



**FINAL Report:
Puget Sound Clean Air Agency
Title V Program Review
(2nd Round)**

EPA Region 10
September 30, 2008

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Attachment

- 1 Program Review Information Request & Response

I. Introduction

This report documents the second review of the Puget Sound Clean Air Agency's (PSCAA) Title V permitting program. The first Title V program review for PSCAA was completed in September 2006.

PSCAA's Title V Program

PSCAA is a local air pollution control agency with jurisdiction in four counties located in western Washington: King, Kitsap, Pierce and Snohomish. EPA is the Title V permitting authority in Indian country within those four counties with one exception: PSCAA is the Title V permitting authority on non-trust land within the 1873 Survey Area of the Puyallup Reservation. Within PSCAA's four-county area, Washington Department of Ecology is the permitting authority for all chemical pulp mills and aluminum smelters and Washington Energy Facility Site Evaluation Council (EFSEC) is the permitting authority for all thermal electric energy projects that are at least 350 megawatts in size.

PSCAA has its own Title V fee regulation but requires sources to comply with the Washington Department of Ecology Title V regulation found in Washington Administrative Code (WAC) 173-401. EPA granted PSCAA, along with Washington state, six other local agencies and EFSEC, interim approval of its Title V program effective December 9, 1994, and full approval effective September 12, 2001, 66 FR 42439 (August 13, 2001).

PSCAA issues Title V permits to approximately 35 sources. There are currently 5 full-time permit engineers at PSCAA that divide their time between Title V permits and construction approvals.

Program Review Objective and Overview

The Title V program reviews were initiated in response to recommendations in a 2002 Office of Inspector General audit. The objective of the broader program reviews (as opposed to individual permit reviews) is to identify good practices that other agencies can learn from, document areas needing improvement, and learn how EPA can help improve state and local Title V programs and expedite permitting. EPA set an aggressive national goal of reviewing all state and local Title V programs with 10 or more Title V sources. PSCAA was one of ten Title V programs reviewed from 2004 through 2007. Here is the list of agencies reviewed in the first round along with the final report date and the current number of Title V sources they regulate:

Permitting Authority	Report Date	Permits
Idaho Department of Environmental Quality	January 2004	59
Oregon Department of Environmental Quality	June 2006	123
Lane Regional Air Protection Agency (OR)	June 2006	20
Spokane Regional Clean Air Agency (WA)	August 2006	10
Puget Sound Clean Air Agency (WA)	September 2006	35
Washington Department of Ecology	September 2006	27
Northwest Clean Air Agency (WA)	September 2006	21
Alaska Department of Environmental Conservation	September 2006	158
Olympic Regional Clean Air Agency (WA)	September 2007	15
Southwest Clean Air Agency (WA)	September 2007	12

EPA also committed, beginning in 2007, to repeat the reviews of all Title V programs with 20 or more Title V sources every four years. The second round will cover each of the four states in region 10 (Alaska, Idaho, Oregon and Washington) as well as three local agencies, Lane Regional, Puget Sound and Northwest. EPA Region 10 plans to complete all second round reviews by the end of 2010, tailoring the reviews to each agency. EPA Region 10 completed one second-round program in 2007 (Idaho).

The first Title V program review looked at all major elements of a Title V program. With this second-round review, EPA has elected to focus on issues specific to PSCAA's implementation of their permitting program. Of particular interest is how PSCAA has addressed the recommendations and concerns raised by EPA in the first review. EPA is also interested in PSCAA permit issuance progress, compliance assurance monitoring (which is required to be added during permit renewal for most sources) and how PSCAA has integrated new requirements and rules into the permits and program.

In preparation for this second-round review, EPA requested specific information from PSCAA (Attachment 1). EPA reviewed PSCAA's response as well as a sampling of PSCAA's permits, applications, forms and rules to confirm that previously identified issues were being addressed. EPA selected permits for review that were issued after the initial Title V program review to provide a more accurate depiction of how PSCAA permits reflect changes in program implementation. The permits are listed below:

Permit No. 10028	Puget Sound Energy Inc (Frederickson)	Issued May 15, 2007
Permit No. 11820	Graymont Western U.S. Inc (Tacoma)	Issued May 4, 2007
Permit No. 11656	Saint-Gobain Container Inc	Issued June 6, 2007
Permit No. 20350	Brunswick Family Boat Company	Issued March 30, 2007

EPA also reviewed permit issuance data PSCAA reported to the Title V Operating Permits System (TOPS). While on site at the PSCAA office, August 15, 2008, EPA interviewed the stationary source program manager. The purpose of the interview was to clarify and discuss what we learned from our review of their permits and other information.

Program Review Report

This program review report is presented in five main sections:

- I. Introduction
- II. Follow-up to 2006 Program Review
- III. Compliance Assurance Monitoring
- IV. Summary of Concerns and Recommendations

The introductory section presents some background regarding PSCAA's Title V program as well as an overview of EPA's program review plan. Section II presents EPA's evaluation of PSCAA's progress in resolving concerns identified in the 2006 program review. Section III is an evaluation of PSCAA's compliance with addressing compliance assurance monitoring. Finally, Section IV summarizes EPA's second-round concerns and presents EPA's recommendations.

II. Follow-up to 2006 Program Review

In the initial Title V program review, finalized in September 2006, EPA provided observations delineated into nine separate topic areas labeled A thru I. In each section, EPA identified good practices, concerns and other observations. Following that initial report, EPA asked PSCAA to respond to the concerns identified. In November, 2006, PSCAA provided responses including a commitment to research one concern further (C-2). EPA informed PSCAA that we would be doing a second program review before the end of 2010.

This section of the second-round review report presents EPA's evaluation of the progress PSCAA has made in addressing the concerns identified in the initial program review. Each of EPA's original concerns is listed below, followed by PSCAA's response received in November 2006, and followed yet again by EPA's second-round (Round 2) evaluation.

Section A. Title V Permit Preparation and Content

A-1 2006 EPA Concern: Applicable requirements that are "state-only" requirements are generally clearly marked in the permit; however, it is not accurate to say that only requirements approved by EPA through sections 110, 111 and 112 of the Clean Air Act (CAA) are federally enforceable. Section 70.6(b) of the CAA and WAC 173-401-625 state that all terms and conditions of a Title V permit are federally enforceable except those designated as "state-only," and that "state-only" requirements are those requirements that are not required under the CAA or any of its applicable requirements. For example, standard permit terms from WAC 173-401 that are included in a Title V permit are federally enforceable. This statement about federal enforceability should be clarified.

2006 PSCAA Response: We are addressing this concern by clarifying language regarding "federally enforceable" versus "state only" provisions in future versions of operating permit documents as they are issued.

Round 2 Evaluation: EPA reviewed four of PSCAA's permits found on line. Statements that were a concern have been removed in the four permits that were reviewed. EPA considers this concern resolved.

A-2 2006 EPA Concern: Several permits included a narrative in the permit which seemed to explain the applicable requirements table and certain applicable requirements. There is also a nice explanation of some of the SIP approval issues that impact the applicable requirements in permits. While helpful, these types of explanations are best placed in the statement of basis.

2006 PSCAA Response: This concern indicated that the narrative in our permits explaining the applicable requirements tables should be moved to the statement of basis for the permit. While we understand the interest to include only requirements and enforceable language in the permit, the narrative is important to guide a reader of the permit in the event the permit is the only document they read. It is impractical to expect all users of these permits to need two documents to comprehend the essence of the permit. Also, we have found no specific circumstance where this information has caused a compliance issue due to confusion. No change will be made in response to this concern.

Round 2 Evaluation: EPA reviewed four of PSCAA's permits found on line. It appears that PSCAA has removed the narratives that were a concern from the four permits that were reviewed. This concern is considered resolved.

A-3 2006 EPA Concern: Most permits also included a statement that unit-specific monitoring supersedes facility-wide monitoring. It is not clear whether unit-specific monitoring supersedes all of the facility-wide monitoring, or just in those cases where there is a conflict. This should be clarified.

2006 PSCAA Response: We agree with this comment. We will review our permits for examples of imprecise language and revise future versions of operating permit documents for clarity as they are issued.

Round 2 Evaluation: EPA reviewed four of PSCAA's permits found on line. Three of the permits EPA reviewed (10028, 11820 and 20350) have language at the beginning of Section I.A that still implies streamlining without providing the appropriate streamlining justification and do not clarify when the general monitoring is in fact superseded. The fourth permit (11656) reviewed has better language which clarifies when general monitoring and recordkeeping is no longer applicable because unit-specific monitoring and recordkeeping applies, but it still implies streamlining. If the general monitoring and recordkeeping being superseded comes directly from an underlying requirement, PSCAA should explain the streamlining in the SoB. It was not evident in any of the permits reviewed that general monitoring and recordkeeping requirements were being streamlined.

A-4 2006 EPA Concern: The table format used by PSCAA, and other permitting authorities in Washington, can lead to difficulties for permit engineers. Some permit engineers tend to abbreviate necessary wording of rules and requirements in order to fit lengthy text into the narrow columns, which can lead to unclear or incomplete requirements. Formats that do not limit the space for writing a requirement help to ensure the requirement is written with the necessary details and formatting to make the requirement clear. Often, substantial portions of pages are blank because all of the text is in a single column, which unnecessarily lengthens the permit without adding value. In Table 1 of the permit, due to the need to cite multiple regulations in column two, the other columns are under-utilized. While it would likely take a considerable effort to change all of the permits to a text format (see permits issued by Oregon or Idaho), PSCAA should consider the benefits of making the changes during permit renewals.

2006 PSCAA Response: We understand the reviewers would prefer the agency use a different format rather than the table format. However, the agency decided upon the table format years ago and it seems to work well for the agency staff and the permitted sources. No specific examples have been raised where the format created an enforcement gap or problem. With many pressing issues related to the operating permit program, changing an established format without a compelling need is not an appropriate use of resources. No change will be made in response to this concern.

Round 2 Evaluation: Having seen and reviewed virtually all of the permit formats used in region 10, EPA has shared their opinion of formats with agencies across the region, explaining advantages and disadvantages as well as why some formats work better for the staff writing the permit and some work better for people reading and trying to understand the permit. Writing a permit that balances those advantages and disadvantages is challenging. It is up to PSCAA to decide which format works best for them. At PSCAA's request, EPA sent them an example of a different permit format. EPA will no longer treat this issue as a concern.

A-5 2006 EPA Concern: PSCAA's permit format includes in the emission unit-specific applicable requirements table a mix of requirements including emission and operational limits; testing; monitoring and recordkeeping; and reporting. PSCAA should consider an alternative format that would be more "user-friendly" such as organizing the permit by emission unit first and then by

requirement type. For example, PSCAA's format does not allow an inspector to easily extract a list of monitoring and recordkeeping requirements for each emission unit to review during an inspection if those types of requirements are not separated in the permit. Similarly, it was common to find operation and maintenance requirements mixed in with monitoring requirements in PSCAA's permits. Monitoring is generally used to identify problems (or assure there are no problems) while maintenance is used to avoid problems or to address identified problems. Finally, operation and maintenance requirements do not necessarily satisfy the need to have monitoring; in fact, monitoring should be specified to assure compliance with any operation and maintenance requirements. PSCAA should consider the benefits a new permit format would bring.

2006 PSCAA Response: Same response for A-4. No change will be made in response to this concern.

Round 2 Evaluation: Same evaluation as for Concern A-4. EPA shared their observations and opinion on formats. It is up to PSCAA to decide which format works best for them. EPA will no longer treat this issue as a concern.

A-6 2006 EPA Concern: PSCAA noted that none of the initial permit applications contained enough information to draft a permit. PSCAA (and the state Department of Ecology who authored the rule) did not require the use of a specific application form. Developing and requiring the use of a specific permit application may have helped PSCAA and other agencies in Washington obtain the information needed to draft a permit. PSCAA similarly does not require the use a specific application for permit renewals.

2006 PSCAA Response: The use of standard forms for permit applications is one possible satisfier to address incomplete application issues. However, requiring the use of forms would not have resolved the fact that many original applications were incomplete. Many were incomplete because there was not an operating permit program in the state when the program began in 1995. Since that time, many complete original applications have been submitted for new sources, using existing permits as the application format. We work with sources on their renewal permits on the same basis, asking that they start their application using the existing permit and then identify additional information that needs to be submitted. A standard application form would probably not meet our needs and we do not intend to devote staff resources to develop specific application forms. The existing rule does not require use of those forms if we made them available. Ecology provided forms for sources to use, but few sources chose to use them. No change will be made in response to this concern.

Round 2 Evaluation: PSCAA provided EPA with four renewal applications as part of the second-round review. EPA reviewed two of the permit renewal applications; one that was formatted like a permit application (Dynea Overlays, # 12048) and one that marked up the existing permit (Ball Metal Beverage Container Corp, # 10249). The one formatted like an application incorporated a new MACT standard and included an actual emission inventory. This was a clean way to present the new applicable requirements. The marked up permit had a number of edits hand-written on the permit. This was an efficient approach for simple, straight-forward changes. Other changes appeared to be without explanation as to why the change was appropriate. They did not submit a marked up the statement of basis. Neither application included a compliance assurance monitoring analysis (a critical component of renewals), a potential to emit inventory (or confirmation that it hasn't changed), a list of physical changes to the facility or any reference to permit revisions or construction approvals (all of which may not exist). A form could have confirmed many of these questions with very little additional burden on the source. During the on-site interview, PSCAA stated that they did not think their permit issuance backlog was

impacted by the lack of information in applications. Accepting PSCAA's claim that the lack of a mandatory application form is not causing problems for PSCAA, EPA will no longer treat this issue as a concern.

Section C. Monitoring

C-1 2006 EPA Concern: While PSCAA has been good about filling gaps in monitoring, they rarely enhance insufficient monitoring found in some underlying requirements. If PSCAA does not believe they have the authority to enhance insufficient monitoring in the Title V permit issuance process, they should revise the underlying applicable requirement to ensure the Title V permit has sufficient monitoring to assure compliance.

2006 PSCAA Response: This issue was discussed with your staff, and we better understand EPA's concerns in this area. EPA has been party to litigation regarding this issue and staff indicated that additional rulemaking may address some of these concerns. At the present time, we intend to continue following EPA's progress on rulemaking and other policy initiatives on this topic. No changes will be made in response to this concern at this time.

Round 2 Evaluation: On August 19, 2008, the U.S. Court of Appeals vacated EPA's 2006 interpretive rule that prohibited states from enhancing monitoring in Title V permits. That means that permitting authorities again must ensure that monitoring in permits is sufficient to assure compliance with the terms and conditions of the permit.

C-2 2006 EPA Concern: PSCAA often relies on manufacturer specifications for setting acceptable parameter monitoring ranges. Furthermore, parameter ranges for monitoring are rarely included in the permit; rather, the source is required to write the acceptable range down at the facility. Parameter monitoring to assure compliance with applicable requirements is a critical part of the Title V permitting program. In fact, it is EPA's policy that monitoring parameter ranges required by NESHAP and NSPS must be specified in the permit. For requirements that do not originate in an NESHAP or NSPS, either the monitoring parameter range or the procedure for setting the range should be in the permit. Additionally, the statement of basis should explain how operation within the parameter range assures compliance. It is important to ensure that the parameters and their acceptable ranges can be relied upon to represent compliance (or noncompliance). Representative monitoring parameters and ranges provide certainty for the agency, the source and the public and can be established through reference method testing (to establish the relationship between the parameter and the applicable requirement), through review by the permit writers and through documentation of the acceptable ranges complete with procedures for setting and changing the ranges. When renewing permits, PSCAA should ensure monitoring parameters and ranges relied upon in permits accurately represent performance and compliance of the emission sources.

2006 PSCAA Response: We discussed this issue with your staff and we more fully understand EPA's views on this issue. We understand that EPA is interested in ensuring that permit conditions are enforceable and that acceptable parameter ranges are easily identifiable. The EPA policy statement your staff identified with respect to this concern [Hodanbosi, May 20, 1999], discusses parameter ranges used "*for determining compliance with the emission standard.*" We agree that parameters that are direct measures of compliance are covered by this policy. As an example, two cement plants in our area that have operating permits are subject to the dioxin/furan emission limitations in the applicable MACT rule. The inlet temperature to the emission control device that is observed during the performance test has to be monitored and temperatures above that test-established parameter represent dioxin/furan emission exceedances (by rule). While we agree with this concern, we need additional time to more fully consider this issue and prepare a

final response. We will prepare a list of regulatory requirements that have parameter value limitations which equate to emission limitations. We will solicit input from members of the National Association for Clean Air Agencies (NACAA) to identify the practices of other agencies with respect to this issue. We intend to discuss issues such as the permit modification processes used to change the parameter range in a permit, the authority used to modify a permit (e.g. source required to submit permit modification application or agency reopens for cause), and the effective date of the new parameter range. By June 30, 2007, this Agency will provide EPA an updated response to this concern, and a plan and schedule to address it. There is another group of parameter ranges in our permits that are used as indicators of effective operation and maintenance (O&M) activities, not emission standards. Out of range values require repair and maintenance, and are not an emission violation. In these cases, we have a process for determining the range in the permit. We believe this meets the requirements of the EPA policy statement. Therefore, we will take no further action with respect to parameter ranges that require an O&M response.

Round 2 Evaluation: PSCAA provided EPA with an updated response during the on-site interview on August 15, 2008, which included a summary of their permitting agencies survey as well as a copy of a decision by the Ohio Environmental Review Appeals Commission (see Attachment 1). EPA briefly discussed this concern with PSCAA during the on-site interview.

EPA's position on this concern can be simplified as follows: For each applicable requirement in the permit, permitting agencies must include monitoring, recordkeeping and reporting (MRR) that assures compliance. Such monitoring must be clear, enforceable and explained in the statement of basis. Including the monitoring range (or maximum or minimum value) is an important step towards providing clarity and enforceability in the permit.

Not all requirements require MRR to assure compliance. In cases where agencies feel confident that there is little to no chance for non-compliance (e.g. no controls used, no history of issues, very small emitter, etc), the PA should be able to justify that in the SoB. Monitored parameter ranges should be set based on compliance data – emission tests are good for this. For permit renewals, sources should be required to submit data for setting ranges with their permit applications. When data does not yet exist for setting the range, the method for setting the range can be included in the permit; the method can also be included in the permit for resetting the range periodically. Ranges set based on engineering judgement or manufacturer's specifications should be verified through emission testing if there is any concern about ongoing compliance; this can be done as part of an application or included as a requirement in the permit. PAs should not always assume a single parameter will assure compliance. When a range is mandated by an applicable requirement, it must be included in the permit. For all other applicable requirements, including only the method should suffice until the range has been set. Once a range is set, it should be added to the permit in all cases. If the method for setting the range is in the permit, the actual range can be added to the permit using the minor modification procedure; if the method is not in the permit, adding the range will be a significant modification to the permit. A permit that includes the method does not need to be reopened to add the range if there are less than three years until expiration.

Operation and maintenance applicable requirements should have MRR to assure compliance and are sometimes written with MRR steps in them; but, O&M requirements should not be confused with MRR itself. Separating O&M requirements from MRR in the permit would help keep this relationship clear. Operation outside of a parameter range does not have to be considered non-compliance with the underlying standard unless the underlying requirements or permit says so. Most ranges, therefore, will be used as indicators that serve as a threshold for an action (investigate, correct and document). The permit should be clear when a deviation occurs in all monitoring requirements.

There are always exceptions to EPA's position; PAs should use their judgement to establish MRR that assures compliance for their sources.

C-3 2006 EPA Concern: Nearly all of PSCAA's permits reviewed by EPA contained at least one tiered approach to monitoring, commonly for opacity and particulate emission limits. The approach normally begins with some sort of an observation which can lead to corrective actions, additional observations and eventually deviation reporting. Rarely did the monitoring scheme lead to a reference method test (e.g. RM 9 or RM 5). Where initial observations indicate possible concerns about compliance, the permit can be designed to automatically require a reference method test to confirm compliance. This is particularly appropriate where the initially-observed concerns recur often or are not promptly corrected. When renewing permits, PSCAA should add specific reference method testing where appropriate and consider the use of "automated" test requirements.

2006 PSCAA Response: The Final Report recommends adding specific reference method testing where appropriate and consider automated testing requirements based on observations (e.g. visible emissions). The Final Report mentions provisions for visible emission checks which lead to corrective actions and suggests that a performance test be triggered. The interest behind those provisions is for sources to recognize operations which were not operating properly and correct the problem. For example, if an emission unit should never have visible emissions when operated properly, a requirement to complete a reference method is not helpful. A reference method test may show the emission unit was below applicable limits (e.g. visible emissions or particulate concentration) but the point is the unit is not operating properly. The monitoring included in our permits was based on a review explained in the statement of basis. In the future, adjustments to monitoring provisions will be based on the five factors used to evaluate gap filling monitoring and testing will be included if indicated by an analysis of the five factors. We will continue to consider additional monitoring as a component of our review and drafting renewal permits.

Round 2 Evaluation: EPA's Review of PSCAA's permits indicates that emission testing requirements have been added in certain places. For example, several visible emission monitoring regimens include a Reference Method 9 observation when the source fails to eliminate the observed visible emissions. However, in some cases, the source is given a choice to perform a RM9 observation or report the visible emissions as a deviation (for example see permit # 11820, Condition II.A.1.a). In such a case, there is no verification of compliance with the visible emission limit. Where the same visible emission monitoring regimen is used to indicate compliance with a particulate emissions limit, the eventual verification of compliance should be using a particulate emission tests rather than a RM9 observation (for example see permit # 11820 and Requirement I.A.3). The addition of compliance verification tests when potential compliance issues can not be resolved quickly is a good use of the permit; however, PSCAA should be more clear that the verification testing must be done and utilize testing that fits the underlying requirement.

Section D. Public Participation and Affected State Review

D-1 2006 EPA Concern: Like many of the permitting authorities across the country, PSCAA provides the permittee with a pre-draft permit for review and comment before the draft permit goes out for public comment. Soliciting the permittee's input on the factual aspects of the permit can help to reduce errors in the permit and help educate the permittee on its obligations under the permit. Working with the permittee on developing the substantive requirements of the permit, however, can create the impression that the permit issuance process is not an open process. PSCAA should

carefully balance these interests as it works with permittees during the development and issuance of Title V permits.

2006 PSCAA Response: We agree with the comment that there is a balance between involvement of the permittee in the complex technical components of a Title V permit and public involvement in the permit process. As a result, some may perceive that developing a draft permit is not an open process. We are aware of specific community interest in facilities that are located in the south end of Seattle. In these cases, the agency has tried to engage and involve the South Park community in a meaningful way in permit actions affecting their community. This has included holding hearings during the comment period, even when a hearing was not requested by the public. We are in the process of developing the agency approach to environmental justice to better serve these communities and have received very helpful advice from Running Grass of EPA Region 10. We are open to other suggestions from EPA regarding best practices used by other agencies to address this general issue and suggested changes in our process. Without more specific information regarding this perception, we have not identified any further changes at this time to make in response to this concern.

Round 2 Evaluation: EPA has had the opportunity to discuss this concern with several permitting authorities. The advantage of reconciling some issues with the source prior to going to public comment can be beneficial to the source and EPA; but it can also be beneficial to the public in that they are seeing a better example of what the agency is planning to approve. In fact, where EPA makes changes to a permit after the public comment period in response to comments by the company, and the public has concerns about the changes, the public's only recourse is to formally challenge the permit. Our primary concern with pre-public notice permit negotiations has been whether those negotiations (and comments) are documented (transparent). If clearly documented and made a part of the public record, then the public will be aware of all the information upon which the agency based their decisions and will have the opportunity to comment during the public comment period. As long as PSCAA is careful to document changes made in response to comments made by sources, revisions as a result of negotiations prior to the public comment period are appropriate and this concern is no longer an issue.

Section E. Permit Issuance / Revision / Renewal

E-1 2006 EPA Concern: At the time of this review, PSCAA has four permit applications, received after 2000, for which the permit has not yet been issued; however, PSCAA has a plan to ensure these permits are issued soon. PSCAA has a backlog of permit renewals, with 13 renewal applications in house already. PSCAA also has been selective in processing permit reopenings, leaving some unprocessed. Title V permits are required to be reopened when the source becomes subject to newly promulgated applicable requirements if there are three or more years until the permit expires. PSCAA shared their concern that the requirement to reopen an operating permit to incorporate new MACT rules within 18 months of promulgation does not make sense when most of those rules have compliance dates 3 years after the promulgation date. The 18-month deadline often pre-dates the source's deadline to implement the selected compliance option in the MACT. EPA has stated that, consistent with Part 70, permitting authorities may initially describe MACT applicability at the subpart level as long as the detail requirements of the standard are added to the permit later, before the compliance date. PSCAA will need to manage their workload such that permit modifications and renewals meet regulatory deadlines. EPA's new focus on tracking permit issuance nationally will require PSCAA to track and report their progress.

2006 PSCAA Response: We are focusing our effort to get our permit backlog (primarily renewal permit work) caught up and expect to be on track by the end of this calendar year. The operating permit tracking tool we described in preliminary fashion during the onsite visit has been

completed, is functional, and providing benefits to us already. This tracking tool will support our work associated with submittal of new Title V TOPS permit status/activity reports every six months, as described recently by EPA staff members. Our progress on addressing this concern will be tracked in our TOPS reports to EPA every six months.

Round 2 Evaluation: According to data in TOPS, at the end of 2006, PSCAA had 11 permits that had expired and had not been renewed. By mid-2008, that number has steadily grown to 18. PSCAA provided EPA with a staffing summary, a financial report and an explanation for the backlog (see Attachment 1). In the last three years, three experienced permit engineers retired from PSCAA and were replaced by two less-experienced engineers. The one-FTE reduction in staff was meant to balance the declining number of Title V sources – falling from 55 in 2001 to 35 today. PSCAA's permit engineers have other responsibilities that are considered a higher priority than Title V permits by PSCAA including new source review, compliance report reviews and enforcement support. According to PSCAA financial report, they are collecting adequate fees to pay for their current program and may be collecting enough to add staff or a contractor to help write permits. PSCAA is trying to become more efficient in their construction approvals and Title V permit writing. PSCAA must get their backlog of permits issued, whether that takes hiring more staff or a contractor.

Section F. Compliance

F-1 2006 EPA Concern: In their permits, PSCAA did not always clarify whether certain events were deviations or when a deviation occurs and, in some cases, appear to be inconsistent between their rules, permits and their questionnaire responses (see section F, item 2.b). For example, various rules and permits also excuse loss of monitoring data under certain circumstances, and some require recordkeeping and reporting which may not meet PSCAA's general deviation reporting deadlines. For these circumstances, it is not always clear when a deviation occurs. To assure proper implementation, PSCAA should review their rules and permits for these exceptions and then be clear in their rules or permits how each should be recorded and reported consistent with Title V deviation reporting requirements.

2006 PSCAA Response: We agree with the comment because we have experienced confusion within the agency regarding deviations. Contributing to this confusion is the absence of a definition of "deviation" in 40 CFR Part 70. Thus, we were left to interpret the meaning of deviation. One option is to use the definition of "deviation" found in 40 CFR §71.6(a)(3)(iii)(C). Part 71 defines a deviation as *"any situation in which an emissions unit fails to meet a permit term or condition"*. Therefore, in the absence of any other guidance, we will start including a definition of "deviation" in our permit documents which reflects the Part 71 language referenced above. These changes will be processed in renewal permits as they are processed. We will also include this language in our deviation report forms which are available (not required) for operating permit source use.

Round 2 Evaluation: The acknowledgement and use of the Part 71 definition of deviation should help PSCAA permit writers and compliance staff be more consistent about deviation reporting. The permits EPA reviewed also revealed an effort to clarify when the source is to report a deviation. This has been a good improvement since the first program review. EPA considers this concern resolved.

F-2 2006 EPA Concern: Like many permitting authorities, PSCAA requires corrective actions when certain monitored parameters are outside of the acceptable range. This is a practical approach for assuring potential operational problems are addressed promptly. When using this approach, PSCAA should clarify when a deviation occurs (when the unit is outside the range or if corrective

action is not taken), such that the appropriate records are created and reported. Furthermore, PSCAA should add recordkeeping so each event of operation outside the acceptable range is documented, even if it is not a deviation.

2006 PSCAA Response: The permit language reflects our intent and the practices the sources should use to implement the permits. Our permits require businesses to keep records of all monitoring and inspections required by the permit. The permits require periodic monitoring and include provisions that require sources respond to observations or circumstances at other times. Most of these provisions are intended to demonstrate compliance with O&M provisions in the rule and a requirement to keep equipment in good working order. This concern also appears related to Concerns C-2, C-3, and F-I. In the absence of a specific example of a compliance issue overlooked, we believe the permits have sufficient recordkeeping and reporting requirements. No changes will be made in response to this concern at this time.

Round 2 Evaluation: Similar to Concern F-1, the permits EPA reviewed indicate that PSCAA has clarified when deviations occur and should be reported for many of the standard monitoring regimens (e.g. in permit # 11820 see II.A.1.a, II.A.1.b). While there may be other conditions in permits where it is not clear when a deviation should be reported (e.g. in permit # 11820 see II.A.1.c, II.A.1.d, II.A.1.e), PSCAA added a general recordkeeping requirement in Condition O.5 (permit # 11820) which requires all of the records and results be kept. This is a great catch-all recordkeeping requirement. PSCAA should continue to ensure that their expectations for deviation reporting are clear in permits. EPA considers this concern resolved.

Section G. Resources and Internal Management Support

G-1 2006 EPA Concern: There does not appear to be a single tracking system for permit projects and actions that would allow management to know which projects are behind schedule and how large the backlog might be at any given time. After the interviews, the permit supervisor presented a new system that was being developed. The new system seemed to have some very impressive features. If successful, the new system will be very helpful in assuring permits are issued on time and the permitting backlog is managed appropriately.

2006 PSCAA Response: The tracking system discussed during the review meetings with EPA staff has been implemented and is fully operational (see response to Concern E-1).

Round 2 Evaluation: During the second-round on-site interviews, PSCAA indicated that the tracking system is functional and has been helpful for tracking permit issuance progress. EPA considers this concern resolved.

G-2 2006 EPA Concern: While PSCAA seems to have been able to avoid and manage staff turnover, through a combination of competitive salaries and benefits and challenging work, 3 of the 6 permit engineers will be retiring in the near future. This will present a challenge to effectively replace the lost experience with an already mounting backlog in permit renewals and modifications.

2006 PSCAA Response: In response to the upcoming retirement of engineers from our staff, we hired two replacement engineers prior to the departure of the last two retiring engineers. This overlap and short term extra staffing level provides the opportunity for extra cross training before the retirements. Both of the new engineers were on staff by the end of July and their training is well underway.

Round 2 Evaluation: See the evaluation for Concern E-1. EPA is very concerned about PSCAA's backlog of permit renewals which could be at least partly attributed to their staffing level and experience.

- G-3 2006 EPA Concern: Information provided by PSCAA indicates that PSCAA has a backlog of permit renewals, modifications and reopenings. Both renewals and modifications have regulatory deadlines for issuance. With the initial round of permit issuance completed, EPA is shifting our attention to tracking permit modifications and renewals to ensure that the permits are being issued on time. PSCAA will need to be sure they have adequate resources to meet the regulatory deadlines for these permit actions (see Good Practice #2 above).

2006 PSCAA Response: See response to Concern E-1 above. We are also shortening the internal review steps for operating permit documents to streamline their processing. Again, our progress on addressing this concern will be tracked in our TOPS reports to EPA every six months and the agency agrees that this permit processing work needs to be on-track.

Round 2 Evaluation: See the evaluation for Concern E-1. EPA is very concerned about PSCAA's backlog of permit renewals.

Section I. Document Review (Rules/Forms/Guidance)

- I-1 2006 EPA Concern: PSCAA updates their rules periodically to adjust their fee rates. EPA should be apprised of rule revisions. All rule revisions should be routinely submitted to EPA for review and approval, even the periodic fee adjustments.

2006 PSCAA Response: The meeting with your staff in October helped us understand this concern and the information we need to provide to EPA. We are developing an internal procedure to ensure we forward operating permit fee and budget information to the region in the proper format in the future. Note - we adopt our fee changes as a part of the budget adoption process for our fiscal year (July 1 June 30). Fees adopted by our Board in June are stated on invoices sent to sources in November for the upcoming calendar year. It is assumed that EPA approval of our fee submittal will follow the agency's budget adoption schedule.

Round 2 Evaluation: PSCAA's program was last submitted to EPA for approval on 9/26/02. Part 70 has been revised or re-interpreted seven times since 2002 (6/03, 6/04, 10/05, 12/05, 12/06 and 5/07). At least one of those changes (5/07) appears to require a change to PSCAA's rules, but PSCAA's rules have not been changed to incorporate a Part 70 change since 2002. During the same time period, PSCAA's rules have been revised three times, primarily for fee adjustments. None of the PSCAA rule changes were submitted to EPA for approval. PSCAA should review the Part 70 changes to determine whether their rules should be revised and make those changes. PSCAA should submit their current rules for approval now and after each revision in the future. If needed, EPA can provide guidance on submittal format and content as well as timing that might work best.

- I-2 2006 EPA Concern: PSCAA allows a "short form" for compliance certifications. Annual compliance certifications are required to include identification of each term or condition of the permit that is the basis of the certification, the compliance status of the source, and the method(s) used for determining the compliance status of the source. While PSCAA's compliance certification form is not required to be used, it likely serves as guidance for compliance certification reports. The form only requires deviations to be listed. Without listing each term or condition that the certification is based upon, the source is not obliged to list the method used to determine compliance. In fact, the compliance certification statement in the form implies that

only the monitoring specified in the permit can form the basis for compliance, when, in reality, any credible evidence should be considered when documenting compliance. A more complete listing of the permit terms and conditions that the certification is based upon, along with any monitoring or other information used to make the determination, helps ensure accurate and complete certifications.

2006 PSCAA Response: This concern expresses EPA's preference for a "long form" annual compliance certification rather than the "short form" we accept (and have encouraged) from our sources. We use a short form certification because it is the last step in completing the entire compliance record for the source during the certification period. It is our expectation that the source has submitted all documents required by the operating permit (e.g. deviation reports, monitoring reports, permit applications, test reports, etc.) for the period. We have that entire record on file when the certification is submitted, along with our inspection reports. The assigned inspectors and engineers have been tracking the source's compliance status throughout the year. We understand the short form certification may be unsatisfying by itself if the record described above is not available. Another concern with the long form certifications is that sources may certify compliance on a basis other than the requirements in the operating permit itself. Additional information or credible evidence may be discussed through other submittal reviews (e.g. deviation report which includes additional information to explain the circumstances about a specific event). However, the permit terms should be the reference point for compliance certification. This topic awaits national guidance (and possibly rulemaking) to clarify EPA's views. In the State of Washington, after much discussion among the air agencies, the Washington Department of Ecology concluded both the long-form and the short-form of certification were legally acceptable under Title V. Therefore, no changes will be made in response to this concern at this time.

Round 2 Evaluation: EPA took another look at PSCAA's certification form (3/13/07 version) and reviewed two compliance certifications submitted to PSCAA and EPA (Brunswick family Boat, submitted 10/15/07 and Graymont Western, submitted 4/18/08). EPA accepts that a short form can be acceptable; however, EPA has concerns about PSCAA's current annual compliance certification form. The form clearly relies on the assumption that the source reported all deviations during the year. Section I of the form asks (yes or no) whether there were any deviations during the certification period. If the answer is "yes," the source is instructed to complete Section II, titled "Identification of Deviation Reports Submitted During the Certification Period." Section II is obviously designed for listing the reports in which any deviations were previously reported and asks for the "Report Submittal Date" and "Report Description." The form does not include an obvious place for reporting deviations that were not previously reported. Furthermore, the compliance certification statement on the form does not allow the Responsible Official to indicate whether compliance was continuous or intermittent as required. The statement essentially states that the source was in intermittent compliance with terms and conditions identified in the deviation reports listed in Section II and was in continuous compliance with all terms and conditions not identified in the deviation reports listed in Section II. There is no option to certify intermittent compliance for deviations that were not addressed by a deviation report listed in Section II. While use of a long form would rectify this situation simply by the nature of the details required to be reported, the short form could be modified to provide the necessary flexibility for the Responsible Official to accurately certify the compliance status of the source. PSCAA should revise their annual compliance form or use a long form to address this concern.

- I-3 2006 EPA Concern: PSCAA's web site states that "Operating permits are required for major sources of air pollution." In some cases, minor sources are also required to obtain Title V operating permits. PSCAA should clarify this statement on their website.

2006 PSCAA Response: The language from our website regarding applicability for operating permits is being edited to provide the requested clarification and will be completed by December 31, 2006.

Round 2 Evaluation: It appears that this statement has been removed from PSCAA's website. This concern has been resolved.

- I-4 2006 EPA Concern: PSCAA's deviation report form states that "A deviation is not necessarily a violation. Violations will be determined by Puget Sound Clean Air Agency." This is a misleading statement because EPA, courts and hearing boards are also authorized to determine whether a violation has occurred.

2006 PSCAA Response: The agency's deviation report form is being edited to provide the requested clarification and will be completed by December 31, 2006.

Round 2 Evaluation: At the time of the on-site interview for the second-round review, PSCAA had not yet revised their deviation report form. Since then, however, they sent EPA a new version (see Attachment 1). The sentence "Violations will be determined by Puget Sound Clean Air Agency" has been removed. This concern has been resolved.

III. Compliance Assurance Monitoring

The Compliance Assurance Monitoring (CAM) requirements, found in 40 CFR Part 64, apply to pollutant-specific emissions units at Title V facilities. Applicability to CAM is based on three factors:

1. The emissions unit must be subject to an emission limitation or standard;
2. The emissions must utilize a control device to achieve compliance with the standard; and
3. Pre-control emissions from the emission unit (on a PTE basis) must be greater than the major source threshold for that pollutant.

CAM must be addressed in initial Title V permits where the permit application was submitted or deemed complete after April 20, 1998. For applications deemed complete prior to this date, CAM must be addressed in the first renewal permit. If an emission unit is a *large pollutant-specific emissions unit*, CAM must be addressed during a significant modification to the Title V permit.

According to PSCAA (see Attachment 1), only three of their issued permits contain CAM requirements: Graymont, Nucor Steel and Puget Sound Energy. Graymont and Puget Sound Energy were two of the four permits reviewed as part of the program review. All four permits reviewed are renewal permits, so CAM applicability should have been addressed in all four permits; CAM requirements should have been included in two of the four permits.

Brunswick and Saint-Gobain

There is no mention of CAM in the Brunswick or Saint-Gobain permits or SoBs. The Saint-Gobain renewal application included a thorough analysis of CAM applicability (the Brunswick application was not reviewed). The SoB should have explained why CAM is not applicable for each emission unit.

Graymont

The Graymont statement of basis does not include a CAM applicability analysis for each emission unit except for EU-1 within the explanations for Permit Conditions EU-1.2 and EU-1.3 (VI.C.1.b) which are both PM10 emission limits. The explanation essentially states that because uncontrolled emissions are greater than 1000 tpy, Emission Unit #1 is subject to CAM. It further notes that Graymont submitted an adequate CAM plan that has been incorporated into the permit. There was no discussion about CAM in section VI.A.2, titled *How monitoring methods in Section II of the AOP were originally developed*, or in section XVI.A.2, titled *Changes to Emission Unit Specific Sections*, of the statement of basis. Section XVI.B of the statement of basis, titled *Changes to Section II*, simply notes that a new section on CAM has been inserted. The statement of basis is the right place to explain why the CAM requirements in the permit are sufficient. It should describe CAM applicability including descriptions of the emission units, controls, emissions and applicable limits, the rationale for selecting the indicators, the rationale for selecting the indicator ranges and any supporting compliance information (e.g. test data, design factors, historical data, margin of compliance) that was relied upon.

The Graymont permit applies CAM to Emission Unit #1 (calcining kiln) for particulate matter (0.05 gr/dscf) and PM10 (20.1 pph) emission limits in Conditions EU-1.2 and EU-1.3 and describes the CAM requirements in Conditions II.C.1 through II.C.9. Permit conditions EU-1.2 and EU-1.3 also require periodic monitoring (visible emission monitoring and emission testing) found in Conditions II.A.2(a) and II.A.2(c). Normally, when an emission unit becomes subject to CAM, only the CAM requirements are relied upon to assure compliance unless the other monitoring requirements are underlying requirements that can not be streamlined. In this case, both of the periodic monitoring requirements appear to be created using PSCAA's gap-filling authority and are not from an underlying requirement.

The specific CAM requirements in Condition II.C are presented in nine sections. Condition II.C.1 simply explains that CAM applies to Emission Unit 1 and Conditions EU-1.2 and EU-1.3. The permit does not apply CAM to the opacity limit found in Condition EU-1.1 which is another emission limit that applies to Emission Unit #1. Aside from that oversight, this discussion about CAM applicability should be kept in the statement of basis. The CAM requirements refer to the periodic monitoring requirements found in Conditions II.A.2(a) and II.A.2(c) which require daily opacity observations (see, no-see) and once-every-two-years emission/opacity tests. The emission testing can be adjusted to be annually if emission limits are exceeded. The statement of basis incorrectly states that testing is required to be done quarterly.

In summary, while the actual monitoring approach for Emission Unit 1 may be adequate, the statement of basis and permit should be revised. The statement of basis should include a complete analysis for CAM including applicability for each emission unit and an explanation and justification for the CAM approach. The permit should be organized to reflect CAM as the monitoring for all of the particulate emission limits that apply to Emission Unit 1, including particulate matter, PM10 and opacity.

Puget Sound Energy

Similar to the Graymont permit, the Puget Sound Energy statement of basis does not include a CAM applicability analysis for each emission unit; in fact, the statement of basis only mentions in two places that CAM was added to the permit. The statement of basis is the right place to explain why the CAM requirements in the permit are sufficient. It should describe CAM applicability including descriptions of the emission units, controls, emissions and applicable limits, the rationale for selecting the indicators, the rationale for selecting the indicator ranges and any supporting compliance information (e.g. test data, design factors, historical data, margin of compliance) that was relied upon.

The Puget Sound Energy permit applies CAM to Emission Unit #1 (two combustion turbines) for NO_x emission limits in Conditions EU-1.1 (% NO_x), EU-1.2 (pph and tpy NO_x) and EU-1.3 (pph and tpy NO_x) and describes the CAM requirements in Conditions II.C.1 through II.C.9. Permit conditions EU-1.1, EU-1.2 and EU-1.3 also require periodic monitoring (combustion turbine monitoring) found in Condition II.A.2(b). Normally, when an emission unit becomes subject to CAM, only the CAM requirements are relied upon to assure compliance unless the other monitoring requirements are underlying requirements that can not be streamlined. In this case, the periodic monitoring requirement appears to be a collection of underlying and gap-filling requirements. The NO_x % emission limit is listed with an SO₂ limit. Permits should separate unique emission limits and monitoring requirements into individual requirements so the references, monitoring and test methods associated with each are clearer.

The specific CAM requirement is presented in Permit Condition II.C. The message in Condition II.C.1, which explains that CAM applies to Emission Unit 1 with water injection for NO_x limits found in Conditions EU-1.1, EU-1.2 and EU-1.3, should be moved to the statement of basis. The CAM requirement relies on monitoring required by NSPS and previously issued orders of approval; however, some of the requirements need clarification. The permit requires monitoring of source operation and water injection system operation parameters but does not include indicator ranges for any of the parameters monitored. The monitoring system accuracy is specified but the calibration frequency and technique are not. The CAM requirement appears to include a method for resetting the required water-to-fuel ratio, but allows the use of an array of techniques leaving it up to the permittee to select one and to decide when it is necessary to reset the ratio. The details for a custom fuel monitoring schedule, previously approved by EPA, should be incorporated into the permit. A reference to the NSPS-required water-to-fuel ratio graphs in Condition II.A.2(b)(ii)(c)(1) should be 40 CFR 60.335(b)(4) rather than 60.335(a). As written, the monitoring conditions seem redundant in places and disorganized in others.

In summary, the statement of basis and permit should be revised. The statement of basis should include a complete analysis for CAM including applicability for each emission unit and an explanation and

justification for the CAM approach. The permit should be organized to reflect CAM as the monitoring for NOx limits that apply to Emission Unit 1 and edited to accurately represent the sum total of monitoring requirements that apply.

IV. Summary of Concerns and Recommendations

As a result of the Title V program review, EPA identified several concerns. Most of the concerns were identified in the first-round program review. EPA was able to review PSCAA's implementation of the compliance assurance monitoring (CAM) requirements; additional concerns regarding CAM have also been identified. The concerns identified by this report are summarized below under four themes followed by EPA's recommendation for moving forward.

PSCAA has made some improvements to their permits, but more improvements are still needed. While it isn't obvious that facility-wide monitoring has been superseded by unit-specific monitoring in permits, the language in (or not in) permits and statements of basis leave open the possibility that supersession without the proper documentation could easily occur (Concern A.3). When periodic monitoring identifies potential non-compliance, the permit does not require testing using the test method that is appropriate for confirming compliance with the applicable requirement (Concern C.3). PSCAA has not submitted any rule revisions for EPA's review and approval since 2002 (Concern I.1). Even if PSCAA continues to use a "short" compliance certification form, the form as written does not meet Part 70 requirements (Concern I.2).

Given what has transpired since the 2006 Title V program review, it is time for PSCAA to address two issues sidestepped in 2006. With the August 2008 U.S. Court of Appeals decision, all permits must contain sufficient monitoring, recordkeeping and reporting requirements that assure compliance with the applicable requirements (Concern C.1). Despite the mixed responses to PSCAA's survey of other agencies, permits that do not contain monitoring ranges (or maximum or minimum thresholds) or the method for creating a range, are not as enforceable as they should be (Concern C.2).

EPA is very concerned about permit issuance rates. PSCAA's backlog of unissued renewal permits has grown significantly since EPA pointed out the backlog concern (Concerns E.1, G.2 and G.3).

Documentation of CAM can be improved. None of the permits reviewed contained a thorough applicability analysis and none of the permit with CAM captured a good justification for the monitoring in the permit.

Recommendation

PSCAA should provide to EPA a response that explains what they plan to do to resolve the concerns identified in this program review. Between the previous report and the on-site interview during this second-round review, PSCAA should be familiar enough with these issues to respond within 30 days of receiving the final report. If PSCAA prefers to discuss the concerns before responding, EPA should accommodate that.