notice of applicability of the general permit to its operations and operate under that national permit. Since title V fees do not apply by law to pollutants other than pollutants regulated under a NAAQS, NSPS or National Emission Standards for Hazardous Air Pollutants (NESHAPs), pursuant to section 502(b) (3) (B) (ii) of the CAA, state and local authorities would be relieved of the considerable burden of issuing title V permits to entities for whom they would have no authority to levy permitting fees, and the notices would provide national and local authorities the ability to track major sources of GHGs. (5111)

Some commenters (4863, 5139, 6414) did not explicitly support or oppose the use of general permits and/or permits by rule as a streamlining option. However, these commenters had comments on the use of general permits and/or permits by rule, including:

- EPA's argument that it should be allowed to redefine "potential to emit" as "actually emitting" is not justified in this instance, as the permits themselves could be streamlined by including legally and practically enforceable general limits on operational parameters. (5139)
- EPA has proposed to disapprove elements of the commenter's state's air permitting program where a key component of the minor source permitting program is the use of general permits or permits-by-rule, because of the assumption that these minor source programs have systematically been utilized inappropriately to authorize major sources and circumvent major NSR requirements. The commenter believes that EPA now proposing to use these very same mechanisms to authorize major sources will be confusing to some, but perhaps a signal that a more rational policy has been adopted by others. (6414)

Some commenters (5082, 7935) oppose the use of general permits and/or permits by rule as a permitting streamlining option. Their reasons for opposition include:

- If GHGs were to become subject to control requirements, many sources would be applying for title V permits at the same time. As a result, permitting authorities would face unrealistic title V permit processing demands. Such demands would likely make it impossible for authorities to act on title V applications within 18 months, as generally required, which could ignite a wave of litigation over missed deadlines. (5082)
- General permits cannot substitute for the case-by-case analyses required under PSD provisions because general permits do not allow for facility-specific conditions. (7935)

Response:

Since commenters echoed many of our concerns about why it will take time to put these measures in place and many commenters had differences of opinion as to whether and how we should move forward on these approaches, including policy and legal concerns, we are not finalizing the general permits and permits-by-rule streamlining options at this time. We would

likely want to explore, through a notice and comment process, which of these measures is viable to pursue further. These comments, including any opinions about the legal and policy direction we must take regarding these streamlining options, will be addressed in the action(s) where we might apply them.

4.5 Electronic Permitting

The proposal preamble for the Tailoring Rule acknowledges that the use of electronic permitting is growing across the U.S. as more states implement new or upgraded systems. We believe that the use of electronic permitting (in addition to the use of general permits) could assist in addressing some of the administrative burdens that may occur due to GHG emission sources being added to the PSD and title V programs. Comments received on electronic permitting as an option to streamline the PSD and title V permitting process are presented in this subsection.

Comment:

Some commenters (5079, 5711) support the use of electronic permitting as a streamlining option. These commenters state that electronic permitting could:

- Help streamline the PSD program for sources already considered major sources for conventional pollutants, as well as those that would be brought into the program for GHG emissions by reducing the time, cost and resources expended by permitting agencies and applicants to obtain a PSD permit. (5711)
- Help where data entry may be used for multiple compliance programs, such as a consistent data platform between PSD and GHG Mandatory Reporting Rule requirements. (5711)

Various commenters (2504, 4238, 4239, 5082, 5135, 5198) oppose the use of electronic permitting as a streamlining option. The reasons for their opposition include:

- EPA should not address electronic permitting as part of the Tailoring Rule. EPA should do so in a separate rulemaking and only after a careful evaluation of how such rules impact individual states. (2504)
- Electronic permitting approaches would not be helpful until states have gained some experience implementing the new requirements into their PSD and title V permitting programs. (4238, 4239)
- The commenters' states attempted the use of electronic permitting and that the effort was unsuccessful and resulted in a significant loss of money and time. (5135, 5198)
- EPA has not demonstrated how electronic permitting of major sources of GHG will reduce the amount of time required for permitting or how it "streamlines" the permitting process. Therefore, the commenter states that EPA should not rely on this "potential" streamlining" method to mitigate the absurdities that will result from EPA's regulation of GHGs. (5082)

Response:

Even though electronic permitting is a streamlining approach that does not require rulemaking or state adoption, this approach will require implementation experience with GHG that is not now available. We expect that at least 1 year of implementation experience (of the type we will gain starting in 2011) would be required, plus at least an additional year to extrapolate that experience to small sources and put this approach into effect. For that reason, we are not able, at this time, to presume that this approach will ease any burden prior to the planned rulemaking for step 3 (i.e., later half of 2011, to promulgate by July 2012, effective July 2013). These comments, including as any concerns expressed by commenters about this approach, will be addressed in the action(s) where we might apply this streamlining option.

4.6 "Lean" Techniques for Permit Process Improvement

The proposal preamble describes "lean" techniques as referring to a collection of process improvement principles, methods, and tools designed to help organizations identify and eliminate non-value-added activity ("waste"), in order to meet customer needs better, more quickly, and more efficiently. In the context of air permitting, we assert that "lean" improvement events typically focus on eliminating administrative process waste (e.g., backlogs in permitting, document errors, unnecessary rework on documents, delays associated with transmission of documents between various parties that develop and approve them). We acknowledge that many states employ "lean" techniques to improve air permitting and other agency processes and believe that similar and improved "lean" techniques could be employed as a streamlining option/tool for GHG PSD and title V permitting purposes. This subsection presents comments on the use of "lean" techniques as a streamlining option/tool for GHG PSD and title V permitting.

Comment:

One commenter (5711) expresses explicit support for the use of "lean" techniques for permit process improvement. The commenter believes that lean permitting may reduce procedural waste by reducing or eliminating permit backlogs, errors, unnecessary redrafting of documents, and delays due to transmitting documents among the parties that develop and approve them. (5711)

A few commenters (2504, 4238, 4239) oppose the use of "lean" techniques for permit process improvement. The reasons for their opposition include:

- EPA should not address "lean" as part of the Tailoring Rule. EPA should do so in a separate rulemaking and only after a careful evaluation of how such rules impact individual states. (2504)
- "Lean" approaches would not be helpful until states have gained some experience implementing the new requirements into their PSD and title V permitting programs. (4238, 4239)

Response:

Even though "lean" permitting is another streamlining approach that does not require rulemaking or state adoption, this approach will require implementation experience with GHG that is not now available. We expect that at least 1 year of implementation experience (of the type we will gain starting in 2011) would be required, plus at least an additional year to extrapolate that experience to small sources and put this approach into effect. For that reason, we are not able, at this time, to presume that this approach will ease any burden prior to the planned rulemaking for step 3 (i.e., later half of 2011, to promulgate by July 2012, effective July 2013). These comments, including as any concerns expressed by commenters about this approach, will be addressed in the action(s) where we might apply this streamlining option.

Appendix K: API Response to Sub-workgroup Information Request

Howard J. Feldman
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June 18, 2012

John A. Paul, Administrator
RAPCA
117 S. Main St.
Dayton, Ohio 45422-3280

Re: Streamlining of Greenhouse Gas Permitting

Dear Mr. Paul,

As requested, the American Petroleum Institute (API) and its member companies are pleased to provide the attached input on permit streamlining approaches for PSD, Minor NSR, and Title V permits for greenhouse gas emissions.

API and its members have been actively working with EPA to identify mechanisms to simplify permitting of greenhouse gas emissions, should such permitting be upheld in the courts.

API is providing responses to the five questions provided in your May 22, 2012 email and looks forward to the opportunity to discuss these issues further with the Clean Air Act Advisory Committee.

Please contact me to arrange a mutually suitable time to discuss these issues further.

Sincerely,

Howard J. Feldman

Attachment
Cc: CAAAC GHG Streamlining Workgroup

API Responses to CAAAC GHG Streamlining Workgroup Questions
June 18, 2012

Question 1 - Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold…What is the general set of requirements triggered (see workgroup attachment, "PSD Program Overview" for reference)?

Requirements triggered for all pollutants above significance levels:

- Best Available Control Technology (BACT)

  Comment relative to GHG BACT: In all GHG PSD permitting experience to date, EPA's binding guidance to treat CCS as "available" has resulted only in permit review delays and excess costs. API is not aware of any BACT assessment resulting in the requirement to implement CCS. This is because there is universal agreement that CCS is not currently a commercially available technology and will not be commercially available until a much later date, possibly 2030 or later. EPA's insistence that CCS be considered in every BACT review comes at substantial cost and, more importantly, delay in both the preparation and review of permit applications and associated BACT analyses. It also results in delays in the processing of applications as the reviewing authorities are obligated by this guidance to collect and analyze data regarding CCS BACT. (*See p. 22 of API, et al. comments to EPA on Step 3 of the Tailoring Rule for additional discussion.*) This is complicated by the fact that the state permit reviewers do not always understand EPA's suggestions regarding the depth and breadth of a CCS BACT analysis. Treating CCS as available requires companies to make substantial investments in the development of capital and operating cost estimates and to responses to questions regarding CCS. This can add three to six months to the permit preparation and review time that provides no environmental benefit.

  As part of the top-down BACT process, API understands that BACT Step 1, the identification of all available control options, is intended to capture a broad array of potential options for pollution control. However, as EPA has recognized, this Step is not without limits. For example, EPA has recognized that a Step 1 list of options need not necessarily include inherently lower polluting processes that would fundamentally redefine the nature of the source proposed by the permit applicant. BACT should generally not be applied to regulate the applicant's purpose or objective for the proposed facility[1]. We agree that BACT should not generally extend to redefining the source but believe the existing guidance is insufficient and leads to permitting delays as some agencies, in fact, seem to require extended analyses of options that should be well beyond a BACT analysis. We suggest issuing firm guidance with examples documenting the need to restrict the review to legitimate BACT options and not to extend the BACT review to options inconsistent with the applicants' intended objectives and purpose for the proposed project. Reviewing authorities should not question basic facility design considerations such as fuel types or the choice of a simple cycle combustion turbine versus a combined cycle unit. Attributes such as these go to the fundamental design and purpose of a unit and are not candidate BACT technologies.

- Public Notice and Comments

  API suggests that one very easy way to streamline the permit review and issuance process would be to ask USEPA to limit its comments to the initial draft and proposed PSD permits prepared by state and local agencies. We are concerned that the growing trend of using an opportunity to comment on a Title V permit is actually creating an extended comment period relative to the issuance of the initial PSD permit. In states like Louisiana, where obtaining the Title V permit is prerequisite to beginning construction, this practice creates additional construction and project delays for no real benefit.

Additional requirements triggered for all pollutants with NAAQS that are above significance levels include:

[1] "PSD and Title V Permitting Guidance for Greenhouse Gases, United States Environmental Protection Agency, Office of Air and Radiation, March 2011.

- Ambient Air Quality Analysis
- Soils, Vegetation, and Visibility Analysis
- Class I Area Impact Analysis

The above three analyses add additional time and cost to any PSD permitting effort, for both the applicant and the reviewing agency. It is important to note that the number of instances where these analyses are required has increased with the regulation of GHG emissions under the Tailoring Rule. As described further in response to Question 3, there are several instances where GHG emissions trigger major source status for a facility and the above reviews are then triggered for non-GHG pollutants that are emitted above significance thresholds, even if the source is not a major source for those pollutants.

Further, the results of these analyses can create capital expenditures of dubious value that would not otherwise be needed. In one example project, the ambient air quality analysis (triggered solely by GHGs) lead to a need to increase stack height to stay below the significant impact level (SIL) for the 1-hr NO_2 standard. The impact of the NO_2 release was not consequential relative to the NAAQS, but to avoid the delay and cost of multi-source modeling against the NAAQS, the plant decided to increase the stack height in order to expedite permit approval.

The following additional approvals are also triggered if the permit is being issued by EPA or a delegated state permitting authority:

- Endangered Species Act (ESA) Biological Assessment and Cultural Resources Report

  EPA will not issue a PSD permit until it establishes that the permit will have no impact on endangered species pursuant to Section 7 of the ESA. This means that when a PSD permit is required solely as a result of GHG emissions, an ESA review is required, even though the US Fish and Wildlife Service, the Department of the Interior, the National Marine Fisheries Service and the National Ocean and Atmospheric Administration have acknowledged in rulemaking that GHG emissions from a single source have no measurable impacts on endangered species[2]. Instead, the scope of the ESA review is for other emissions emitted in less than significant quantities even when the only reason the source is seeking a PSD permit is because of GHG emissions. In these circumstances, the ESA review has nothing to do with GHG emissions, but rather examines the other emissions, regardless of whether they are above a significance level. The technical effort to complete the ESA review is substantial and can be seasonally dependent for certain species, meaning that the evaluations can extend greater than one year. Also, EPA guidance on how to complete the review is lacking. For example, there is no current EPA guidance for determining the impact of emission deposition on bodies of water.

  In addition, EPA must complete a consultation in accordance with Section 106 of the National Historic Preservation Act (NHPA). To expedite these consultations, EPA requests that the permit applicants provide a biological assessment and cultural resources report covering the project and action area. EPA has requested that this information be submitted as early as possible so that the Agency may issue a permit at the earliest possible time, and within the timeframes required by statute. Because GHG emissions do not impact local habitats, API is urging EPA to revisit this policy and eliminate the need for such assessments where emissions of other constituents are not significant, as defined in the permitting regulations. (*See p. 21 of API, et al. comments to EPA on Step 3 of the Tailoring Rule for additional discussion.*)

  At a minimum, the Agency should publish guidance for streamlined ESA analyses where the only significant emissions are GHGs to avoid the need for complex ESA reviews where non-GHG emissions are not significant.

- Environmental Justice Analysis (Independently performed by EPA)

[2] 76 FR 76272

Permit applicants understand the need for the EJ review per Executive Order 12898. Because the review is prepared by EPA, the permit applicant project schedule is impacted by the Government's limited resources to perform these reviews. We propose streamlining techniques for the EJ analysis in responses to Questions 4 and 5.

Question 2 - Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold… What are the consequences or impacts of triggering these requirements for your particular industry?

Triggering PSD solely because of GHG emissions creates a deterrent to economic recovery and growth. Specifically, as a result of having to take the actions described in response to Question 1 above, PSD permitting triggered solely due to GHG emissions results in the following issues:

- Schedule delays
    - The PSD process generally adds time to any permitting timeline, but for permitting triggered solely by GHG emissions, the requirement to review CCS on a project-by-project basis adds time to application development and permit review for no benefit.
    - When EPA is the final permitting authority for GHG permitting, the unnecessary ESA review and NHPA review add time and cost to the permitting process with no associated benefit. The Environmental Justice review by EPA adds uncertainty to the review process and potential delays to the permitting timeline.
    - For cases where GHG emissions trigger PSD and other pollutants are emitted at significant levels, but below major source threshold levels, projects are subject to public hearings, BACT reviews, ambient air quality analyses, soils, vegetation, and visibility analysis, and Class I Area Impact Analyses that would not otherwise be necessary.
- Investment Uncertainty
    - API member companies seeking to execute capital projects need to be able to develop realistic and predictable project timelines to ensure that equipment can be designed, procured, installed, and brought on-line when expected and to support investment decisions. The uncertainty in the GHG BACT review process and, ESA, NHPA and EJ assessments, creates overwhelming obstacles to these investment decisions. Companies are forced to guess at the amount of additional time to build into the permitting cycle for planning. This generally results in an inherent weakening of calculated economic benefit of a given project, which can lead to deferral of projects or prioritization of alternate, foreign investment, over domestic projects. For projects that have investment needs of billions of dollars, the impact of these delays should not be under estimated.
- Air Pollution Control System upgrades
    - API laments the loss of EPA's prior Pollution Control Project guidance excluding Pollution Control Projects from PSD permitting. There are sound reasons supporting why a required air pollution control project, for example installing a device required for MACT or NSPS control, should be exempt from the PSD permitting process. API recognizes and respects the D.C. Circuit decision on the pollution control project exclusion, but believes there are other ways to facilitate and streamline permitting of these devices, such as general permits.

EPA has highlighted the fact that the number of GHG permits that have actually been submitted is smaller than anticipated. There are a number of reasons for this discrepancy. First, several companies expedited permit applications or started construction before the Tailoring Rule became effective. In addition, because PSD permitting is so burdensome and difficult to accomplish, companies often decide not to pursue projects that would be required to go through PSD permitting. In some cases, the economic return is insufficient to fund projects once the time required to obtain the PSD permit is factored in to the

entire project cost. In other cases, preliminary modeling shows that meeting the PSD modeling requirements will be a significant challenge. In these situations, many companies decide not to pursue the projects, foregoing the associated benefits.

API Responses to CAAAC GHG Streamlining Workgroup Questions
June 18, 2012

Question 3 - Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold… What are some likely source categories that will be brought into major source review solely because of GHG emissions? Examples specific to your industry would be most informative.

In the oil and gas industry, there are several project scenarios that can result in major source review solely because of GHG emissions. While it is possible to reduce non-GHG pollutants with add-on controls, this option does not exist for GHGs, leading to cases where GHG emissions push very low emitting projects into PSD. Some specific examples include:

- Upstream O&G operations - production facilities (These would generally be new facilities)
    - Flaring of associated gas – Some areas in the US have production operations that are forced to flare associated gas along with primary oil production due to a current lack of infrastructure to capture gas and transfer it to market. When flare emissions are combined with other GHG (methane) emissions, it is possible to trigger PSD solely due to GHG emissions. The PSD review for this scenario, however, does not result in any additional controls or reductions in emissions but does add uncertainty and time to the fast-paced development schedule for these projects.
    - Steam-intensive production activities – Certain oil production operations require the use of steam and therefore the installation of steam generators that emit GHGs. Although NO_x emissions can be maintained below significance levels with controls, it is not possible to do so for GHG emissions.
- O&G gathering and mid-stream operations (These projects could either be new facilities or modifications to existing ones)
    - Compressor stations – To move gas to market, it is necessary to utilize efficient natural-gas driven compressor engines. Generally, for efficiency of scale and operations, stations will often have several engines to handle the flow from a large number of production wells. Although NO_x emissions can be maintained below significance levels with combustion controls or end-of-pipe controls, it is not possible to do so for GHG emissions.
    - Processing plants – These include combinations of gas-fired compressors and equipment for separation of natural gas liquids.
    - CO_2 removal operations (acid gas treatment) - In many geographies, natural gas has elevated levels of CO_2, which must be removed to meet pipeline specifications for sale.
- Downstream O&G operations – refining operations (These projects would generally be modifications to existing facilities)
    - Cogeneration projects – As facilities continue to implement cogeneration projects for energy efficiency and stability purposes, reducing overall emissions (on a global basis), GHG emissions can still drive a project into PSD permitting. While some cogen projects can net out of PSD by retiring older boilers, this is not always the case. Quite often a facility must maintain a certain amount of reserve boiler capacity in the event of cogen outages. In this scenario, a facility would be forced to obtain PSD approval.

- The addition of boilers or combustion turbines – Relatively simple projects, which may even be supporting pollution control efforts, may trigger PSD for GHG pollutants due to the need for steam to support the project.

- Hydrogen production/adding hydrogen production capacity – As facilities continue to upgrade equipment and capabilities to produce lower sulfur fuels, including home heating oil, additional hydrogen capacity is often needed. While steam methane reformers efficiently produce hydrogen from natural gas and other light hydrocarbon streams, the units necessarily produce significant amounts of CO_2 from the carbon in the unit feed and from fuel firing in the furnaces.

Indeed, a facility with 200 MMBtu/hr aggregate combustion capacity burning natural gas would emit 100,000 tpy CO_2e, but using emission factors for low NO_X equivalent to 40 ppm, that facility would emit well under 40 tpy of NO_X. Presuming a CO limit of 100 ppm, CO emissions would be less than 65 tpy and for gas combustion would be a minor PSD source. Emissions of all other pollutants from gas combustion (SO_2, VOC and $PM_{2.5}$) are substantially lower than NO_X emissions, since emission factors for each of these pollutants are much smaller than the emission factor for NO_X. Thus, it follows that a facility subject to the 250 tpy PSD major source threshold could readily be minor for conventional PSD pollutants but could emit over 300,000 tpy CO_2e.

Further examples can be seen in Tables 1 and 2 below.

Table 1. Potential Facilities Subject to PSD Solely for GHG Emissions

			Emissions (TPY)					
Equipment Type	Details	Fuel	NO_x	CO	VOC	PM	CO_2eq	Fuel Usage (MMBTU/hr)
Boiler/Heater	Low NOx burners	NG	122	73	5	7	100,000	196
	SCR, catalytic oxidation*	NG	9	33	4	7	100,000	196
Turbine	SCR, catalytic oxidation*	NG	8	6	4	6	100,000	196
Reciprocating Engines	600 ≤ HP < 750 Tier 4	NG	74	36	35	8	100,000	196
	600 ≤ HP < 750 Tier 4	Distillate	53	26	25	6	100,029	140
	Lean Burn Engine (Cat G3516B)	NG	148	69	68	9	100,000	196
* BACT/LAER type controls								

API Responses to CAAAC GHG Streamlining Workgroup Questions
June 18, 2012

Table 2. Potential Major Modifications Subject to PSD Solely for GHG Emissions

			Emissions (TPY)					
Equipment Type	**Details**	**Fuel**	**NO_x**	**CO**	**VOC**	**PM**	**CO_2eq**	**Fuel Usage (MMBTU/hr)**
Boiler/Heater	SCR, catalytic oxidation*	NG	6.4	25.1	3.2	5.0	75,000	147
Turbine	SCR, catalytic oxidation*	NG	5.9	4.3	3.3	4.2	75,000	147
Reciprocating Engines	600 ≤ HP < 750 Tier 4	Distillate	39.9	19.2	19.0	4.2	75,000	105

* BACT/LAER type controls

The above situations are examples that we believe show that the reach and impact of the PSD program for sources subject solely to PSD as a result of GHG emissions has been under estimated by EPA and drives the need for additional streamlining efforts.

Question 4 - Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold… Are there any streamlining approaches short of applicability options? i. e., once applicability is triggered, are there any streamlining approaches that could simplify the triggered reviews of non-GHG pollutants emitted at significant emission rates?

The following streamlining approaches could simplify PSD reviews:

- For projects being permitted by EPA or a delegated permitting authority, the agency should develop guidance to greatly simplify the non-GHG issues that arise when PSD is triggered by GHGs.
    - Standardized local/regional guidance should be developed for endangered species act reviews, biological assessments, cultural resource reviews, and environmental justice reviews. Presumptive analyses would be appropriate. Further, a tiered concept similar to the use of significant impact levels (SILs) in PSD modeling could help reduce the uncertainty and burden on both the applicant and the agency.
    - A specific example for the O&G industry could be establishing presumptive analyses of the non-GHG issues for typical production operations in a given state or hydrocarbon basin. This approach would speed up the permitting process and reduce unnecessary agency burden.
- Focused efforts should be made to develop general permits and presumptive BACT, which are most likely to provide the greatest streamlining for the greatest number of sources, in the absence of direct PSD exclusions for GHG sources. In so doing, agencies should build on the transition policies and PTE guidance that EPA developed in the 1990s, and consider tiered simplification that incentivizes clean energy and environmental improvement projects.

The ability of General Permits to streamline the permit review process is well documented, and many states have implemented permit streamlining alternatives such as General Permits and Permits by Rule (PBRs). In Texas, for example, which has a bifurcated permitting system, there are more than 140 NSR authorizations (PBRs or standard permit registrations), plus six classes of Title V General Operating Permits (GOPs) – four cover oil and gas facilities in different groups of counties and the other two are for air curtain incinerators and municipal solid waste landfills. These authorizations, which are equivalent to general permits, are an essential mechanism for the regulated community. New Jersey and Pennsylvania also have successfully implemented General Permit programs. New Jersey has 24 separate General Permit categories and issued 6,803 General Permits in the past year. Online registration is available which provides instantaneous approval. Pennsylvania has 18 General Permit categories and has issued several hundred in the past year. Pennsylvania's regulations guarantee an approval in less than 30 days for General Permits.

Figure 1 compares permit processing times for various approaches as reported in 2008 by the Texas Commission on Environmental Quality (Biennial Report 2007-2208, Appendix B, Permit Time-Frame Reduction and Tracking). As shown in the table, the average permitting time for a federal PSD permit (pre-GHG permitting requirements) was 364 days versus 27 to 32 days for Texas PBRs and Standard Permits.

The information in Figure 1 demonstrates that General Permits can be a highly effective means of dramatically cutting permitting cost and delay.

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Figure 1 – Permit Time-Frames

Figure B-1

Air Permits (Uncontested)

Permit Time-Frame Reductions

(as of September 1, 2008; based on rolling 12-month averages)

Priority 1

Application Type	Average Processing Time *(days)*	Total under Review	Target Maximum	Number under Review Exceeding Target
New source review (NSR) permit, new	200	170	240	25
NSR permit, amendment	216	531	270	76
NSR permit, new - federal timeline	189	11	330	5
NSR permit, amendment - federal timeline	410	8	330	4
Federal NSR *(prevention of significant deterioration, nonattainment, 112g)*, new and major modification	564	80	330	25
Permit by rule	27	259	45	5
Standard permit *(without notice)*, SB 1126, and relocation	32	51	45	6
Concrete batch plant standard permit *(with notice)*	61	38	150	0

Question 5 - Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold… What are some potential alternatives to PSD (for example, general permits, permits by rule, others), for sources once PSD is triggered by GHG emissions for each of the sub-workgroups.

In addition to the General Permit and PBR approaches noted previously, other opportunities to streamline the permit process include:

- Enhance minor source permitting to avoid PSD by recognizing that existing State Agency permits are practically enforceable.
- Develop presumptive BACT for many types of sources, especially fuel combustion. This is particularly an issue for natural gas combustion which is generally recognized as a "clean" fossil fuel. EPA can develop presumptive BACT for almost all natural gas combustion sources including package boilers, RICE engines, simple-cycle combustion turbines and combined-cycle combustion turbines, that would substantially streamline the permitting process while ensuring excellent environmental performance.
- Update permit guidance to recognize that CCS is not BACT given that it is not commercially available and will not be for many years.
- Issue guidance limiting the scope of the ESA, NHPA and EJ Reviews, especially where non-GHG pollutants are not significant.
- Issue guidance addressing how to perform an ESA that provides templates, for example, addressing the appropriate level of detail.
- Provide general ESAs, NHPA and EJ reviews covering areas of the country like the shale basins undergoing concentrated development where there is no need to repeatedly conduct nearly identical reviews.
- Consistent with past EPA major/minor source policies EPA should implement a transition policy that excludes sources with actual emissions at 50% or less of the 100,000 tpy CO_2e threshold to avoid sources being required to submit Title V applications on July 1, 2012 or being considered PSD major sources.
- The PSD permitting process, due to its complexity, is the rule most often cited as potentially delaying the start of construction for affected projects. EPA should streamline this part of the process by reconsidering its approach as to what qualifies as "construction activities" for the purposes of beginning construction. We believe agencies often confuse the term "commence construction" with "begin construction" and that the term commence construction is really meant to be used for transition provisions related to the grandfathering of certain historic projects.
- We recommend that EPA do everything possible to approve the existing state NSR Reform SIPs that the Agency has not yet taken final action on. This is the majority of NSR Reform SIPs and, until approved, many of the streamlining techniques embodied in NSR Reform are not available in states where the prior rules remain in effect. These reforms include the use of the actual to future projected actual applicability test and the use of PALs to streamline the PSD process. Similarly, EPA should take steps to make sure that all such future SIP revisions are expeditiously processed with high priority.
- EPA should adopt proven streamlining practices such as setting explicit schedules for permit approvals. The timing of the current federal permit review process (and some states) is subject to too much uncertainty, notwithstanding the Clean Air Act's mandate that permit processing not

exceed one year. EPA often provides comments on applications after the close of the public comment period and appears to have little incentive to assure expeditious processing of permit applications.

Many states have adopted formal goals for permit processing time. Figure 1 (see response to Question 4) includes Texas' overall targets for various classes of permits. Based on API members' experience with state agencies throughout the country, we have prepared Figure 2, which provides our estimate of reasonable permit processing times for most permits. We urge the Agency to adopt this schedule as standard policy to remove much of the uncertainty associated with the process.

Figure 2 - Recommended Timeline for GHG Permitting Actions

Permit Type	Actions	EPA Review Timeline
Major Source Permit *GHG-only; non-General Permit*	Determination of Administrative Completeness	By no later than the 30th day
	Notice for Public Hearing	By no later than the 150th day
	Public Hearing	By no later than the 180th day
	Issue Permit	By no later than the 235th day
Major Source Permit *GHG-only; General Permit*	Determination of Administrative Completeness	By no later than the 30th day (post-project notification is allowed in some instances)
	Notice for Public Hearing	Not Applicable for individual permitting action
	Public Hearing	Not Applicable for individual permitting action
	Issue Permit	By no later than the 60th day
Minor Source/ Synthetic Minor	Determination of Administrative Completeness; Notice to request public hearing (w/in 15 days)	By no later than the 30th day
	Notice for Public Hearing	By no later than the 60th day (if applicable)
	Public Hearing	By no later than the 90th day (if applicable)
	Issue Permit	By no later than the 135th day (w/public hearing) By no later than the 90th day (w/o public hearing)
Minor Source/ Synthetic Minor *General Permit*	Determination of Administrative Completeness	By no later than the 15th day (post-project notification is allowed in some instances)
	Notice for Public Hearing	Not Applicable for individual permitting action
	Public Hearing	Not Applicable for individual permitting action
	Issue Permit	By no later than the 45th day
Permit-by-Rule *No additional permit required*	If emissions are below certain threshold(s) and equipment meets any exclusions, etc., no formal permit issues, only recordkeeping, etc.	Not applicable

EPA already has recent experience adopting specific timeframes for reviewing permits in its Indian Country permit rule. [*See e.g.*, 76 Fed. Reg. 38,763 (July 1, 2011)]. In particular, EPA established specific periods for determining whether applications are complete and for granting or denying such permits. For synthetic minor sources, for example, EPA allowed 60 days for the completeness review and one year for granting or denying the permit. While API believes that this one year period is excessive, the Indian

Country rule at least provides some level of certainty and serves as a guide for a further EPA proposal on Title V and PSD processing timeframes.

In addition to explicit timeframes for permit processing, some state and regional permitting authorities also have developed other innovative approaches to assure more expeditious and predictable processing of permit applications. In areas where EPA is the air permitting authority, the Agency should study and adopt streamlining techniques developed by the state agencies which have proven to be effective. For example, the Louisiana Department of Environmental Quality has implemented an "expedited" review program in which an applicant can choose to pay an additional fee to cover the overtime effort (*i.e.*, after hours and weekends, but not during normal working hours). EPA and applicable states also could move away from processing permits in the order received, as EPA Region 6 currently does, and instead implement parallel processing, in which smaller, similar or more straight-forward applications are handled by one group of reviewers, while a separate group handles the larger, more complex applications. Both of these techniques would streamline the process and offer advantages to EPA, state agencies, and the regulated community.

Appendix L: NEDA/CAP Response to Sub-workgroup Information Request

NEDA
CAP
CLEAN AIR PROJECT

The National Environmental Development Association's Clean Air Project

Members:
Alcoa, Inc.
The Boeing Company
BP America
ConocoPhillips
Eli Lilly & Company
ExxonMobil Corporation
Georgia-Pacific LLC
Intel Corporation
Invista S.à r.l.
Koch Industries, Inc.
Merck & Co., Inc.
NewPage Corp.
Occidental Petroleum Corporation
Procter & Gamble
Weyerhaeuser

Counsel:
RITTS LAW GROUP, PLLC

July 16, 2012

John A. Paul, Administrator
Dayton Regional Air Pollution Control Agency
117 South Main Street
Dayton, Ohio 45422-3280

RE: Streamlining Greenhouse Gas Permitting

Dear John:

NEDA/CAP, a coalition of American manufacturers from various major industrial sectors, applauds the Work Group's activities to promote streamlining GHG permitting , a result that is critically important for public and the economy. In the following document, we are providing responses to the five questions posed to stakeholders in your May 22, 2012 email. They emphasize:

- Developing a strategy to minimize or eliminate permitting for pollution control projects and especially energy efficiency projects and combined heat and power (CHP) projects and natural gas projects that trigger increases in GHGs and/or that cause increases in "other" pollutants ;
- Eliminating or streamlining the analysis of CCS in BACT reviews;
- Developing a strategy to reward sources that have taken synthetic minor limits prior to becoming GHG-only major sources or will take synthetic minor limits to remain out of PSD for "other" regulated air pollutants; and,
- Paring back or eliminating PSD review of other regulated pollutants for GHG-only major sources.

We appreciate this opportunity to provide the requested input and regret that several recent EPA's rulemakings have made it difficult to respond more quickly to your request.

With warm regards,

Rob Kaufmann, Chairman of NEDA/CAP

620 Fort Williams Parkway Alexandria, Virginia 22304
Tel: 703-823-2292 Fax: 571-970-3721

NEDA/CAP Comments on Streamlining GHG Permits
July 16, 2012

QUESTION 1: What general set of requirements would be triggered if a new source or modification would trigger PSD solely because its GHG emissions increase was above the PSD threshold(s)?

NEDA/CAP is extremely concerned that while many projects would be subject to PSD because of GHGs (i.e., they are major modifications to major sources), the PSD regulations would appear to require PSD review for any regulated pollutant for which there is a "significant emission increase" including sources that are not currently "major sources " for any other regulated pollutant. THIS ISSUE IN OUR VIEW IS THE MOST IMPORTANT ELEMENT OF GHG PSD REVIEW BECAUSE IT INCREASES THE COST OF PREPARING THE PSD APPLICATION AND THE UNCERTAINTY WITH REGARD TO OBTAINING THE PERMIT. **NEDA/CAP therefore urges the Committee to consider a streamlining approach to address this issue, either determining that only GHGs should be subject to PSD or greatly streamlining how significant increases in other pollutants would be reviewed**.

A. **DELAY TO "BEGIN ACTUAL CONSTRUCTION"**- The Applicant agrees not to begin "actual construction" on the project until the PSD Permit is approved and issued, resulting in a delay of 10 months to many years in construction of the proposed project. At the pre-application meeting (see above), the applicant may discuss activities that can be conducted for site-preparation prior to construction/installation of an emitting unit at the site.
B. **PSD PERMIT APPLICATION:** The requirement to submit to its respective permit authority a preconstruction PSD Permit Application for review and approval before it can construct or install the proposed project. The simple fact that a project requires PSD is enough to scuttle some projects, principally because of the delay (6 months to 5 years in obtaining the permit). Managing uncertainty created by the known delay in obtaining a construction permit is of paramount importance with respect to GHGs and any other regulated pollutant.

1. **RETENTION OF PERMIT CONSULTANT(S)** - To complete the proposed permit application, some prospective applicants will contract with a consultant (1) to prepare the PSD permit application and related emissions estimates for the project; (2) to advise and/or design the appropriate pollution controls for the project, and/or (3) to design a compliance assurance monitoring plan for the project. (A few larger companies may have internal permitting groups.) Additional legal assistance may be retained in anticipation of the importance of the project, inconsistent BACT determinations including but not limited to the type of process that is being proposed, and anticipated opposition to the project from the community and/or non-governmental entities. (Note that even large manufacturers do not typically prepare federal PSD applications without consultants and outside counsel.)

2. **PRE-APPLICATION MEETING WITH PERMIT AUTHORITY:** Nearly all permitting authorities require (or strongly advise) a pre-application meeting with the permitting authority to discuss application requirements, the scope of BACT determinations for GHGs, and air quality related value review. (If the project requires federal review, then other reviews such as Endangered Species Review and Historic Preservation Review also is triggered.)
If the project will result in significant increases in "other" regulated air pollutants, even if the plant is a "minor source" for those pollutants, the meeting will consider all the PSD review requirements including air quality analysis, increment consumption and other pollutant-specific BACT assessments more broadly. The need for pre-construction/post-construction monitoring for criteria pollutants also may be discussed. Federal land managers may or may not be included in such meetings, depending on the proximity of the proposed site of a project to a national park or other Class I area. EPA's proposed "Environmental Justice" "best practice" guidance emphasizes pre-project application outreach with potentially affected communities. If the project requires a federal PSD permit, the EPA regions will require (it appears) pre-project outreach in addition to pre-application meetings. 77 Fed. Reg. 38051 (June 26, 2012).

3. **DELAY TO PREPARE DETAILED PERMIT APPLICATION** - The Permit Applicant commences preparation of a detailed permit application that describes the project, the projected GHG emissions that would result from the project including but not limited to:
(1) the basis for the calculation including any necessary process information, the selection of the relevant emissions factors, selection of baseline emissions, and assumptions for how "projected actual emissions" are calculated;
(2) the applicant's proposed Best Available Control Technology (BACT) for the proposed project;
(3) other proposals for monitoring and reporting emissions from the proposed project.
The cost of such applications depends on the project, but can add an additional $10,000-$150,000 or more to the project, depending on the complexity of the proposed project, the availability and acceptance of emission factors or other process emissions data, the feasibility of modeling, additional costs of collecting monitored data, and the BACT analysis.
(4) Air Quality Related Value Analysis including visibility and impact on protected species will often need to be conducted. Currently the AQRV analysis involves not only GHGs but other pollutants for which the project will result in significant emission increases. Additional requirements in the last prong of PSD review requirements that can be overlooked are analysis of impacts on Endangered Species and Historically Preserved properties, unless EPA is responsible for issuing the permit, as it is in Texas,

Wyoming, Florida, Arkansas, and elsewhere).

C. **ADDITIONAL INFORMATION REQUIREMENTS** - The additional PSD review for pollutants that "come along for the ride with regulated GHG increases" add disproportionately to the cost of GHG applications (because GHGs are not a NAAQS and do not require air quality or increment analysis, or monitoring/modeling.

There is currently ambiguity in GHG-only major source permitting: First, despite some disagreement over the years, EPA appears to have been quite clear historically that a project must result in emissions that would cause the project to be a "major modification" of a "major source" of the *same* pollutant. In other words at a GHG-only major source, PSD can only be triggered for other pollutants, unless there is a "major GHG modification" of a "major GHG source." *See "Tailoring Step 1" and Step 3" rules.* Second, a full PSD permitting analysis nonetheless appears to be required for *other* regulated air pollutants if a "major modification" occurs at a GHG-only major source. In other words if a "major GHG modification" is constructed, a full blown PSD analysis would appear to be required for any other pollutant subject to PSD (e.g., PM2.5 or H2S). The most resource-intensive analyses for the latter group of pollutants is:

1. **ENGINEERING DESIGN AND PROJECT "BACT" EQUIPMENT (AND CONTROL EFFICIENCIES)** – Even though the Permit Applicant could not commence actual construction on the project, the source will typically need to design the proposed change in order to obtain from pollution control vendors estimates, or more often, vendor guarantees regarding applicable pollution controls in order to obtain the information needed to prepare a submit the PSD application.

2. **AIR QUALITY RELATED VALUES AND OTHER ASSESSMENTS** – PSD requires review of ambient air quality, air quality related values, and other possible associated effects of a project on the surrounding environment. Although GHGs do not affect the ambient air quality *per se* because they principally are believed to affect climate by affecting stratospheric elements, there is the potential for a PSD permit for GHGs from a project to require both an air quality-related value assessment that could include potential impacts of a project on air quality related values including weather or other values, including but not limited to biological assessments affecting endangered species or other cultural assessments under the Endangered Species Act, or the National Historic Preservation Act, or both (particularly for federally-issued PSD permits). NEDA/CAP would argue, however, that while these issues could arise during permitting, it is unlikely that a project would have enough emissions to affect climate itself, but increasing calls for cumulative environmental assessments under federal and local laws slow project permitting largely because of the uncertainty of the

analysis.

D. **FORMAL PUBLIC OUTREACH** – Formal notice and public comment on proposed/draft permits are required, and responding to comments can cause additional delay. Typically this adds at least 45 – 60 days to project review, and this review period is built into the permit timeline. Permit objections and additional delays – frequently on the basis of the BACT analysis-- are not planned. If time is of the essence and/or if loans or bond issuance is necessary for the project, permit objections and the delays that will result can lead to cancellation of a project.

E. **LITIGATION RISK**- A project must be important enough to a company to merit the risk and cost of potential litigation in order to obtain a permit.

F. **POTENTIAL DECISIONS ON DECREASING THE SIZE OF A PROJECT AND/OR REDUCING UTILIZATION OF OTHER PROCESSES AT A SOURCE TO LEGALLY AVOID PSD.** Because of all the requirements just discussed prospective PSD applicants also consider whether it is possible to either reduce the proposed size of a project or to reduce utilization of equipment elsewhere in a plant in order to legally "net" emissions increases from a project with decreases in actual emissions in a plant in order to legally avoid the delays and expense of going through PSD permitting. This sometimes results in removal of plant equipment, additional pollution control purchases elsewhere in the plant or other plant changes that may require minor NSR review to be practically enforceable.

G. **PRACTICALLY ENFORCEABLE LIMITS TO REDUCE EXPOSURE TO PSD** - The analysis of the feasibility of plantwide applicability limits and/or emission caps may also take place in order to provide additional future permit certainty, albeit at the cost of limiting expansion for some projects at a site. Ironically a number of plants in the manufacturing sector, particularly in the agriculture and chemical industry, home products, and product research and development areas that acquired synthetic "minor status" for criteria pollutants, are now subject to PSD applicability for GHGs only, making other pollutants for which "practically enforceable limits" are in place once again regulated because of emission increases above PSD significance thresholds.

QUESTION 2: Assuming that a new source or modification is proposed which would trigger PSD solely because of its GHG emissions, what are the consequences or impacts of triggering these requirements for your particular industry?

H. Corporate officials might decline to implement the project if the project cannot be designed to avoid PSD review thereby providing the requisite return on investment. Permit costs (including uncertainty with respect to when a project can be constructed) thus rise to the level of importance for some projects, with other critical determinants such as the cost of raw materials, transportation costs, and access to markets/consumers.

1. Investor uncertainty is the principle reason, however, for re-locating a project and PSD, because of inherent permitting delays and costs, including the uncertainty associated with BACT and air-quality reviews, can present strong corporate sentiment against innovations or manufacturing new product lines if they will require PSD review.
2. Sentiment against projects that offer energy efficiency and early pay-backs are further obstructed by the absence of the pollution control project exclusion from NSR that the federal court found was inconsistent with the Clean Air Act in *New York v. EPA, 413 F.3d 3, 39 (D.C. Cir. 2006).*

I. Corporate officials might decline to build or install the project in the United States.

J. Corporate officials may determine to accept the financial uncertainty of the delay and cost of permitting in the U.S., if other aspects of the project make it attractive to build in the United States (e.g., demand, shipping cost, industrial engineering concerns, energy costs and/or availability of other natural resources, etc.).

1. Projects involving combustion sources and most particularly boiler modifications are very problematic because of BACT analysis if they trigger PSD. Project netting, because it appears to be based on a conservative analysis of potential emissions rather than projected actual emissions, is frequently a disincentive to improving boiler performance, as is the absence of a pollution control project exemption.

2. Construction of future biomass or fossil fuel-fired combined heat and power (CHP) projects is particularly problematic because of the uncertainty of the current three year deferral of biomass from GHG permitting including but not limited to the increased cost of steam production from NGCC as BACT, and the difficulty of GHG emission increases from cycling to follow production load, gas availability and infrastructure as an alternative to available coal in some parts of the country.

K. In certain industries, where emissions of other pollutants have been "capped" to avoid PSD review, if expansion of that plant cannot be successfully accomplished without triggering PSD review without delay and additional costs for controls, the plant could face future restrictions on product expansion.

QUESTION 3: Which sources categories will be likely to be brought into major source review solely because of GHG emissions?

NEDA/CAP believes that a partial list of changes that could trigger PSD solely for GHGs includes:

- Installation of process heaters (and thermal oxidizers) at petrochemical facilities; installation of hydro-treaters and distillation equipment.

- Installation of new boilers and combustion engines at any minor facility, including but not limited to R&D facilities. Ironically any energy efficiency project, in the absence of the PSD exemption for pollution control projects" , can trigger PSD for GHGs.

- Oil & Natural Gas Production Facilities because of CO2 and to a lesser extent methane from gas production. (The PSD aggregation and fugitive policies are particularly critical for these sources.)

- Installation of in-line -dryers at large coating and/or converting facilities and in grain drying/ food processing using natural gas-fired driers.

- Fertilizer Plants

- Co-generation (Combined Heat and Power) Plants at any Major Manufacturing Facilities (Ironically, if the CHP owner and operator is the owner of the plant, then emission increases from non-major PSD emission increases become an issue. Typically, the reverse has been true because if the owner/operator is not the owner, netting has not been allowed.)

- Industries that utilize refrigeration and chillers for process fluids.

- Smelting operations and other industries that have the potential to use high amounts of SF6 to prevent electrical arcing in processes or switch gears, in the absence of policies regarding SF6 leak rates.

- Electronics Manufacturing (SF6 and CFCs) in etching and cleaning.

- Aluminum mills expansions/retrofits because of energy requirements for process equipment.

- Historical "synthetic minors" (including but not limited to petrochemical, home care, and electronic product plants) that curtailed their actual emissions and took caps to avoid PSD

review, but have become subsequently subject to PSD for GHGs.

- Future of construction materials (board plants/saw mills) is dependent on permanent exclusion of biogenic emissions from GHG permitting. Food products and supplements, also is dependent on permanent exclusion of biogenic emissions from GHG permitting.

Question 4: Are there any streamlining approaches short of applicability options? (i.e., once applicability is triggered, are there any streamlining approaches that could simplify the triggered reviews of non-GHG pollutants emitted at significant emission rates?)

1. If PSD is triggered for significant increases of pollutants for which a source is otherwise "minor," NEDA's preferred approach would be to revise existing guidance/regulations to clarify that for sources that trigger PSD because they are new major sources of GHGs or major modifications of major sources of GHGs, PSD review is confined to GHGs. In other words, significant increases of other pollutants are not subject to PSD review at such facilities unless the source also is a "major source" of that pollutant."

    a. Alternatively, for GHG-only projects with significant increases in "other pollutants," require BACT but simplifying PSD review by not requiring air quality and increment analysis since these sources are not themselves "major sources" of those pollutants.

    b. OR apply minor NSR to "other pollutants" that would increase above significance levels for non-GHG pollutants.

    c. Do not require AQRV review for these pollutants on the grounds that the source is not "major" for other pollutants except GHGs and/or consider adopting a mitigation project effluent fee to streamline the permit in lieu of analysis of a particular AQRV.

2. Restore the "pollution control project exemption," at least for GHG-only projects on the grounds that there is not a NAAQS for GHGs and controlling them should not bring non-major sources of other pollutants into the PSD program.

3. Streamline the existing GHG BACT Permitting Guidance by eliminating the expensive review of CCS until it actually becomes a viable cost-effective technology. EPA's recent proposed NSPS rulemaking for GHGs underscores the lack of cost-effectiveness of this technology. Eliminating this part of the BACT analysis could save appreciable applicant preparation and regulator reviewing time presently devoted to location of information on infrastructure and geological vulnerability of aquifers that does not advance CAA goals.

4. Provide that sources that took synthetic minor limits prior to the GHG permitting effective date, per the "timing rule," remain synthetic minors for "other pollutants" and allow other sources to acquire these "limits" to remain out of PSD for other pollutants through a streamlined FESOP process.

5. Apply minor NSR including state BACT and/or presumptive BACT to "other pollutants" where there are significant emission increases where review is triggered only by GHGs.

6. Equate BACT for other pollutants for which PSD review is triggered with energy efficiency including tune-ups and other work practices for any project whose projected actual emissions exceed significance level but would be less than 100 tons per year.

7. If other pollutants are regulated, adopt "permits by rule" for other pollutant increases from retrofits of certain types of new combustion sources, including boilers and process heaters. Generally these will be based on energy tune-ups and other work practices.

8. Managing uncertainty is of paramount importance. Thus, if there actually was a one year time-frame for issuance of a permit after the application is deemed complete, manufacturers could more easily manage uncertainty.

QUESTION 5: What are some potential alternatives to PSD (for example, general permits, permits by rule, others), for sources once PSD is triggered by GHG emissions for each of the sub-workgroups?

In NEDA's comments on the proposed tailoring rule (in which we neither opposed nor embraced the tailoring rule), we suggested that GHGs be regulated on an entirely different basis than other pollutants under the PSD program because the magnitude of GHGs and their impact on "ambient air" are so different than the "conventional pollutants." **Here are some of those suggestions:**

1. EPA should limit the initial PSD review to sources whose "actual" historical emissions meet or exceed the "major source" thresholds.

2. EPA should reinstate historic policies for PSD that allow sources and states to presume "synthetic minor" status for sources whose historic emissions are less than 80% of "major source" levels.

3. EPA should renounce its policy that a source that is major for GHGs is a "major emitting facility" for other pollutants subject to PSD regulation.

4. Adopt federal "permits by rule" for retrofits of certain types of existing combustion sources, or installation of new ones, including boilers and process heaters. Generally these will be based on energy tune-ups and other work practices for existing sources, or installation of high efficiency components for new units (NEDA notes that the trend is already to install the most efficient equipment because energy is such a high percentage of overall facility costs). Sources should have the option to apply for permits by rule and complete a simple permit application that describes why BACT has not improved.

5. PSD should not apply to any modifications that result in increases in "fugitive emissions" above significance thresholds.

6. EPA should issue a national model PSD Permits for GHG sources that contain a menu of options of potential BACT measures that sources can adopt to streamline permitting.

7. An interagency task force should be formed to simplify the process of analyzing GHG impacts on endangered species, FLMs, and other historic values that streamlines permitting by clarifying expectations and if possible, providing general permit conditions that address these expectations. The PSD permitting manual should be amended to include these conditions.

8. EPA should adopt clear guidance on evaluating refrigerants and "inerting materials" such as SF6 that would only be emitted into the environment if it "leaked." NEDA/CAP prefers a work practice to prevent leakage rather than default emission factors.

9. Allow project netting of GHGs based on projected actual emissions.

Appendix M: PSD/Title V GHG Permit Streamlining Suggestions, LACSD

PSD/TITLE V GHG PERMIT STREAMLINING SUGGESTIONS
LACSD, June 29, 2012

1) Potential to Emit

An important component of streamlining is ensuring that EPA uses reasonable approaches in determining potential to emit so that sources do not prematurely trigger the GHG PSD thresholds. An example of this is a MSW landfill that may be going through an expansion, or a municipality that is developing a new MSW landfill. In either case, while the landfill may have the potential to be in operation for many years (e.g., 100 years), the landfill operator is only planning a landfill gas collection and management system for 10 years. Choosing a method of developing a reasonable potential to emit is important so the landfill operator does not prematurely trigger PSD which puts a regulatory burden on both the operator and the regulatory agency. So, in this example, is the potential to emit for the landfill 10 years, or 100 years? This type of determination is complicated. Under NSR in the South Coast, for example, only the first 10-year phase would be permitted (but the California environmental documentation would be submitted for the entire life of the project). Requiring a look out to 100 years would impact a large number of landfills and be counter to streamlining efforts.

EPA needs to carefully consider how these types of potential to emit determinations are made for this and similar sectors if the goal is permit streamlining. We recommend that long-life projects be phased in appropriate stages to avoid PSD permitting until such time as they are truly major sources.

2) BACT

How BACT is determined will likely be the most important means of streamlining GHG PSD permitting. We recommend that EPA work with each impacted sector to develop an approach to BACT development. This approach may lead to development of "presumptive BACT" determinations. Presumptive BACT is a means of streamlining, but its development should follow careful guidelines. In general, presumptive BACT should provide a menu of acceptable BACT options, not a "one size fits all" approach.

Another suggestion is to rely on existing regulations, such as NSPS, where possible, to streamline BACT determinations. Under this suggestion, if an industry has a relevant NSPS that concurrently controls GHG emissions, the NSPS should be considered in the BACT analysis as at least the "BACT floor" to start the BACT determination. An example of where this can be used is in the landfill industry. EPA has promulgated a NSPS that controls landfill gas which is largely methane (a potent

GHG). In this case, the landfill NSPS might easily be determined to be final BACT for any landfill permit that would trigger GHG PSD.

3) Programmatic Equivalency

California is the national leader in adopting GHG reduction programs. The largest program is AB32 which is a mix of command-and-control and cap-and-trade measures designed to reduce GHG emissions to 1990 levels by 2020. In addition, GHG reductions can be implemented through other California regulations such as CEQA and SB375.

EPA should investigate when, a source triggers a PSD permit solely because of GHGs, whether or not BACT can be satisfied by an existing local program that achieves specified reductions in specific time frames. A South Coast refinery, for example, would be regulated by both the AB32 Low Carbon Fuel Standard and cap-and-trade regulation that collectively would greatly exceed any GHG reduction due to efficiency-only improvements. This approach may be especially important to streamlining the permitting of all the additional sources if EPA were to lower the GHG threshold in the future, in states that have local GHG regulations.

4) Relaxed Requirements for Criteria Pollutants that are Regulated Under PSD Only Because GHG Triggered PSD

If a source triggers PSD solely because of GHG, any criteria pollutant that exceeds its individual significance level will be subject to the full PSD requirements. We suggest that an effective streamlining strategy could be to treat the corollary criteria pollutant increase under these circumstances less stringently than if PSD were triggered by an attainment criteria pollutant initially. We recommend that these criteria pollutants not be regulated until such time as they individually exceed the major source threshold. However, if EPA believes that a more stringent approach is warranted, then only the BACT provisions of PSD, similar to what is required for the GHG that originally triggered PSD, would be required.

5) Future Amendments that Could Expand GHG PSD Requirements Beyond BACT

EPA was clear in the 10/27/09 Preamble to the Draft Tailoring Rule that:

> *"There are currently no NAAQS or PSD increments established for GHGs, and therefore these PSD requirements would not apply to GHG emission sources, even when PSD is triggered for GHG emission sources."*

We strongly recommend that EPA further clarify this issue by stating that under no circumstances will GHG be regulated beyond BACT and public notice requirements under PSD. If EPA were to find that establishment of a NAAQS or PSD increment

warrants expanding GHG PSD requirements beyond BACT, we would suggest that EPA develop a "minor" PSD program, triggered at a certain GHG emissions level (e.g., current level of 100,000 tons CO2e) where only BACT and public notice would be required.

6) Biogenic CO2 Emissions

EPA is into the second year of a three-year stay on including biogenic emissions in the GHG PSD threshold. The issue is being studied by a Science Advisory Board subpanel. If the SAB finds that biogenic emissions should be added to the threshold emission calculation, this would result in hundreds of biogenic sources potentially triggering PSD review, countering any possible streamlining efforts that will have been developed to date.

Many, especially the biogas generator sector, have written in support of a permanent exclusion for biogenic sources. We strongly suggest that SCAQMD weigh into the on-going EPA efforts to study this situation and support a permanent exclusion.

Appendix N: GHG Tribal Feedback

	PSD						
Tribe	Belong in for GHGs only?	Presumptive BACT?	Streamline EJ/ESA review?	Phase-in/tier for CCS BACT demonstration	Relaxed requirements for GHG-only sources	Relax requirements if source is a synthetic minor control device?	Suggestions
A	Most oil GHG controls are defined. Tribes could be overwhelmed permitting these sources.	No real operation b/c control technology is not widely available at this time. If EPA does this, please review periodically to allow for new technology.					Charge permit fees for GHGs
B	If big enough to be brought into PSD for GHGs, probably big enough to be brought in for criteria pollutants.	If EPA does, need to separate out sub-categories carefully and have strong technical basis for decisions. Top-down probably just as easy.	Thinks if sources are big enough, they will have to perform full analysis.				EPA could use NSPS, along with work practice standards, instead of
C	Wyoming uses presumptive BACT for some oil and gas sources and it has worked out well. I think this is for minor sources, though. Not sure why they do BACT for minor sources...		Not sure.	Needs to be carefully worded as once CCS is "commercially available" it will apply. Need to balance this with the technology-driving benefits of BACT.	Could be OK. Permitting for GHGs only could limit other pollutants, too. The tribe is "on the fence" about this and feels that more research is needed.		
D	Probably OK if just for GHGs, especially if PSD is triggered solely by GHG. Do need to review regularly.	No comment, not familiar enough with this issue.		No, this is not too new to take off the table.	Depends on what other emissions are and how close to significance levels they are. Presumptive BACT could help here.		
E	No. Believes the differences between sources warrants top-down BACT. Also likes the technology-driving potential of top-down BACT.		No. These are huge issues for tribes.	Make sources at least look at it to drive the technology. On the other hand, maybe offsets or other technological advances could be used instead.	Not sure.	No. Facility should have to offset increased GHG emissions by making reductions elsewhere.	

Title V						
Tribe	General Prmts	Prmt by rule	Exemption by Rule	Opt-out conditions	Opt-out based on heating value	Suggestions
A						
B						
C	Prefer over PBR b/c GP's can target facilities/units better than PBR can. Felt that GP's are also easier to update.		OK with this, but need to track to make sure they are indeed covered.	Seem like common sense.		
D			Sounds OK, but need good documentation that actuals are really < 50% of thresholds.	Options sound good.		Could existing sources be grandfathered out of Title V?
E	Don't like either PBR or GP's - gives industry an "out". GP's are preferable to PBR b/c at least the source has to fill out forms and makes	Doesn't like b/c they don't get updated or changed unless the rule is opened up again.	Need documentation that actuals are really < 50% of thesholds.	OK on using limits that have been set for other pollutants to limit GHG's. As for taking limits on GHG's alone, that'd be fine as long as you can prove that you're meeting the limits.	OK, as long as it's set at a reasonable value.	

Appendix O: PSD Program Overview

PSD PROGRAM OVERVIEW

Note: this PSD program overview was prepared by the GHG permit streamlining sub-workgroups and is our overview of PSD requirements. This document does not represent any official position of EPA or the CAAAC. This document is for discussion purposes only.

Statutory Framework

Preconstruction Permit Programs – CAA Title I

- **Minor Source NSR** – Part A, Section 110 (State requirements for non-major new and modified sources)
- **PSD – Part C, Section 165 (Requirements for new major sources and major modifications in attainment/unclassified areas)**
- **Nonattainment NSR** – Part D, Section 173 (Requirements for new major sources and major modifications in nonattainment areas)

Regulatory/Statutory Authority (SIP – Approved, Delegation or FIP)

- Sections 110(a)(2)(C) & 161 of the CAA require each state to include a PSD program in its SIP
- If a SIP doesn't contain an approved PSD program, EPA promulgates a FIP, and uses PSD regulations from 40 CFR § 52.21
- EPA can delegate its authority for PSD permit to a state pursuant to 40 CFR § 52.21(u)

Goals of the PSD Program

-
- Protect public health and welfare from any adverse effect which might occur even at air pollution levels below the NAAQS
- Ensure that economic growth occurs in harmony with the preservation of clean air resources
- Preserve, protect, and enhance air quality in areas of special natural recreational, scenic, or historic values, such as national parks

PSD Program Requirements

- **Best Available Control Technology (BACT)** – Top-down case-by-case analysis, considering energy, environmental, and economic impacts to determine the maximum degree of reduction achievable. **Top-down BACT process:**

    1. Identify all available control options
    2. Eliminate technically infeasible options
    3. Rank options by their effectiveness
    4. Evaluate economic, energy, and environmental impacts
    5. Select BACT and establish permit limits

- **Ambient Air Quality Analysis** – Demonstrate that emissions from a new source or major modification will not violate the applicable NAAQS or applicable PSD increment
- **Soils, Vegetation, and Visibility Analysis** – Analyze whether direct effect of source emissions and indirect impacts from commercial, residential, and industrial growth would impair visibility or adversely affect soils or vegetation
- **Class I Area Impact Analysis** – If emissions from the new source or major modification could impact a Class I area, consult with the appropriate Federal Land Manager to determine whether the project will adversely affect air quality-related values, including visibility
- **Endangered Species Act (ESA)** – Section 7 of the ESA requires all federal agencies to consult with the US Fish and Wildlife Service or the National Marine Fisheries Service if the permit action may affect listed species or their designated habitat (also applies to delegated PSD permit actions)
- **Public Notice and Comments** – Solicit and adequately respond to public comments before taking final action (for delegated PSD programs use Part 124 public notice requirements)

Pollutants & Sources Subject to PSD Review

-

- Are regulated NSR pollutants that are **Criteria pollutants** (PM10, PM2.5, Ozone, NO2, SO2, CO and Lead), and their **precursors** (NOx, VOCs, and SO2) which have NAAQS, and **Non-criteria pollutants** (i.e. PM/TSP, GHG, etc.) and include:
    - Those that made the source **major** for PSD in the first place, and
    - Any regulated pollutant for which the area is not classified non-attainment, and for which the PTE of the pollutant is ≥ the respective **significant emissions rate**
- **Major Stationary Source** is a source which emits or has PTE 100 TPY of any regulated NSR pollutant (including GHGs) for the list of 28 source categories or 250 TPY for any other source (and for GHGs it also emits or has the PTE ≥ 100,000 TPY of CO2e)
- **Significant Emission Rates** include, but are not limited to:
    - CO 100 TPY
    - NOx or SO2 40 TPY
    - PM 25 TPY
    - PM10 15 TPY
    - PM2.5 10 TPY (direct) or 40 TPY (SO2/NOx precursors)
    - Ozone 40 TPY (VOC/NOx precursors)
    - Lead 0.6 TPY
    - GHGs 75,000 TPY CO2e

Appendix P: GHG Streamlining Information Request - Questions

Memorandum
May 22, 2012

The Clean Air Act Advisory Committee (CAAAC) has established a "Greenhouse Gas Permit Streamlining Work Group" to explore potential permit streamlining approaches for PSD, Minor NSR, and Title V permits triggered by greenhouse gas emissions. The workgroup has several sub-workgroups including two that are looking closely at PSD permit streamlining approaches (one sub-workgroup looking at triggered PSD permits with no other pollutant emissions greater than significant levels, and the other sub-workgroup considering PSD permits triggered solely by GHG emissions, but having other pollutants emitted at significant emissions levels). The PSD sub-workgroups are seeking your input on the following list of questions as applicable to your particular industry for both situations.

Assuming that a new source or modification is proposed which would trigger PSD solely because its GHG emissions increase was above the major source threshold,

1. What is the general set of requirements triggered (see workgroup attachment, "PSD Program Overview" for reference)?
2. What are the consequences or impacts of triggering these requirements for your particular industry?
3. What are some likely source categories that will be brought into major source review solely because of GHG emissions? Examples specific to your industry would be most informative.
4. Are there any streamlining approaches short of applicability options? i. e., once applicability is triggered, are there any streamlining approaches that could simplify the triggered reviews of non-GHG pollutants emitted at significant emission rates?
5. What are some potential alternatives to PSD (for example, general permits, permits by rule, others), for sources once PSD is triggered by GHG emissions for each of the sub-workgroups.

The subcommittees will review and discuss any material you submit. We request that you limit your response to no more than one page per question, and that you submit your responses by May 29, 2012. The sub-workgroups would like to discuss the responses on our May 31, 2012 call.

After reviewing your submission, the sub-workgroups may ask for clarifications or may invite you to address one or both of the sub-workgroups on a future conference call.

Thank you for your consideration of this request. Please respond to this request by email (reply to all), so that all members of both sub-workgroups can review your submission.

Sub-workgroup chairs:

Mohsen Nazemi, Deputy Executive Officer, SCAQMD, Diamond Bar, California
John A. Paul, Administrator, Regional Air Pollution Control Agency, Dayton, Ohio

Appendix Q: South Coast Tailoring Rule Comments

South Coast
Air Quality Management District
21865 Copley Drive, Diamond Bar, CA 91765-4178
(909) 396-2000 • www.aqmd.gov

Office of the District Counsel
909.396.2302
909.396.2961 Fax

April 20, 2012

via www.regulations.gov

Honorable Lisa Jackson, Administrator
U.S. Environmental Protection Agency
1200 Pennsylvania Avenue NW
Washington, D.C. 20460

Re: Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule Step 3, GHG Plantwide Applicability Limitations and GHG Synthetic Minor Limitations; 77 Fed. Reg. 14226 (March 8, 2012)

Attention: Docket Number EPA-HQ-OAR-2009-0517

Dear Administrator Jackson:

The South Coast Air Quality Management District (SCAQMD) staff appreciates the opportunity to comment on the above-cited proposed rule (hereinafter "Tailoring Step 3"). The SCAQMD is the regional agency primarily responsible for stationary source air pollution control in the four-county Los Angeles region. The SCAQMD is home to about 17 million people, about 5% of the U.S. population. The SCAQMD implements the Title V program in the region, and has adopted and submitted a Prevention of Significant Deterioration Rule for Greenhouse Gases (GHGs) to EPA for approval into the State Implementation Plan (SIP). The District supports EPA's efforts to implement the Title V and PSD programs for greenhouse gases in a way that is administratively manageable and consistent with the intent of Congress.

SCAQMD supports the Step 3 proposal to maintain the applicability thresholds for GHG emitting sources at the current Step 1 and Step 2 levels. Furthermore, SCAQMD is in favor of streamlining approaches for PSD and Title V permitting programs. SCAQMD also appreciates EPA's request to have Mohsen Nazemi, SCAQMD's Deputy Executive Officer for Engineering and Compliance, serve as the co-chair of the Clear Air Act Advisory Committee GHG Permitting Streamlining Work Group, and looks forward to assist in further development and implementation of permit streamlining approaches identified in Step 3 of the Tailoring Rule, as well as, potential additional permit streamlining approaches.

Below please find SCAQMD staff's comments and suggestions regarding the EPA's proposed Tailoring Step 3, for your consideration.

I. SCAQMD Supports EPA's Decision Not to Lower GHG Applicability Thresholds

EPA's proposal states that lowering the existing Title V and PSD thresholds for GHG sources is not feasible at this time. 77 Fed. Reg. 14238 col. 1. The SCAQMD staff agrees and is in support of this EPA proposal. Chart 1 on 77 Fed. Reg. 14238 clearly illustrates that reducing the threshold from 100,000 tpy to 60,000 tpy would have no benefit in further control of GHGs since the percentage of stationary source GHG emissions covered would remain stable at the existing 67%, while the number of sources covered would increase from 5,326 to 7,561 (a 42% increase). Even reducing the threshold to 50,000 tpy would only increase GHG coverage from 67% to 70%, while increasing the number of sources covered from 5,326 to 9,980 (a 87% increase). Changing the threshold to 50,000 tpy, which would be needed to obtain any benefit, would almost double the number of permits issued for a mere 3% increase in covered emissions. Therefore, reducing the threshold to 50,000 tpy is not feasible since the additional administrative burden far outweighs the incremental benefit. We also note that EPA estimates that GHG PSD permits (which are the only permits that actually reduce emissions) would increase from 552 sources nationwide to 3,539. 77 Fed. Reg. 14234, col. 2. This is more than 540% increase in permitting efforts, for only a 3% increase in covered emissions. EPA has previously estimated that an increase of a mere 550 PSD permit actions nationwide would be administratively infeasible. 74 Fed. Reg. 55332. Surely, an additional 3,000 permit actions would overwhelm permitting authorities, while resulting in only an incremental benefit.

Moreover, SCAQMD's overall staffing, as well as permitting resources, continue to drop. Between the years 2011-2012 and 2016-2017, SCAQMD plans to reduce its total authorized staffing from 817 to 755, a reduction of about 7.6%. (Moreover, SCAQMD has already reduced its authorized staffing from over one thousand positions in the early 1990s.) While it is unknown exactly which positions will be eliminated, it is reasonable to expect that a proportionate share of permit processing staff positions will be eliminated. These staff reductions are necessary in order for SCAQMD to ultimately achieve a balanced budget by 2015 (currently the budget is balanced by using about six million dollars from the unreserved fund balance).

Finally, recent changes to California law have made it more difficult to increase fees. In November 2010, the voters approved "Proposition 26," which generally provides that all charges imposed by a local government are taxes, unless they qualify for an enumerated exemption. Taxes imposed by a special-purpose district such as SCAQMD must be approved by a two-thirds vote of the local electorate. There is an exception for fees to recover the costs of issuing a permit, but Proposition 26 shifts the burden of proof to the local government to establish the validity of the fee. Therefore, Proposition 26 increases the likelihood of litigation challenging any fee increase.

II. SCAQMD Supports Allowing Synthetic Minor Source Permits for GHGs

EPA proposes to create the regulatory authority to issue synthetic minor permits for GHGs where EPA is the PSD permitting authority. A GHG source could agree to an enforceable GHG emissions limit set below a level that would trigger PSD permitting requirements. The process for obtaining a synthetic minor permit is generally less complicated than the PSD permitting process for a major source. This action would give facilities a mechanism to keep themselves out of major source permitting requirements for GHG, where EPA is the permitting authority, as long as the source minimizes its GHG emissions.

On December 22, 2009, the California Air Pollution Control Officers' Association (CAPCOA) submitted comments on the "Prevention of Significant Deterioration and Title V Greenhouse Gas Tailoring Rule," 74 Fed. Reg. 55292 (October 27, 2009; Docket EPA-HQ-OAR-2009-0517). The SCAQMD joined those comments by letter dated December 24, 2009. The CAPCOA letter urged EPA to "adopt a method of limiting a facility's potential to emit (PTE) and thus to keep it out of the PSD and Title V programs, where its actual emissions are lower than the applicable thresholds." This need continues to exist.

The current proposal would allow EPA, where it is the permitting authority, to allow sources to take an emissions cap to keep their emissions below the major source threshold ("synthetic minor" permit). We believe EPA has inherent authority to issue such a permit, based on the definition of PTE as limited by federally-enforceable permit limits: See 77 Fed. Reg. 14245 col. 3, *quoting* PTE definitions. However, we also support clarifying this authority in the proposed rule.

More importantly for state and local permitting authorities, it is essential that they be able to issue "synthetic minor" permits as well. EPA believes that "many state and local permitting authorities will already have mechanisms in place to issue such GHG synthetic minor limits...." 77 Fed. Reg. 14244 col. 3. Nevertheless, EPA requests comment on whether permitting authorities implementing SIP-approved PSD permitting programs lack mechanisms to create synthetic minor limitations for GHGs, and if so, how that gap in permitting authority or mechanism for issuing synthetic minor permits could best be filled." Id. SCAQMD has always assumed that a "synthetic minor" permit issued under its Title V program would operate to avoid "major" source status for purposes of PSD and nonattainment NSR as well. We request EPA to make it clear and support that this is the case. SCAQMD has the ability to limit PTE and create "synthetic minor" permits under its Title V program. Rule 3001(d)(2).

SCAQMD agrees with EPA's proposal to create regulatory authority to allow synthetic minor permitting for GHG on a CO_2e basis. However, the PTE should be calculated based on the maximum rated capacity, the maximum daily hours of operation, and the physical characteristics of the materials processed or given in permit conditions which directly limit the GHG CO_2e emissions. Any fugitive emissions directly associated with the permitted source shall be included in the potential to emit calculations.

III. SCAQMD Supports Limiting PTE through "Prohibitory Rules"

EPA discusses methods of redefining PTE or establishing source category specific PTE to allow sources to essentially avoid major source status without obtaining an individual permit determination. 77 Fed. Reg. 14248 col. 3. EPA does not propose to finalize this approach through this rulemaking.

SCAQMD strongly urges EPA to continue to work on developing such an approach. California air districts and the state Air Resources Board worked closely with EPA in establishing a similar approach for the criteria pollutant Title V program by allowing districts to adopt a so-called, "prohibitory rule," which established PTE limits through specified operating parameters and recordkeeping requirements. If these requirements were met, sources did not need to obtain a "synthetic minor" permit. SCAQMD implemented this program through Rule 3008, which was approved by EPA as part of the Title V regulations. (A copy of Rule 3008 is attached.)

The SCAQMD's Rule 3008- Potential to Emit Limitations has similar requirements for source specific categories based on their operation limits for limiting the PTE so that they do not have to obtain a Title V permit. This rule was amended to include GHG emissions on November 5, 2010. Table 1 in this rule provides Alternative Operational Limits for different types of operations/source categories. However, based on SCAQMD's experience, it is not recommended to limit production time or limiting the number of shifts or operating hours or operating time (day, nights, evenings) as it would be an enforcement nightmare. Instead, a source should be required to keep records based on throughput limits to verify that the PTE is not exceeded.

While it may be valuable for EPA to help develop model "prohibitory rules" for different GHG source categories, we also request that EPA remain open to allowing the Regional Offices to approve a state or local permitting authority "prohibitory rule" that limits PTE without requiring an individual synthetic minor determination.

IV. EPA Need Not Lower GHG Permitting Thresholds below Levels Contemplated by Congress

CAPCOA's December 22, 2009 comment letter on the original proposed Tailoring Rule pointed out that under the "absurd results" doctrine, EPA does not need to continue to reduce the GHG threshold for Title V and PSD programs. We reiterate that comment here.[1] EPA stated: "The 'absurd results' case law requires that if a statutory provision cannot be applied literally, then it should be applied as close to literally as possible, consistent with Congressional intent." 74 Fed. Reg. 55311. *See Nora Pharmaceutical Corp. v. Shalala*, 140 F.3d 1050 1068 (D.C. Cir. 1998). The touchstone, therefore, is Congressional intent.

EPA has made clear that it believes Congress never intended such expensive and process-laden programs as PSD and Title V to apply to small sources below some reasonable threshold. 74 Fed. Reg. 55308-55310. EPA states: "applying the 100/250 tpy threshold literally to CO2 emissions would frustrate Congressional intent by subjecting to PSD sources that Congress specifically intended not to include." 74 Fed. Reg. 55309. EPA further explains "Congress designed the applicability provisions to apply [PSD] requirements to industrial sources of a certain type and a certain size…and by the same token, to exempt other sources from these requirements." 74 Fed. Reg. 55308. Thus, the D.C. Circuit court concluded that Congress intended to limit the burdens of PSD to sources that are large enough to be financially able to bear the substantial costs imposed by the PSD provisions and which, as a group, are primarily responsible for pollutant emissions. *Alabama Power v. Costle*, 636 F.2d 323, 353-54 (D.C. Cir. 1980). The existing Tailoring Rule, as implemented in Steps 1 and 2, already covers the types of sources Congress expected to be included.

In view of the foregoing, Congress never intended for PSD and Title V to apply to sources smaller than some reasonable threshold, and consequently, EPA is not ever required to reduce the Tailoring Rule threshold.

V. EPA Should Immediately Work on Developing Presumptive BACT for GHGs

EPA is considering implementing presumptive BACT for GHG sources and other possible source categories and emissions units that may be promising candidates for this approach. In particular, EPA is soliciting comments for how and when to update presumptive BACT determinations, the use of presumptive BACT for general permits, and the appropriate public participation for the development and application of presumptive BACT.

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[1] EPA's "administrative necessity" rationale justifies retaining the threshold at 100,000 tpy because further reductions are administratively not feasible and result in only an incremental benefit.

We support the concept of developing and applying "presumptive BACT" to GHG sources. We urge EPA to establish by rule a standard of proof that would be required for a source or a public member to overcome the presumption that the specified BACT is appropriate. We suggest the proper standard of proof is "clear and convincing evidence." If the standard were to be a mere "preponderance of the evidence," the presumptive BACT would have little utility as many applications would likely be challenged.

While the PSD program specifies that BACT applies on a "case-by-case basis," we believe EPA may properly establish a presumptive BACT which applies unless a challenger establishes by clean and convincing evidence that the presumptive BACT is inapplicable or does not meet the statutory requirements. This is particularly so because the definition of BACT requires the weighing of various costs, energy and environmental factors, which is essentially a policy decision. It is therefore reasonable to uphold the permitting authority's presumptive BACT unless that policy judgment is shown by clear and convincing evidence to be arbitrary and capricious. Finally, allowing the concept of presumptive BACT is consistent with case law which EPA has explained as allowing "an administrative approach not explicitly provided in the statute" such as "streamlined agency approaches or procedures where the conventional course, typically case-by-case determinations, would, as a practical matter, prevent the agency from carrying out the mission assigned to it by Congress." 74 Fed. Reg. 55312 *citing Alabama Power v. Costle*, 636 F.2d 323, 359 (D.C. Cir. 1980).

SCAQMD supports the development of presumptive BACT for general permits and other source categories as this will help in streamlining the permitting process. SCAQMD has developed BACT for different source categories and equipment for its Minor NSR program that is similar to presumptive BACT. In addition, SCAQMD suggests that EPA develop a Clearinghouse for GHG BACT and also publish here the emissions factors and source test data available for estimating GHG emissions. SCAQMD supports the idea of guidance for presumptive BACT instead of rule making for the different source categories. SCAQMD supports the idea to set presumptive BACT at the same levels as in equipment energy efficiency standards established by government agencies or other respected standard setting bodies such as the DOE. SCAQMD also supports the idea to use ENERGY STAR equipment certification, such as the ones for residential boilers that must have annual fuel utilization efficiency (AFUE) ratings of 85 percent or greater, which is comparable to the DOE boiler energy efficiency standards ranging from 80 to 83 percent established in 2007.

Consideration should also be given regarding the impact of GHG BACT on non-GHG pollutants, as it may lead to higher emissions. Because SCAQMD is nonattainment for ozone and PM, NOx and other precursor emissions must be limited to the "lowest achievable emissions rate," which is more stringent than BACT. Wherever there is a conflict between nonattainment pollutant LAER and further reducing GHGs, the nonattainment pollutant limit must receive the highest priority. This priority is consistent with the concept of GHG BACT, which allows the consideration of "environmental impacts," (CAA §169(3)) such as effect on NOx emissions.

VI. SCAQMD Supports Allowing General Permits for Title V and PSD GHG Sources

EPA is considering various methods for developing general permits. A general permit is a permit that the permitting authority adopts once and then applies identically to each source that requests coverage and meets the specific eligibility requirements. General permits are best suited for the regulation of sources that perform the same or similar operations, emit similar air pollutants and are subject to the same set of limitations, standards and requirements. Also EPA is asking comments on a proposal that the general permits be limited to only GHG only sources.

Title V regulations (and SCAQMD's implementing rules) already authorize the issuance of general permits for Title V sources. Therefore, we do not believe that additional rulemaking is needed for this purpose.

SCAQMD supports the idea of issuing General Permits for sources with GHG emissions and has extensive experience in implementing similar programs for non-GHG pollutants. The SCAQMD has developed a certification/registration for selected equipment types, a filing program for certain types of equipment that are emissions sources but are exempt from the requirement to obtain a written permit, and Streamlined Standard permits to streamline and issue permits for selected equipment that have previously established requirements and permit conditions. SCAQMD agrees with EPA to implement a phased approach to focus initially on GHG only sources for the general permits and build on the experience in the development of these permits for various source categories.

SCAQMD also supports the concept of general permits for GHG PSD sources. We concur that it would be appropriate to first focus on sources that are major only for GHGs, without ruling out the possibility of general permits for other PSD pollutants in the future. We urge EPA to issue regulations which would specifically authorize permitting authorities to issue general permits for GHG PSD sources. Without such specific authority, permitting authorities may be reluctant to use this streamlining mechanism. However, we strongly urge EPA not to make general permits a "required minimum element for SIP-approved PSD programs." 77 Fed. Reg. 14251. We believe §116 of the Clean Air Act clearly authorizes states to impose air pollution control requirements as long as they are not less stringent than federal minimum requirements. Since general permits are a streamlining technique, states are free under §116 to adopt more stringent requirements, including procedural protections such as enhanced public participation. General permits are not a mandatory requirement under Title V and should not be under PSD either. We therefore also oppose making Title V general permits mandatory on states. 77 Fed. Reg. 14251 col. 3.

EPA has requested comment on whether the public review requirements for PSD permits can be satisfied through public participation in the development of the general permit itself or whether each individual use of the PSD general permit requires public participation. We suggest a middle ground. The development of a general permit for a particular source category should be

subject to public notice and opportunity for public hearing in the same way as a Title V general permit. Thereafter, the application of a general permit to an individual source need not be subject to prior public notice or public hearing. However, the permitting authority should be required to promptly post notice of the application of a general permit on its website, or if no website is available, provide notice through other reasonable means. This would allow members of the public to monitor the general permit process and assure themselves that it is being appropriately used.

EPA also inquires whether there should be a periodic review of the general permit's provisions. 77 Fed. Reg. 14251. We assume that the purpose of any such periodic review would be to update BACT requirements. We also assume that sources which have already been made subject to a general permit would not need to have their permits periodically reviewed, since once imposed on a given source, BACT does not change. We support the concept of periodic review of BACT requirements in general permits. Because we have little experience with GHG BACT, it is not clear how often such BACT is likely to be updated. As an initial proposal, we suggest that general permits be reviewed, and BACT updated if need be at least every five years. This would not preclude proponents of a more advanced BACT from requesting a permitting agency to consider reviewing a general permit during the interim five years.

EPA requests comment on whether there should be a process for states or the public to request EPA to propose general permits for source categories and emissions units. 77 Fed. Reg. 14251. We assume this refers to general permits in EPA–administered PSD programs, since states could propose their own general permits for state-administered programs. We support this concept, and suggest that it might be implemented through a process similar to the petition for rulemaking under 5 U.S.C. §553(e).

VII. Plantwide Applicability Limits (PAL)

EPA explains that the purpose of amending its current PAL regulations is to allow sources to rely on the PALS emissions limitations in determining whether their GHG emissions are "subject to regulation," and thus whether they are subject to PSD or Title V. 77 Fed. Reg. 14240 col. 1. We strongly support EPA's apparent decision not to make PALS mandatory for permitting authorities. (EPA states that permitting authorities would likely only agree to issue a PAL if they believe they have the necessary resources to do so. *Id.*)

EPA has requested comment on two approaches for regulating GHG-only sources under a PAL. The first is the Major Source Opt-In approach. This would allow GHG sources to become existing major stationary sources and receive PALS for GHGs and any other pollutant emitted by the source. 77 Fed. Reg. 14241. Just as a point of clarification, we believe that §182(e)(2) defining modification to include any change resulting in any increase in emissions from any discrete operation, units or other pollutant emitting activity at the source…" precludes the use of

PALS at major sources for ozone precursors (Volatile Organic Compounds and Nitrogen Oxides) in Extreme ozone areas.

EPA's second approach is the Minor Source Approach. This would allow a source to use PAL to limit its plantwide emissions while allowing the source to maintain its minor source status. 77 Fed. Reg. 14242. This approach would be limited to only GHG emissions.

EPA requests comment on whether to finalize either or both approaches. Id. When EPA originally adopted the PAL approach for criteria pollutants in the New Source Review program, the SCAQMD was very concerned that EPA's regulations failed to require adequate monitoring, recordkeeping and reporting to make a PAL enforceable. However, this concern derived from the fact that EPA's regulation made the PAL a mandatory program element. SCAQMD recommends that EPA allow a minor source approach for GHG only sources and calculate PAL based on CO_2e. This minor source approach will be less burdensome as a streamlining technique than the major source opt-in approach as the latter would require additional resources to address non-GHG pollutants. SCAQMD also agrees that a CO2e PAL can function to assure both the GHG emissions are not subject to regulation, and that a change does not trigger a major modification. However, as long as EPA does not make PAL mandatory, we do not object to finalizing both approaches. However, we would caution EPA to ensure in its implementing regulations that adequate monitoring recordkeeping and reporting requirements are in place. Otherwise, sources in areas where less vigorous MRR is required would gain a competitive advantage over sources in more rigorous areas, and the GHG reduction goals of the program will be frustrated.

VIII. Title V "Empty" and "Hollow" Permits

EPA uses the term "empty permits" to refer to Title V permits "issued to a source that is not subject to any applicable requirement for any pollutant." 77 Fed. Reg. 14255 col. 1. The term "hollow permit" refers to a permit for a GHG major source that does not contain requirements for GHG emissions, but which contains other applicable requirements for pollutants for which the source is not major." Id. n.58. We believe that EPA should interpret Title V not to require permits for either of such types of sources.

SCAQMD agrees that as the thresholds are not being lowered to less than 100,000 tpy CO2e, it is unlikely that in this area the smaller sources would be brought into the program and need to be treated as empty permits. For example, for a boiler rated at 2 MMBTU/hour boiler fired on natural gas, the emissions would be approximately 900 tpy of CO_2. At the SCAQMD, any boiler rated above 2 MMBTU/Hour requires a permit for non-GHG pollutant, thus, empty permits do not result for such sources. This is because SCAQMD already has the most stringent criteria pollutant rules in the nation, so its rules apply to smaller sources than may be the case in other areas. However, even in SCAQMD, it is likely that there would be "hollow" permits created under the existing rules. Because SCAQMD's rules reach smaller sources, it is likely that

permits may be required that have criteria pollutant conditions, but no GHG conditions. We therefore support interpreting Title V not to require permits for either "empty" or "hollow" permit situations.

Any requirement to issue permits to either of such types of sources would frustrate and defeat the purposes of Title V. The essential purpose of the Title V program is to "assure compliance by all sources required to have a permit under this subchapter with each applicable standard, regulation or requirement under this chapter" (i.e., the CAA §502(b)(5)(A).) Moreover, each Title V permit must include "enforceable emissions limitations and standards." CAA § 504(a). Where there are no applicable requirements, there are no emission limitations and standards to put in the permit, and no requirements with which to ensure compliance. The cumbersome Title V process would be meaningless. Therefore, EPA should interpret Title V not to require issuance of "empty permits."

By the same token, it would be illogical to require issuance of "hollow" Title V permits, which would not be subject to Title V at all but for their GHG emissions, yet they have no GHG applicable requirements to put in the permit. We recognize that §502(a) provides that EPA may not exempt any major source from the requirements for a Title V permit. However, that section must be read in harmony with the purposes of Title V, which as cited above make clear that Congress intended the Title V permit to be a method of implementing applicable requirements, and providing public participation in the permit process. Where there are no applicable requirements, or no applicable requirements for the pollutant for which the source is major, Title V is meaningless. It is a maxim of law that where the purpose for the law ends, the law also ends. Cal. Civil Code §3510. Therefore, EPA may and should interpret Title V not to require permits in these cases.

EPA requests comment on whether it could adopt such an interpretation through guidance, an interpretive rule (without notice and comment) or only through notice and comment rulemaking. 77 Fed. Reg. 14255 col. 1. Recently, the courts have been unsympathetic to EPA's use of guidance documents and held that rulemaking is required. *Natural Resources Defense Council v Environmental Protection Agency*, 643 F.3d 311 (D.C. Cir. 2011). In view of the language of §502(a) precluding exemptions for major sources, EPA should use notice-and-comment rulemaking to fully explain its rationale to the public, and respond to public comments, to reduce the likelihood of successful legal challenge.

IX. Conclusion

In conclusion, SCAQMD staff supports EPA's Tailoring Step 3 proposal to maintain the applicability thresholds for GHG emitting sources at current Steps 1 and 2 levels. Further, SCAQMD staff is in favor of any streamlining approaches for PSD and Title V permitting programs and looks forward to working with the Clean Air Act Advisory Committee GHG Permitting Streamlining Work Group to assist in the development and implementation of further permit streamlining approaches.

Thank you for the opportunity to provide these comments on EPA's Tailoring Rule Step 3 proposal. Should you have any questions or wish to discuss this matter, please contact the undersigned, Barbara Baird, District Counsel, at (909)396-2302 (bbaird@aqmd.gov) or Mohsen Nazemi, Deputy Executive Officer, Engineering and Compliance, at (909)396-2662 (mnazemi1@aqmd.gov).

Respectfully submitted,

SOUTH COAST AIR QUALITY
MANAGEMENT DISTRICT

Mohsen Nazemi, P.E.,
Deputy Executive Officer
Engineering and Compliance

Barbara Baird
District Counsel

BB/MN/pa
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Attachment: Rule 3008

(Adopted March 16, 2001)(Amended November 5, 2010)

RULE 3008. POTENTIAL TO EMIT LIMITATIONS

(a) Purpose

The purpose of this rule is to exempt low-emitting facilities with actual emissions below a specific threshold from federal Title V permit requirements by limiting the facility's potential to emit.

(b) Applicability

This rule shall apply to any facility which would, if it did not comply with the limitations set forth in either paragraphs (d)(1) or (d)(2) of this rule, have the potential to emit air contaminants equal to or in excess of the thresholds specified in Table 2, subdivision (b) of Rule 3001 – Applicability, or for GHGs 100,000 or more tpy CO_2e.

(c) Definitions

All terms shall retain the definitions in Rule 3000 - General, unless otherwise defined herein.

(1) 12-MONTH PERIOD means a period of twelve (12) consecutive months determined on a rolling basis with a new 12-month period beginning on the first day of each calendar month.

(2) ACTUAL EMISSIONS means the emissions of regulated air pollutants from a facility on a 12-month basis. Valid continuous emission monitoring data or source test data shall be preferentially used to determine actual emissions. In the absence of valid continuous emissions monitoring data or source test data, the basis for determining actual emissions shall be: throughputs of process materials; throughputs of materials stored; usage of materials; data provided in manufacturer's product specifications; material volatile organic compound (VOC) content reports or laboratory analyses; other information required by this rule and applicable District, state, and federal regulations; or information requested by or available to the District. All calculations of actual emissions shall use United States Environmental Protection Agency (EPA), California Air Resources Board (CARB) or District approved methods, including emission factors and assumptions.

(3) ALTERNATIVE OPERATIONAL LIMIT means a limit on a measurable parameter, such as hours of operation, throughput of materials, use of materials, or quantity of product, as specified in paragraph (d)(2).

(4) DE MINIMIS FACILITY means any facility that emits in every 12-month period quantities of actual emissions as specified in either subparagraph (A) or (B) below:

(A) The facility emits:

(i) less than or equal to four (4) tons per year of each regulated air pollutant (excluding hazardous air pollutants (HAPs)); and

(ii) less than or equal to four (4) tons per year of any single HAP, or twenty (20) percent of any newly adopted major source threshold for a single HAP that EPA may establish by rule, whichever is less; and

(iii) less than or equal to five (5) tons per year of any combination of HAPs; and

(iv) less than 25,000 tons per year CO_2e for GHG emission.

(B) At least 90 percent of the facility's emissions are associated with an operation for which the throughput is less than or equal to any of the following quantities specified:

(i) 1,120 gallons of any combination of solvent-containing materials but no more than 440 gallons of any one solvent-containing material, provided that the materials do not contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene;

(ii) 600 gallons of the combination of all solvent-containing materials where the materials contain the following: methyl chloroform (1,1,1-trichloroethane), methylene chloride (dichloromethane), tetrachloroethylene (perchloroethylene), or trichloroethylene, but not more than 240 gallons of any one solvent-containing material;

(iii) 960 gallons of solvent-containing (or VOC containing) material, used at a paint spray unit(s);

(iv) 5,722,667 gallons of gasoline dispensed from equipment with Phase I and II vapor recovery system as defined in Rule 461;

(v) 972,000 gallons of gasoline dispensed from equipment with only Phase I vapor recovery system as defined in Rule 461;

(vi) 376,000 gallons of gasoline dispensed from equipment without Phase I and II vapor recovery system as defined in Rule 461;

(vii) 1,120 gallons of gasoline combusted;

(viii) 13,280 gallons of diesel fuel combusted;

(ix) 56,800,000 cubic feet of natural gas combusted;

(x) 19,184 gallons of ultraviolet/electron beam materials not to exceed 50 grams/liter.

(5) EMISSION UNIT means any article, machine, equipment, operation, contrivance, or related groupings of such that may produce and/or emit any regulated air pollutant or HAP.

(6) MAJOR SOURCE means any facility with a potential to emit, measured in tons per year per facility location, exceeding the emission threshold levels in Table 2, subdivision (b) of Rule 3001.

(7) POTENTIAL TO EMIT means the maximum capacity of a facility to emit an air pollutant based on its physical and operational design. Any physical or operational limitation on the capacity of the facility to emit a pollutant, including air pollution control equipment and restrictions on hours of operation or on the type or amount of material combusted, stored, or processed, shall be treated as part of its design only if the limitation is legally and practically enforceable by the EPA and citizens or by the District.

(8) PROCESS STATEMENT means a Declaration of Total Emissions filed pursuant to Rule 301(e)(7) or a 12-month report on permitted emission units from an operator of a facility certifying under penalty of perjury the following: throughputs of process materials; throughputs of materials stored; usage of materials; fuel usage; any available continuous emissions monitoring data; hours of operation; and any other information required by this rule or requested by the District.

(d) Requirements

Any facility subject to this rule shall comply with either one of the following requirements:

(1) Emission Limitations

A facility subject to this rule has the following limits on emissions in every 12-month period:

(A) 50 percent of the major source thresholds for regulated air pollutants (excluding HAPs and GHGs);

(B) 5 tons per year of any single HAP, or fifty (50) percent of any newly adopted major source threshold for a single HAP that EPA may establish by rule, whichever is less;

(C) 12.5 tons per year of any combination of HAPs; and

(D) less than 50,000 tons per year CO_2e for GHG emissions.

(2) Alternative Operational Limits

Any facility for which 90 percent of the facility's emissions from the permitted emission units in every 12-month period are associated with one of the operations identified in Table 1 shall comply with the corresponding operational limits in Table 1.

(e) Recordkeeping

(1) The recordkeeping provisions below shall not apply to De Minimis facilities.

(2) On and after May 15, 2001, the operator operating a facility subject to this rule under any one alternative operational limit, shall operate the facility in compliance with the alternative operational limit and comply with the following recordkeeping requirements as applicable:

(A) The operator shall maintain all purchase orders, invoices, and other documents to support information required to be maintained in a monthly log. Records required under this section shall be maintained on site for five years and be made available to the District, CARB, or the EPA upon request.

(B) The operator of a Gasoline Dispensing Facility equipped with Phase I and Phase II Vapor Recovery Systems shall maintain on site a monthly log of gallons of gasoline dispensed in the preceding month with a calculation of the total gallons dispensed in the previous 12 months.

(C) The operator of a Degreasing or Solvent-Using unit shall maintain on site a monthly log of amount and type of solvent used in the preceding month with a calculation of the total gallons used in the previous 12 months.

(D) The operator of a Paint-Spraying Unit shall maintain on site a monthly log of the gallons of VOC-containing materials used in the preceding 12 months with a calculation of the gallons of volatile organic compound-containing materials that also contain hazardous air pollutants used in the previous 12 months, and a calculation of the total gallons of volatile organic compound-containing materials used in the previous 12 months.

(E) The operator of an Emergency Standby Engine with output less than 1,000 brake horsepower shall maintain on site a monthly log of hours of operation, amount of fuel used, and a calculation of the total hours operated and amount of fuel used in the previous 12 months shall be kept on site.

(3) On and after May 15, 2001, the operator of a facility not operating under any alternative operational limit, shall comply with the following applicable recordkeeping requirements. The recordkeeping requirements of this rule shall not replace any recordkeeping requirement contained in an operating permit or in a District, State, or Federal rule or regulation.

(A) The operator of a facility subject to this rule shall keep and maintain records for each permitted emission unit or groups of permitted emission units sufficient to determine actual emissions. Such information shall be summarized in a monthly log, maintained on site for five years and shall be made available to the District, CARB, or EPA staff upon request.

(B) Coating/Solvent Emission Unit

The operator of a facility subject to this rule that operates a coating/solvent emission unit or uses a coating, solvent, ink, or adhesive shall keep and maintain the records in accordance with Rule 109.

(C) Organic Liquid Storage Unit

The operator of a facility subject to this rule that contains an organic liquid storage unit shall keep and maintain the following records:

(i) A monthly log identifying the liquid stored and monthly throughput; and

(ii) Information on the tank design and specifications including control equipment.

(D) Combustion Emission Unit

The operator of a facility subject to this rule that contains a combustion emission unit shall keep and maintain the following records:

(i) Information on equipment type, make and model, maximum design process rate or maximum power input/output, minimum operating temperature (for thermal oxidizers) and capacity, control device(s) type and description (if any) and all source test information; and

(ii) A monthly log of hours of operation, fuel type, fuel usage, and fuel heating value.

(E) Emission Control Unit

The operator of a facility subject to this rule that contains an emission control unit shall keep and maintain the following records:

(i) Information on equipment type and description, make and model, and emission units served by the control unit;

(ii) Information on equipment design including where applicable: pollutant(s) controlled; control effectiveness; maximum design or rated capacity; inlet and outlet temperatures, and concentrations for each pollutant controlled; catalyst data (type, material, life, volume, space velocity, ammonia injection rate and temperature); baghouse data (design, cleaning method, fabric material, flow rate, air/cloth ratio); electrostatic precipitator data (number of fields, cleaning method, and power input); scrubber data (type, design, sorbent type, pressure drop); other design data as appropriate; all source test information; and

(iii) A monthly log of hours of operation including notation of any control equipment breakdowns, upsets, repairs,

maintenance and any other deviations from design parameters.

(F) General Emission Unit

The operator of a facility subject to this rule that contains an emission unit not included in subdivision (e) of this rule shall keep and maintain the following records:

(i) Information on the process and equipment including the following: equipment type, description, make and model, maximum design process rate or throughput; control device(s) type and description (if any);

(ii) Any additional information requested in writing by the Executive Officer;

(iii) A monthly log of operating hours, each raw material used and its amount, each product produced and its production rate; and

(iv) Purchase orders, invoices, and other documents to support information in the monthly log.

(f) Reporting

(1) The reporting provisions below shall not apply to De Minimis facilities.

(2) Not withstanding the provisions in paragraph (f)(1), within 30 days of a written request by the District or the EPA, the operator of a facility not maintaining records pursuant to subdivision (e) shall demonstrate that the facility's emissions or throughput are not in excess of the applicable quantities set forth in the definition of De Minimis facility.

(3) The operator of a facility subject to this rule shall provide to the District a process statement or monthly log at the time of 12-month renewal for the previous 12 months of operation. The operator shall certify that the monthly log is true, accurate and complete.

(4) Any additional information requested by the Executive Officer shall be submitted to the Executive Officer within 30 days of the date of request.

(5) The operator shall notify the Executive Officer within 7 days of any exceedance of the alternative operational limit.

(6) Notwithstanding the provisions in paragraph (f)(3), a current Declaration of Total Emissions submitted in accordance with paragraph (e)(7)(A) of

Rule 301 - Permitting and Associated Fees shall be deemed to meet the reporting requirements of this rule.

(g) Violations

(1) Failure to comply with any of the applicable provisions of this rule shall constitute a violation of this rule. Each day during which a violation of this rule occurs is a separate offense.

(2) A facility subject to this rule shall be subject to applicable federal requirements for a major source, including all other applicable rules of Regulation XXX, when the conditions specified in either subparagraph (g)(2)(A) or (g)(2)(B) below, occur;

(A) Commencing on the first day following every 12-month period in which the facility exceeds a limit specified in paragraph (d)(1) and any applicable alternative operational limit specified in paragraph (d)(2), or

(B) Commencing on the first day following every 12-month period in which the operator cannot demonstrate that the facility is in compliance with the limits in paragraph (d)(1) or any applicable alternative operational limit specified in paragraph (d)(2).

(h) Exemptions

This rule shall not apply to the following facilities:

(1) Any facility, whose emissions, throughput, or operation, at any time after March 16, 2001 are greater than the quantities specified in paragraphs (d)(1) and (d)(2) and which meets both of the following conditions:

(A) The operator has notified the District at least 30 days prior to any exceedance that the operator intends to submit an application for a Title V permit, or otherwise obtain permit limits that are legally and practically enforceable by the EPA and citizens or by the District; and

(B) A complete Title V permit application is received by the District, or the permit action to otherwise obtain limits that are legally and practically enforceable by the EPA and citizens, or by the District is completed, within 12 months of the date of notification.

(2) Any facility that has applied for a Title V permit in a timely manner and in conformance with Rule 3003 - Applications, and is awaiting final action by the District and EPA.

(3) Any facility required to obtain an operating permit under Rule 3001 - Applicability for any reason other than being a major source.

(4) Any facility with a valid Title V permit.

(5) Notwithstanding paragraphs (h)(2) and (h)(4) of this rule, nothing in this subdivision shall prevent any facility which has applied for or had a Title V permit from qualifying to comply with this rule in the future in lieu of maintaining an application for a Title V permit, or upon rescission of a Title V permit provided the operator demonstrates to the satisfaction of the Executive Officer that the facility's emissions have been permanently reduced by accepting an enforceable permit change and is in compliance with the emission limitations in paragraph (d)(1) or an applicable alternative operational limit in paragraph (d)(2).

(6) Any facility which has a valid operating permit with conditions limiting facility emissions that are legally and practically enforceable by the EPA and citizens or the District to below the applicable threshold(s) for a major source as defined in paragraph (c)(6).

Table 1
Alternative Operational Limits

Type of Operation	Usage Limit in Every 12-Month Period
Printing, Publishing, and Packaging	In addition to the individual equipment usage limits listed, all Printing, Publishing, and Packaging operations have usage limits of 1,333 gallons of materials containing any one HAP, and 3,333 gallons of materials containing combination HAPs.
Flexography and Rotogravure (using water-based or UV-cured inks, coatings, and adhesives)	40,000 pounds inks, coatings, adhesives, dilution solvents, & cleaning solvents
Flexography and Rotogravure (using solvent-based inks)	10,000 pounds (before controls) of inks, coatings, adhesives, dilution solvents & cleaning solvents
Heatset Offset Lithography	10,000 pounds (before controls) of ink, cleaning solvent, & fountain solution additives
Non-Heatset Offset Lithography (web- or sheet-fed)	1,425 gallons of cleaning solvent & fountain solution additives
Screen Printers	1,425 gallons of solvent-based inks, cleaning solvents, adhesives, & coatings
Boilers (≤ 100,000,000 Btu/hr)	71,000,000 cubic feet of natural gas consumed
Bulk Gasoline Plants (equipped with vapor-balance system)	20,000 gallons per day of gasoline loaded & unloaded
Degreasers & Other Units if the solvents do not include: 1,1,1-trichloroethane, dichloromethane, tetrachloroethylene, or trichloroethylene	5,400 gallons of any combination of solvent-containing materials 2,200 gallons of any one solvent-containing material
Degreasers & Other Units if the solvents include: 1,1,1-trichloroethane, dichloromethane, tetrachloroethylene, or trichloroethylene	2,900 gallons of any combination of VOC-containing materials 1,200 gallons of any one solvent-containing material
Emergency Standby Engines (< 1,000 brake horsepower)	< 200 hours of operation
Gasoline Dispensing Facilities (Equipped with Phase I and Phase II vapor recovery systems)	7,150,000 gallons of gasoline dispensed
Hot Mix Asphalt Plants	125,000 tons of hot mix asphalt produced
Spray Booths	1,100 gallons of all VOC-containing materials, with no more than 110 gallons of VOC- & HAP-containing materials and the VOC content ≤ 1000 gram/liter, less water and exempt compounds
Ultraviolet/Electron Beam Cured Operations	21,582 gallons of ultraviolet/electron beam materials not to exceed 50 grams/liter.

Appendix R: SCAQMD Ad Hoc Title V Committee Suggestions

Memo To: Mohsen Nazemi

From: Ad Hoc title V Committee

Date: June 11, 2012

Subject: **PSD, Title V and Minor NSR Permit GHG Streamlining Suggestions**

1. GHG-Only Sources Should Be Handled Under Minor NSR or Major NSR/Title V Only
    - For the few sources that would trigger PSD permitting for GHG emissions that do not hold a Title V permit and for those sources triggering PSD for GHG emissions that do already hold a title V permit and who are not contemplating any GHG impacting modifications, we suggest that these be handled under minor source NSR or major source NSR and not PSD until such time as the facility chooses to undertake a major modification. We understand that a cleanup of EPA regulations is required to effect this per Page 14240 of the March 8, 2012 Federal Register.

2. 3-Year Delay of Most PSD Permit Elements
    - With the exception of the BACT analysis and the public notice provisions, the balance of the traditional PSD permitting requirements such as the ambient air quality analysis, the soils, vegetation and visibility analysis, the potential Class I area impact analysis and ESA requirements etc. should be suspended for a period of three years or longer until a scientific basis for considering them is established by EPA.

3. Expand Synthetic Minor Program to States with Delegated Programs
    - The March 8, 2012 Federal Register proposal for Step 3 of the Tailoring Rule reserves synthetic minors as a streamlining technique only to those states where EPA issues the PSD permits. We see no good reason why the synthetic minor provisions cannot be extended to those states with delegated programs[9].

4. Improve the Certainty of the BACT Analysis if One Must Be Performed
    - If a BACT analysis must be undertaken, steps should be taken to lessen the likelihood that the selected BACT and the required economic, energy and

[9] The Step 3 proposal makes PALs available to states with delegated programs. We are unclear whether or not PALs can apply in the South Coast because of the effect of SB288 and/or the status of Rule 1714 (PSD for GHGs) and are looking forward to a legal interpretation from your staff.

environmental impacts analysis will be questioned by the permitting authorities and/or the public, thereby avoiding a lengthy iterative process. This appears to be the most onerous aspect of the permitting process that GHG PSD sources will probably have to undertake. Some suggestions for incorporation into EPA's March 2011 PSD and Title V Permitting Guidance are:

e. EPA should provide software to better assess localized impacts from projects. Current software is limited to high-flying regional impacts by such agencies as NOAA.
f. Corollary pollutant analyses should be minimized as long as *criteria* pollutants continue to be reduced even at the expense of GHGs. There should be no requirement to perform an optimization of these two types of pollutants (seeking good but not necessarily the best reduction of each pollutant).
g. EPA should provide standardized calculation sheets that can be followed by the permittee to lessen the likelihood of a more informal analysis and determination being challenged in court.
h. Given that that the environmental and economic analyses involved with the top choices can be very time-consuming and complex, a maximum of two scenarios, unless the applicant chooses to perform more, should suffice for the purpose of the application.

5. Flexible Air Permitting
    - The CAAAC should consider the use of flexible air permits (FAPs) including use of advance approvals of operational changes, alternative operating scenarios and plantwide applicability limits to mention a few tools. While the air regulators found EPA's 2007 proposal to be anathema as far as criteria pollutant programs were concerned, they may be less hostile to FAPs focused on GHGs. One tool that might be incorporated into a FAP is a Master Energy Plan that, once approved, can be implemented by a facility as it chooses to make successive modifications.

6. Presumptive BACT
    - Presumptive BACT as discussed in the March 8, 2012 Federal Register on Pages 14252-4 is an appropriate tool for smaller, less-complex sources to utilize versus case-by-case BACT determinations. Presumptive BACT should always remain an option for a facility to follow.

7. General Permits
    - General permits, also as discussed in the above referenced Federal Register on Page 14254 might be a streamlining solution for source categories with very little deviation among the members.

8. Cap and Trade Program Allowances and Offsets Should Not Trigger PSD In and Of Themselves

    - Participation in cap and trade programs such as that established by AB32 should not in and of itself be the basis for an existing facility to need a PSD permit unless the facility meets the balance of the PSD trigger permitting requirements (exceeds required thresholds and is undergoing a significant net emissions increase of GHGs). Holding of offsets and allocations within cap and trade programs should not be considered to be potential-to-emit that factors into permitting thresholds.

    - To prevent continuous returning of permittees to the permitting authority to change GHG numbers listed in national or state inventories or permits or cap and trade programs, GHG-related figures should not be reflected either in PSD or Title V permits in such a way as to require annual modification of the permits. Initial GHG burdens might be stipulated in the permit and then in a chart or a schedule showing the decreased obligation over time with words to the effect that the facility is expected to hold sufficient allowances and offsets at least equal to the initial compliance obligation decreased by the specified program percent reduction per year.

Appendix S: SCAQMD Ad Hoc Title V Committee Email Clarifications

Memo To: Mohsen Nazemi
From: Greg Adams
Date: July 11, 2012
Subject: Jessica Montanez' Remarks on the Ad Hoc TV Committee Memo of June 11, 2012

Hello Mohsen: I've paraphrased Jessica's questions to save time:

1. Why mention major NSR?

   We shouldn't have. After vetting this further among ourselves, we cannot think of why a "major source NSR permit" should exist outside the TV realm. The sentiment in our subcommittee was clearly that for GHG emitting-only facilities, not contemplating any modifications that would increase GHGs, only the absolute simplest type of permitting should be required. This could take the form of a simple description of the GHG emitting activity in a TV permit or better yet the simple listing of the activity in a minor NSR permit if that is what the facility has in its possession.

2. Scientific Basis to Delay Most PSD Permitting Elements?

   We believe the re-cap of the issues we discussed at our recent meeting provides a better description of what we meant. As you are aware, CARB very recently heard a presentation from Mark Jacobson of Stanford, M.L. Fischer of Lawrence Berkeley, V. Ramanathan of UCSD and two other scientists alerting the Board to the effects of short-lived climate warming pollutants (SLCPs) such as black carbon, HFCs, methane and ozone, compounds which might lend themselves to traditional PSD permitting analyses, especially black carbon. California may consider these pollutants in the upcoming 5-year revisit of the Scoping Plan for AB 32 due at the end of this year. We know that EPA is further behind CARB but the sentiment in our group was that precedent could possibly be established by some big biomass burner, for instance, to perform the traditional PSD analyses. Our group felt that any future consideration of expanding PSD analyses for GHGs should wait until something *measureable* has been determined.

3. How do you balance not performing corollary pollutant analyses?

   Again, our more recent memo summarizing our meeting provides a better description of this issue. The sentiment was clear among the committee members that GHGs will never carry the same weight as a health-impacting criteria pollutant and as long as criteria pollutants are being reduced, environmental benefit is in fact being achieved. No further analysis need be done beyond demonstrating that the mass of the criteria pollutants are indeed being reduced. To wit, in the 2009 **Federal Register** page 18901 describing the proposed endangerment findings, under "Impacts on Public Health" the Administrator states, **" To be clear, ambient concentrations of carbon dioxide and other greenhouse gases, whether at current levels or at projected ambient levels under scenarios of high emissions growth over time, do not cause direct health effects such as respiratory or toxics effects."** This sentiment should be carried over to any corollary pollutant analysis if the analysis was triggered by GHGs.

Appendix T: PAL Monitoring Requirements Regulatory Language

(12) *Monitoring requirements for PALs.* (i) *General requirements.* (*a*) Each PAL permit must contain enforceable requirements for the monitoring system that accurately determines plantwide emissions of the PAL pollutant in terms of mass per unit of time. Any monitoring system authorized for use in the PAL permit must be based on sound science and meet generally acceptable scientific procedures for data quality and manipulation. Additionally, the information generated by such system must meet minimum legal requirements for admissibility in a judicial proceeding to enforce the PAL permit.

(*b*) The PAL monitoring system must employ one or more of the four general monitoring approaches meeting the minimum requirements set forth in paragraphs (aa)(12)(ii)(*a*) through (*d*) of this section and must be approved by the Administrator.

(*c*) Notwithstanding paragraph (aa)(12)(i)(*b*) of this section, you may also employ an alternative monitoring approach that meets paragraph (aa)(12)(i)(*a*) of this section if approved by the Administrator.

(*d*) Failure to use a monitoring system that meets the requirements of this section renders the PAL invalid.

(ii) Minimum performance requirements for approved monitoring approaches. The following are acceptable general monitoring approaches when conducted in accordance with the minimum requirements in paragraphs (aa)(12)(iii) through (ix) of this section:

(*a*) Mass balance calculations for activities using coatings or solvents;

(*b*) CEMS;

(*c*) CPMS or PEMS; and

(*d*) Emission factors.

(iii) *Mass balance calculations.* An owner or operator using mass balance calculations to monitor PAL pollutant emissions from activities using coating or solvents shall meet the following requirements:

(*a*) Provide a demonstrated means of validating the published content of the PAL pollutant that is contained in or created by all materials used in or at the emissions unit;

(*b*) Assume that the emissions unit emits all of the PAL pollutant that is contained in or created by any raw material or fuel used in or at the emissions unit, if it cannot otherwise be accounted for in the process; and

(*c*) Where the vendor of a material or fuel, which is used in or at the emissions unit, publishes a range of pollutant content from such material, the owner or operator must use the highest value of the range to calculate the PAL pollutant emissions unless the Administrator determines there is site-specific data or a site-specific monitoring program to support another content within the range.

(iv) *CEMS.* An owner or operator using CEMS to monitor PAL pollutant emissions shall meet the following requirements:

(*a*) CEMS must comply with applicable Performance Specifications found in 40 CFR part 60, appendix B; and

(*b*) CEMS must sample, analyze and record data at least every 15 minutes while the emissions unit is operating.

(v) *CPMS or PEMS.* An owner or operator using CPMS or PEMS to monitor PAL pollutant emissions shall meet the following requirements:

(*a*) The CPMS or the PEMS must be based on current site-specific data demonstrating a correlation between the monitored parameter(s) and the PAL pollutant emissions across the range of operation of the emissions unit; and

(*b*) Each CPMS or PEMS must sample, analyze, and record data at least every 15 minutes, or at another less frequent interval approved by the Administrator, while the emissions unit is operating.

(vi) *Emission factors.* An owner or operator using emission factors to monitor PAL pollutant emissions shall meet the following requirements:

(*a*) All emission factors shall be adjusted, if appropriate, to account for the degree of uncertainty or limitations in the factors' development;

(*b*) The emissions unit shall operate within the designated range of use for the emission factor, if applicable; and

(*c*) If technically practicable, the owner or operator of a significant emissions unit that relies on an emission factor to calculate PAL pollutant emissions shall conduct validation testing to determine a site-specific emission factor within 6 months of PAL permit issuance, unless the Administrator determines that testing is not required.

(vii) A source owner or operator must record and report maximum potential emissions without considering enforceable emission limitations or operational restrictions for an emissions unit during any period of time that there is no monitoring data, unless another method for determining emissions during such periods is specified in the PAL permit.

(viii) Notwithstanding the requirements in paragraphs (aa)(12)(iii) through (vii) of this section, where an owner or operator of an emissions unit cannot demonstrate a correlation between the monitored parameter(s) and the PAL pollutant emissions rate at all operating points of the emissions unit, the Administrator shall, at the time of permit issuance:

(*a*) Establish default value(s) for determining compliance with the PAL based on the highest potential emissions reasonably estimated at such operating point(s); or

(*b*) Determine that operation of the emissions unit during operating conditions when there is no correlation between monitored parameter(s) and the PAL pollutant emissions is a violation of the PAL.

(ix) *Re-validation.* All data used to establish the PAL pollutant must be re-validated through performance testing or other scientifically valid means approved by the Administrator. Such testing must occur at least once every 5 years after issuance of the PAL.

Appendix U: Renewal PAL Adjustment Regulatory Language

(iv) *PAL adjustment.* In determining whether and how to adjust the PAL, the Administrator shall consider the options outlined in paragraphs (aa)(10)(iv)(*a*) and (*b*) of this section. However, in no case may any such adjustment fail to comply with paragraph (aa)(10)(iv)(*c*) of this section.

(*a*) If the emissions level calculated in accordance with paragraph (aa)(6) of this section is equal to or greater than 80 percent of the PAL level, the Administrator may renew the PAL at the same level without considering the factors set forth in paragraph (aa)(10)(iv)(*b*) of this section; or

(*b*) The Administrator may set the PAL at a level that he or she determines to be more representative of the source's baseline actual emissions, or that he or she determines to be more appropriate considering air quality needs, advances in control technology, anticipated economic growth in the area, desire to reward or encourage the source's voluntary emissions reductions, or other factors as specifically identified by the Administrator in his or her written rationale.

(*c*) Notwithstanding paragraphs (aa)(10)(iv)(a) and (b) of this section:

(*1*) If the potential to emit of the major stationary source is less than the PAL, the Administrator shall adjust the PAL to a level no greater than the potential to emit of the source; and

(*2*) The Administrator shall not approve a renewed PAL level higher than the current PAL, unless the major stationary source has complied with the provisions of paragraph (aa)(11) of this section (increasing a PAL).