



FINAL Report:
Northwest Clean Air Agency
Title V Program Review

EPA Region 10

October 18, 2006

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Attachment

- I. Completed Questionnaire

Introduction

This report documents the Title V program review for Northwest Clean Air Agency (NWCAA) located in northwest Washington.

Overview and Program Review Objective

In response to recommendations in a 2002 Office of Inspector General audit, the Environmental Protection Agency (EPA) has set an aggressive national goal of reviewing all state and local Title V programs by the end of fiscal year 2006. Specifically, EPA has developed an action plan for performing reviews of state and local Title V programs and has committed to continuing the Title V fee reviews begun in 1998. The objective of the broader program 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 Region 10 has completed reviews of the Idaho, Oregon, Washington, Alaska, Lane County (Oregon), Puget Sound (Washington) and Spokane County (Washington) Title V programs.

We would like to acknowledge and express EPA's appreciation for the cooperation and patience of NWCAA's management and staff throughout all stages of our review of their Title V program. Receiving the timely and complete questionnaire response in advance of the on-site interviews was very helpful, allowing EPA to narrow the focus of our on-site interviews. NWCAA's efforts to make management, staff, and space available to EPA for the interviews also helped make the on-site time very productive.

General NWCAA Title V Program Background

NWCAA is a local air pollution control agency with jurisdiction in three counties located in the northwest corner of Washington: Island, Skagit and Whatcom. Exceptions to NWCAA's authority in those three counties include: EPA regulates sources in Indian country; WDOE is the Title V authority for all chemical pulp mills and aluminum smelters; and the Washington Energy Facility Site Evaluation Council (EFSEC) regulates all thermal electric energy projects that are at least 350 megawatts in size.

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

NWCAA issues Title V permits to 16 sources. Approximately 16 people at NWCAA work in the Title V program, totaling less than 9 FTE.

Program Review Basis

EPA's review of NWCAA's Title V program, which began in November 2004, is based on answers NWCAA provided to an EPA questionnaire, review of a selection of issued permits and statements of basis, review of application and reporting forms and guidance, and interviews with NWCAA representatives during a site visit on December 1 and 2, 2004. This information was analyzed with regard to Part 70 regulations and policies and NWCAA and WDOE state regulations.

A questionnaire, developed by EPA Headquarters with input from the Regions and revised by Region 10 to include a table titled State/Local Title V Program Fiscal Tracking Evaluation Document (the protocol developed by EPA in 1997 and used in previous Title V fee program reviews), was sent to and completed by NWCAA in advance of Region 10's on-site visit to the agency. We reviewed the completed

questionnaire (Attachment I) and other available information prior to the on-site visit, including the following five issued permits:

Encogen Northwest
BP West Coast Products LLC
Tesoro Northwest Company

Shell Oil Products U.S. Puget Sound Refinery
General Chemical Corporation

While on site at the NWCAA office, we interviewed the management and air permitting staff. We discussed NWCAA's Title V fee program with management and finance staff. The purpose of the interviews was to confirm and clarify what we learned from our review of the permits and questionnaire and to ask questions that developed during our pre-visit review.

EPA's review team included five Region 10 staff members, including legal and technical support. Key elements of each individual's observations, as well as observations from the on-site interviews, are highlighted and discussed in the report.

Program Review Report

This program review report is formatted consistent with the program review questionnaire. Within each of the topic areas, except in Section H, the report describes good practices, concerns, and other notable observations. The fee protocol information is addressed in the Resources and Internal Management Support section of the report. The report addresses the following topic areas:

- A. Permit/Review Report Preparation and Content
- B. General Permits
- C. Monitoring
- D. Public Participation and Affected State Review
- E. Permit Issuance/Revision/Renewal
- F. Compliance
- G. Resources and Internal Management Support
- H. Title V Benefits
- I. Document Review (Rules/Forms/Guidance)

In response to the program review questionnaire and during the on-site interviews, NWCAA identified a number of benefits that have resulted from the implementation of the Title V program. The notable benefits realized by NWCAA, which reflect the value that can come from responsible implementation of such a comprehensive air quality program, are listed in Section H.

In general, we included in the report only those good practices that are unique to NWCAA or seem particularly worth noting and passing along to other permitting authorities. NWCAA's implementation of the program includes many other good practices that are not specifically discussed in the report because they are widely used among other Title V permitting authorities.

A summary of concerns is also provided that identifies those issues that will need to be addressed. Some concerns identified in this review will need to be resolved as NWCAA revises their operating permits and their program is updated. EPA Region 10 expects NWCAA to respond to each of the concerns identified in this report. EPA will work with NWCAA to address the identified concerns and will schedule follow-up as needed.

A. Title V Permit Preparation and Content

Good Practices

1. NWCAA permit engineers have regularly scheduled in-house technical staff meetings and impromptu meetings to collaborate on issues of concern such as test methods, compliance assurance monitoring (CAM) procedures and monitoring requirements, with one staff member serving as an internal resource for stack tests and continuous monitors. They also routinely participate in the Washington permit engineers' quarterly meetings to share information with other agencies. This collaboration likely results in better, more comprehensive and more enforceable permits. Further permit quality and consistency is assured through peer review by the Manager of Technical Services and the agency Director.
2. NWCAA streamlines permit conditions where appropriate. One good example is the creation of a specific section to address leak detection and repair requirements that apply to many emission units and is referenced by the emission unit sections.
3. Permits often clarified rule citations by including all enforceable versions of the rules, adding the date of the rules, and explaining which are enforceable by only the state and how that changes when the new rules are approved by EPA.
4. Statements of basis often included clear source descriptions, including plot plans, flow diagrams and emission unit lists. Some included a good compliance history of the source. A good feature included in at least one statement of basis was an introductory paragraph which described the changes to the permit and reason for modification. The format used for statements of basis is easy to follow.

Concerns

1. Some of NWCAA's permits contained high-level (subpart or section level) references to applicable Maximum Achievable Control Technology (MACT) requirements, effectively omitting the details necessary to describe what must be done to comply. Similarly, some of NWCAA's permits failed to clarify which emission units, equipment and affected components are subject to a particular standard. For example, the list of components subject to leak detection and repair in NSPS Subpart VV can be very long. If it is not practical to list the affected components in the permit, then the permit should clarify how the list is created and maintained and where the list is kept. The Title V permit provides NWCAA an opportunity to clarify how a standard applies to the source which, in this case, assists inspectors and helps to assure compliance. NWCAA should include a sufficient level of detail when incorporating and citing applicable requirements in Title V permits.
2. While NWCAA's statements of basis have some good features, they could be improved. A permitting history would be helpful; the potential to emit should be presented to support any major/minor source claims or applicability determinations that rely on it; the applicability of requirements (CAM, NSPS, NESHAP, etc) could have been explained better in many cases; and streamlining of requirements should always be fully explained. NWCAA should continue to look for ways to improve the statements of basis.
3. The table format used by NWCAA, 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. 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. 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. See permits written by states such as Oregon or Idaho for examples. While it would likely take a considerable effort to change all of the permits to a text format, NWCAA should consider the benefits of making the changes during future permit renewals.

4. NWCAA's permit format separates individual emission units (which is good) but includes in the emission unit-specific applicable requirements table a mix of requirements including emission and operational limits; testing; monitoring & recordkeeping; and reporting. Organizing the permit by emission unit first and then by requirement type makes the permit much more "user-friendly" for finding specific requirements. For example, an inspector can easily extract a list of monitoring and recordkeeping requirements to review during an inspection if those type requirements are grouped. Similarly, grouped reporting requirements can easily be extracted for reviewing periodic Title V reports. NWCAA should consider further grouping of emission unit-specific requirements.
5. It was common to find operation and maintenance requirements mixed in with monitoring requirements. 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.
6. Some permits included a narrative in the permit which seems to explain certain applicable requirements. While helpful, these types of explanations are best placed in the statement of basis.

Other Observations

None

B. General Permits

NWCAA has not developed or issued any general permits.

C. Monitoring

Good Practices

1. NWCAA's permit staff has received training in such topics as continuous emission monitoring systems, stack testing and compliance assurance monitoring. One staff person is dedicated to monitoring work, including reviewing stack tests and continuous monitoring data and auditing monitoring systems, which is an efficient approach to an often complicated aspect of permit writing.

Concerns

1. Monitoring, recordkeeping, and reporting in NWAPA's permits can be improved in several ways. Monitoring for several generally applicable requirements seems unduly vague, thus raising enforcement concerns. In addition, NWCAA permits did not always identify the authority for adding monitoring, recordkeeping, and reporting that was not in the underlying applicable requirement. As another example, NWCAA should clarify in permits where New Source Performance Standards (NSPS) and National Emission Standards for Hazardous Air Pollutants (NESHAPs) should be submitted, particularly when the standard has been delegated to NWCAA and reporting to EPA has been waived.
2. CAM, under 40 CFR 64, must be applied to each applicable requirement that applies to each pollutant-specific emission unit. Some NWCAA permits seemed to be missing CAM requirements for emission units that appear to meet the CAM criteria. There rarely was any explanation in the statement of basis as to whether CAM applied. Establishing CAM is an important purpose of Title V permits. NWCAA should be sure CAM has been correctly applied throughout their Title V permits and thoroughly document their CAM decisions.
3. NWCAA relies on EPA's January 22, 2004 "umbrella monitoring" guidance *Revisions To Clarify the Scope of Certain Monitoring Requirements for Federal and State Operating Permits Programs* in establishing monitoring in permits. NWCAA should note that this guidance was vacated by the courts in October 2005, and EPA repropose the policy in June 2006. In any case, NWCAA should determine whether monitoring in underlying requirements exists and is sufficient, and when not, use their authority to create adequate monitoring in the permit or address the deficiency in the underlying requirement to assure compliance.
4. Operating permits must specify the authority for each term or condition in the permit. When adding "gap-filling" monitoring in permits, the appropriate citation should be the gap-filling authority in NWCAA's rule.

Other Observations

1. Use of a bag leak detector system such as a triboelectric monitor on bag houses may be a useful tool in ensuring appropriate baghouse operation, as these monitors are sensitive enough to pick up even small leaks in bags and they are a relatively inexpensive continuous monitoring option.
2. Particulate matter continuous emission monitoring systems are available and have been demonstrated in use. These systems can be used on wet and dry exhaust streams. For sources that normally operate very near the particulate matter standard or have highly variable emissions, continuous emission monitoring is now a good alternative to frequent emission testing.

D. Public Participation and Affected State Review

Good Practices

1. In addition to publishing public notices in a newspaper of general circulation, sending them to their maintained mailing list and listing them on the WDOE Air Operating Permit Register, NWCAA also posts them on their web site. In fact, all of NWCAA's Title V permits and statements of basis are posted on their website along with new source review (NSR) permits, regulatory orders and procedural documents referenced by the Title V permits.

Concerns

1. Like many of the permitting authorities across the country, NWCAA 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. NWCAA should carefully balance these interests as it works with permittees during the development and issuance of Title V permits.

Other Observations

1. Public involvement is an important part of the Title V process. The Clean Air Act requires states to solicit public comment on draft permits and to provide the public the right to challenge permits in state court. Although NWCAA meets these requirements, comments are received on few permits. NWCAA does not provide outreach to the public on how the Title V program works or how the public can participate in the review and issuance of Title V permits. Nor does NWCAA implement any type of environmental justice program or provide notices in languages besides English. By providing basic training to the public on how the Title V program works and how the public can participate in the review and issuance of Title V permits, NWCAA could help ensure a more meaningful public participation process.

E. Permit Issuance / Revision / Renewal

Good Practices

1. NWCAA has issued all of their initial permits. This is notable because, for having only 16 Title V permits, NWCAA's permitting workload is substantial due to the number of complex sources (e.g. oil refining and energy generation) that they regulate.

Concerns

1. At the time of the on-site interviews, NWCAA had a significant backlog of permit modifications and renewals. NWCAA admitted that some of the permit issuance delays were intentional to more efficiently address anticipated changing regulations. In a follow-up communication in September 2005, NWCAA reported that their backlog still existed, so they were pursuing adding additional permit writing staff. NWCAA 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 NWCAA to track and report their progress.
2. NWCAA's permits contain conditions that include the ability to have alternative test methods or monitoring methods approved by NWCAA (e.g. "procedures approved by the Control Officer"). Significant changes to test methods or monitoring methods in Title V can be made only through the significant permit revision procedure. In addition, NWCAA can not approve an alternative to the test method that is approved as part of the state implementation plan (SIP). See 40 CFR 51.212. NWCAA should appropriately limit the authority to approve alternative test methods or monitoring methods in future permits.
3. NWCAA does not have a central permit tracking system. Each individual permit engineer tracks activities, including the permitting actions, associated with the sources assigned to them and discusses their work during technical staff meetings. When agencies have significant permitting workloads, tracking systems can help focus an adequate level of attention on the work. Given their current backlog of permits, NWCAA should consider a central tracking system for permitting actions.

Other Observations

None

F. Compliance

Good Practices

1. We strongly support NWCAA's compliance certification form to the extent it requires the permittee to certify its compliance status on a permit term-by-permit term basis. Requiring a permittee to show the permitting authority more detail of the process the permittee went through to review the compliance status of the facility will minimize the likelihood that potential noncompliance issues are overlooked. We believe this effort will in turn improve compliance overall. It is difficult to argue that this approach imposes a greater burden on permittees because permittees, as part of their obligation to conduct a reasonably inquiry into their compliance status, should be going through this same process even with a shorter, blanket certification form.
2. NWCAA requires all deviations to be reported no later than 30 days after the end of the month in which they were discovered, with some reported sooner. This should allow NWCAA to ensure more timely investigation, mitigation and enforcement as needed.

Concerns

1. Compliance schedules in permits should include sufficient details to make the schedule enforceable; this may require NWCAA to more routinely write detailed compliance schedules as part of their enforcement program, so they do not need to be enhanced in the Title V permit.

Other Observations

1. The focus of this Title V program review was on NWCAA's implementation of its Title V program. Accordingly, in conducting this Title V program review, EPA did not review reports submitted by Title V facilities to determine the extent of compliance with Title V requirements in NWCAA's jurisdiction and whether NWCAA is taking appropriate enforcement actions in response to noncompliance. EPA also conducts periodic reviews of state and local Clean Air Act enforcement programs which look at, among other things, source compliance and enforcement actions.

G. Resources and Internal Management Support

Good Practices

1. NWCAA appears to have a sound accounting system which effectively tracks Title V revenues and expenses separate from non-Title V revenues and expenses.
2. NWCAA's Title V permit engineers also perform compliance inspections and process construction permits. This allows them to develop a diverse engineering experience base and a good working knowledge of their assigned sources. The advantage this provides must be balanced with the possible workload priority conflicts individual engineers may experience.
3. NWCAA hired a temporary engineer to assist with the permit writing workload. Since the on-site interviews, NWCAA has received approval to hire an additional permit engineer. This should help them to address the permit renewal and modification backlogs that have been developing.

Concerns

1. Information provided by NWCAA indicates that NWCAA has a backlog of 1 new permit, 3 permit renewals and 9 permit modifications and reopenings. Permit renewals and modifications have regulatory deadlines for issuance. With the initial round of permit issuance coming to a close, EPA will be shifting our attention to tracking permit modifications and renewals to ensure that the permits are being issued on time. NWCAA will need to be sure they have adequate resources to meet the regulatory deadlines for these permit actions (see Good Practice #2 above).
2. Title V requires all aspects of the Title V program be funded by Title V fees. That requires tracking of Title V costs, including staff labor. It is efficient for permitting authorities to proportion (using representative factors) labor costs for certain positions that generally cut across Title V and other funding mechanism such Section 105 grants. For instance, personnel management, human resources, safety and other similar positions can be effectively proportioned for cost tracking purposes. However, tracking work on specific and identifiable Title V projects and for specific Title V sources helps to ensure accurate accounting of the Title V costs and is appropriate when practical to do so. The NWCAA records reviewed indicate that two positions may not be tracking their actual time spent on Title V activities. All NWCAA employees should record their time when working on identifiable Title V projects to the extent that it is practical. NWCAA should confirm that all employees charge their Title V work to the Title V account.
3. Travel and training that support the development and implementation of Title V permits must be charged to Title V. While very little Title V travel and training results in additional recordable expenses, based on the records reviewed, it is not apparent that travel and training have been charged to Title V. NWCAA should confirm that travel and training that supports the Title V program are charged to Title V.
4. It was apparent during the on-site interviews that there is some confusion about which aspects of minor new source review (a non-Title V permitting program) can be charged to Title V. While Title V requires all aspects of the Title V program be funded by Title V fees, it also prohibits charging non-Title V work to the program. The implementation (i.e. tracking, enforcement) of non-Title V permitting programs can be charged to Title V once the non-Title V permit requirements are incorporated into the Title V permit as applicable requirements. The development and issuance of non-Title V permits is not a Title V activity and can not be funded by Title V fees. State law, RCW 70.94.162(2)(a)(iii), specifically prohibits charging best available control technology analyses to Title V, and RCW 70.94.152(2) requires local agencies to deposit all NSR fees in the dedicated account of such agency, not the Title V account.

NWCAA should confirm that non-Title V permit development and issuance is not charged to Title V.

Other Observations

1. NWCAA staff indicated an interest in EPA coordinating a regional Title V workshop. They suggested topics such as CAM, lessons learned from the first round of permitting, and rule changes. They also expressed an interest in training on various MACT standards, performance evaluations and emission testing.

H. Title V Benefits

Benefits Identified by NWCAA

In response to the program review questionnaire and during the on-site interviews, NWCAA identified a number of benefits that have resulted from implementation of the Title V program.

1. NWCAA staff has a better understanding of NSPS, SIP and new source review requirements and how to design enforceable monitoring terms to assure compliance and ensure better consistency between regulated sources.
2. Drafting and issuing Title V permits resulted in more complete information and knowledge about facility operations and the applicability of requirements and more consistent monitoring, recordkeeping and reporting. Title V resulted in better documentation of the basis for applicable requirements (in the statement of basis) and improvements to NWCAA's records management and database. Title V permits and statements of basis have become excellent resources for conducting compliance inspections.
3. Occasionally, permit preparation uncovered compliance issues that were subsequently resolved. The requirement for regular compliance certifications is a key driver in forcing sources to bring compliance issues to the attention of NWCAA.
4. Permittees are devoting more resources (staff, environmental management systems, and controls) and attention (compliance monitoring and maintenance) to assuring compliance with their permits and the applicable requirements. The facility owners and operators are more aware of the requirements that apply to their facilities.
5. A variety of Title V permit writing skills and techniques (including monitoring, recordkeeping and reporting and the use of a statement of basis) are being used in non-Title V permits (e.g., prevention of significant deterioration, and major and minor new source review).
6. Title V fees have stabilized funding and improved support of the agency permitting/compliance staff such as training, resources and incentives for hiring and retaining staff.
7. With the hiring of additional technical staff under the Title V program and through the process of writing comprehensive permits that consolidate all applicable requirements for each source, NWCAA has embarked on a path of continuous improvements in the agency's knowledge of the sources and complex compliance issues surrounding them.

I. Document Review (Rules/Forms/Guidance)

Good Practices

1. NWCAA's web site contains all of their Title V permits and statements of basis, as well as many of the supporting documents such as construction approvals and consent decrees. This is a very effective way to make these permit-related documents available to industry and the general public.
2. NWCAA has developed an application specifically for permit renewal and made it available on their web site along with a number of other forms. Given the historically low percentages of technically complete applications, a tailored renewal application may be a good tool for the renewal process.

Concerns

1. NWCAA has updated their rules for fee rate adjustments and other reasons since their program was approved by EPA. 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.

Other Observations

1. NWCAA indicated that they are considering allowing electronic document submittals. Note that EPA recently adopted regulations that, among other things, set forth requirements that EPA-approved programs must satisfy in order to allow electronic reporting and electronic signatures as part of the state EPA-approved program. See 70 FR 59848 (October 13, 2005). This rulemaking, referred to as the Cross-Media Electronic Reporting Rule or "CROMERR", included revisions to 40 CFR part 70 and 71 by adding 40 CFR 70.1(f) and 71.10(a). NWCAA should ensure any future electronic submittal regulations comply with CROMEER if it intends to use electronic signatures or reporting as part of its approved Title V program.