DEPARTMENT OF
ECOLOGY
State of Washington

Washington Air Operating Permit Program Audit Report

Calendar Year 2009

Audits performed by:

Crystal Alford, Department of Ecology Air Quality Program

April Westby, Spokane Regional Clean Air Agency

June 2010

This page is purposely left blank

Table of Contents

Page

Executive Summary 2

Introduction 3

Audit Review – In General 3

Agency Comparisons 4

Individual Agency Audit Reviews

Ecology's Central Region Office 9

Ecology's Nuclear Waste Program 10

Ecology's Eastern Region Office 10

Ecology's Industrial Section 11

Yakima Regional Clean Air Agency 12

Benton Clean Air Authority. 14

Spokane Regional Clean Air Agency 15

Olympic Region Clean Air Agency 16

Northwest Clean Air Agency 19

Puget Sound Clean Air Agency 20

Southwest Clean Air Agency 23

Conclusions 25

Recommendations 26

List of Abbreviations 28

Executive Summary

Washington's Air Operating Permit (AOP) program undergoes a routine performance audit and a random permit review each year. Crystal Alford from Ecology's Air Quality Program and April Westby from Spokane Regional Clean Air Agency performed the audit and the review for calendar year 2009.

General findings

Overall, the audit revealed that Washington's AOPs are generally well written and contain a complete listing of applicable requirements. Many permits are on, or are about to trigger, their second renewal cycle. Agencies have a wealth of experience managing the program, working with the sources, and writing the permits. In addition, the permits have been enforced for two full cycles, and many issues resulting from enforcement of the permit conditions during the permit term are being resolved during the renewals.

Opportunities for improvement

There are still opportunities for ongoing improvement of each agency's permitting, compliance and enforcement activities. During the next renewal cycle, we encourage agencies to review the content of their permits and provide additional clarity when describing applicable requirements and the emission units. Not only does this improve the permits, but it strengthens compliance and enforcement program activities by:

- making the permit and the basis for the requirements in the permit clearer and easier for the source to comply with; and
- making it easier for agency staff to determine compliance.

Conclusions and recommendations

A complete listing of the conclusions from this year's audit and recommendations is given at the end of this report. Recommendations include:

- improving timely processing of permit renewal and new initial permit applications;
- improving the content of the permit/Statement of Basis;
- improving full compliance evaluations; and
- making permit information available on all agency web-sites.

Introduction

Washington Administrative Code (WAC) 173-401-920(3) requires annual routine performance audits of the operating permit program administered by Ecology and the seven local air agencies in Washington State. The Air Operating Permit Coordinator from the Department of Ecology, Crystal Alford, performed the audit of Washington's seven local air agencies and April Westby, from Spokane Regional Clean Air Agency, performed the audit of Ecology's four offices.

The focus this year was performance of the annual routine performance audit and the annual random individual permit review for calendar year 2009. The reviews evaluated individual agency programs based on the requirements listed in WAC 173-401-920(3)(b) and (c). In addition, the most recently issued permits at each local air agency were briefly reviewed to see if audit recommendations are being incorporated during permit renewals.

Not performed during this audit was the fiscal audit required every two years per WAC 173-401-920(3)(a) and the extensive performance audit required every five years per WAC 173-401-920(3)(d).

A preaudit public meeting was held at the Headquarters Office of Ecology in Lacey on March 16, 2010. The meeting was announced in the permit register prior to the meeting. There were no attendees of the meeting.

Audit Review – In General

A standard audit checklist, which included evaluation of specific program activities based on the requirements contained in WAC 173-401-920(3)(b) and (c), was developed to assist in consistently evaluating the programs at each agency. Changes implemented by the agencies since the previous audit were noted and the most recently issued permits were briefly reviewed. The checklists completed by the auditor during each of the site visits are available for review, but are not included as a part of this report.

Data gathered prior to conducting the on-site audits included information from EPA's AFS database (enforcement and full compliance evaluations for 2009) and TOPs database (permitting activities for the first half and second half of 2009). Ecology's Permit Register was used to count permit activities performed during the audit period from the agencies. In addition, agency web-sites were used to review permits and their Statements of Basis, prior to and following the on-site visits.

Overall, several audit criteria evaluated across the individual programs yield similar, unremarkable results. Average application processing time takes three to four months of part time work to complete. Agencies reported applications are received substantially complete and no applications had to be disapproved. EPA review of proposed permit actions did not result in objections to the permits. Permits were not challenged on a legal or administrative basis. Agency files contained appropriate levels of documentation of permit related activities, including full compliance evaluations, report reviews, emission inventories, complaint response,

correspondence with the source, source test and CEM performance test reports, new source review actions, and enforcement actions. Expirations dates are contained in issued permits. Most sources do not specify alternate operating scenarios for inclusion in the permits. Permit appeal information has been included. State or local only requirements are identified with applicable requirements. Source inspections are performed unannounced when possible.

Generally, specific maintenance requirements are not included within the permit, beyond the need to develop and follow an operation and maintenance plan for equipment. Procedural requirements for providing public notice of permit actions in accordance with WAC 173-401-800(2) are generally followed. As discussed in last year's audit, some agencies have not been reporting receipt of a complete permit application in the state permit register, as discussed in WAC 173-401-805(2). It is unclear if the intent of this section (WAC 173-401-805) is to require publication of these actions, or just to make available the opportunity to post notice of the actions in the permit register.

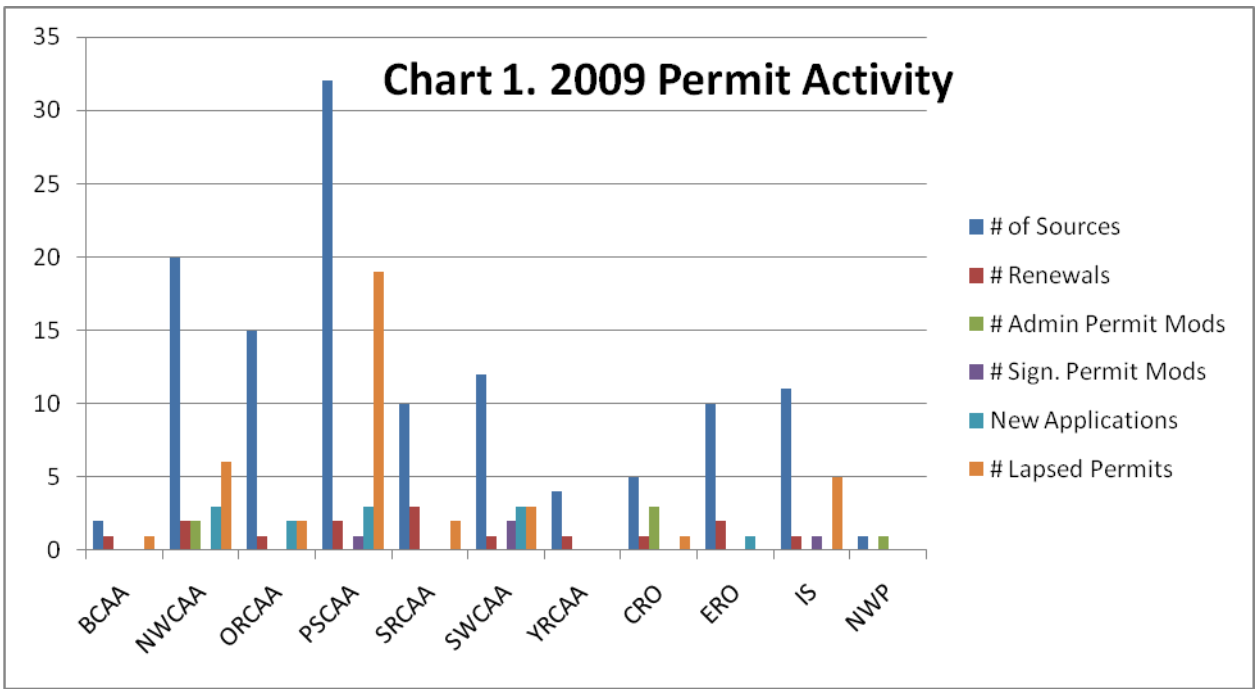
Agency Comparisons

A comparison of permitting activity, program costs, and compliance and enforcement activity at each agency follows, with attention called to certain trends noticed by comparing the agencies to each other. A detailed discussion of agency specific results follows.

Permit Activity
Many Washington permitting authorities are on, or will soon be triggering, their second round of permit renewal cycles. Several agencies have also received new applications from sources that have become AOP applicable and require issuance of initial permits. Administrative and significant modifications to current permits triggered by new requirements that have become applicable add to agency permit workloads.

Chart 1. compares the number of:

- AOP sources in each agency's jurisdiction,
- renewal permits issued by each agency,
- administrative modifications to permits by each agency,
- significant modifications to permits by each agency,
- new applications received by each agency for issuance of initial permits, and
- permits that have expired and whose terms have been extended (a.k.a. lapsed).



Puget Sound Clean Air Agency (PSCAA), Southwest Clean Air Agency (SWCAA), Northwest Clean Air Agency (NWCAA) and Ecology Eastern Regional Office (Ecology ERO) received new applications more than 18 months ago that did not result in issuance of the initial permit in 2009. PSCAA's Frederickson Power LP, the oldest new application, was submitted April 15, 2003. The draft AOP for this source was issued June 4, 2010. Olympic Region Clean Air Agency (ORCAA) has also received new applications.

Every agency except Ecology's Nuclear Waste Program (Ecology NWP), Ecology ERO and Yakima Regional Clean Air Agency (YRCAA) had permits that lapsed (expired before the renewal was issued) in 2009. Currently, the oldest lapsed permit in the state is PSCAA's Rexam Beverage Can Co. which expired May 16, 2005. The draft renewal AOP for this source was issued May 27, 2010.

Explanations for the lapses include:

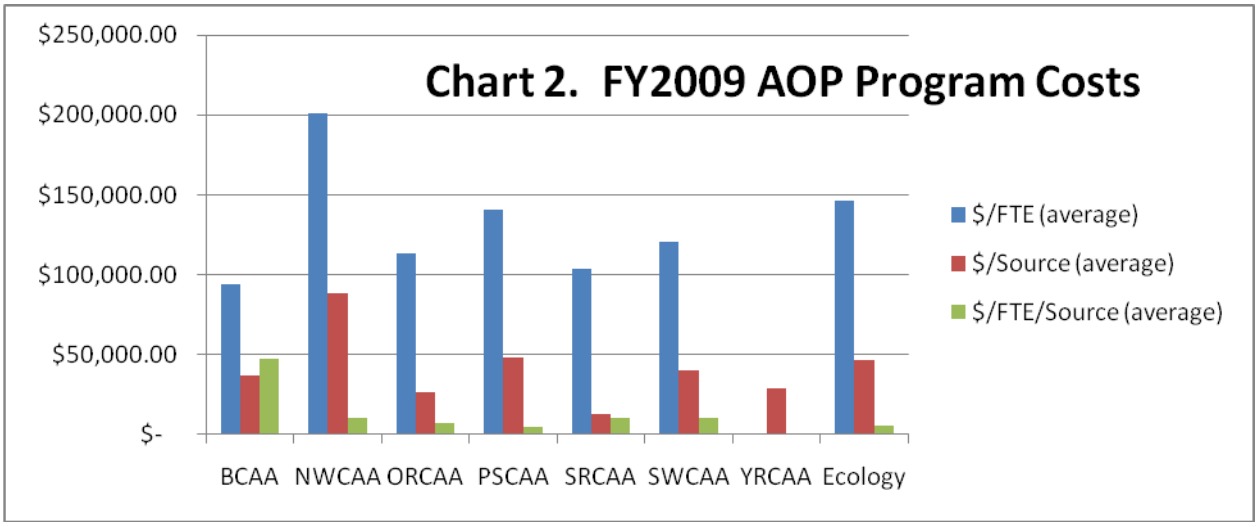
- workload issues,
- staffing issues,
- high number of new applicable requirements to be included in the permits, especially when applicable MACT standards are promulgated, and
- on-going resolution of enforcement issues.

PSCAA, with over half of their sources operating under lapsed permits, has organized an internal work plan to address this problem. Industrial Section had just under half of their AOPs lapsed in 2009. Currently, Industrial Section has either issued, or expects to issue in the near future, all but two of the lapsed permits. One of these two outstanding lapsed permits is for a facility that is shut down (Goldendale Aluminum).

AOP Program Costs
AOP program cost and staff time spent implementing the AOP program was collected from each agency for State fiscal year 2009 (July 1, 2008 through June 30, 2009). Fees are collected from each source annually to recover the cost of implementing an AOP program. Implementation of the AOP program includes permit writing, permit management and enforcement, fee calculation and billing activities, data management, administration, etc. Each agency assesses fees in accordance with their regulations, which result in fees that vary by source.

Chart 2. compares the average cost of implementing the AOP program at each agency:

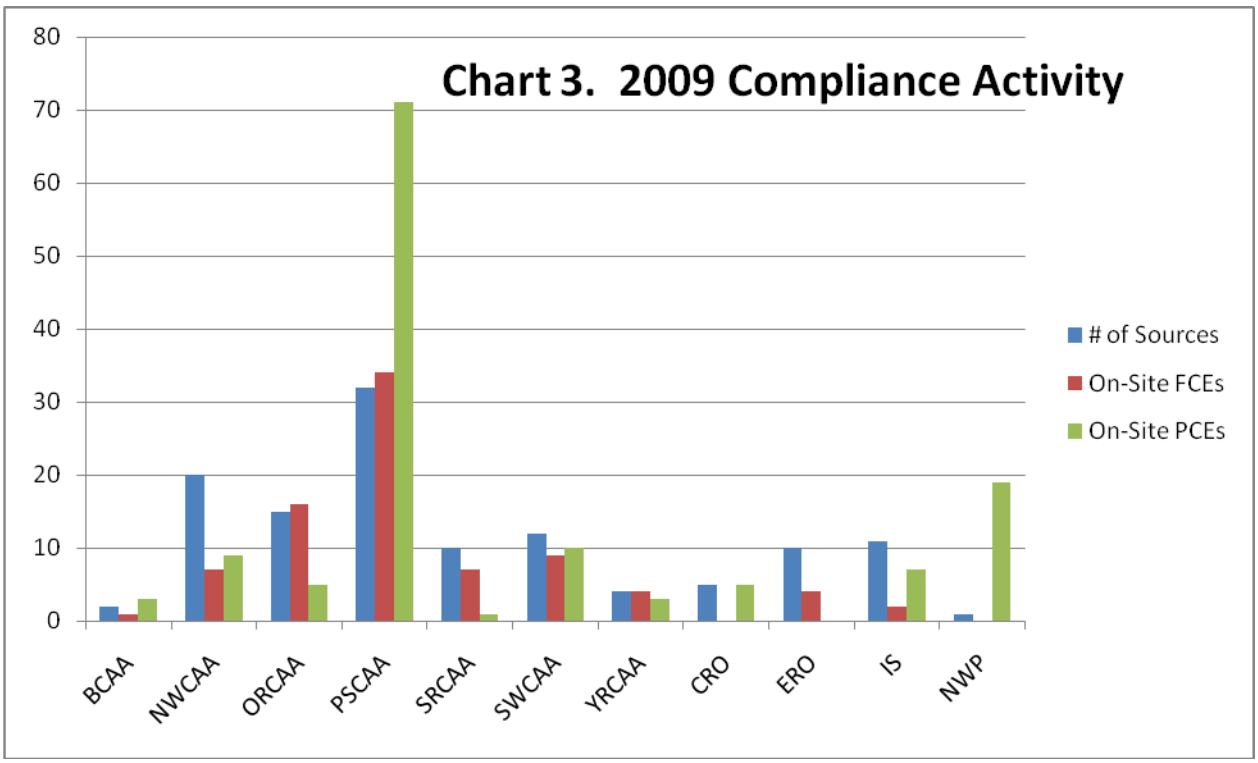
- per FTE,
- per source, and
- per FTE per source.



Information was not provided regarding the number of FTEs working on YRCAA's AOP program. Therefore, only the average cost of the AOP program per AOP source is reported for this agency.

The cost of Ecology's program is not split out by office, but captured as a total agency cost for all AOP work performed by Ecology staff for sources in Ecology's jurisdiction. Generally, Ecology's Industrial Section AOP source fees are larger than Nuclear Waste Program AOP source fees, which are both larger than the Air Quality Program's Regional Office (CRO and ERO) AOP source fees.

Compliance Activity
Information gathered during the audit site visits was used in conjunction with information collected from EPA's AFS database to measure compliance activities at each agency. Compliance activities included on-site partial compliance evaluations (PCEs) and full compliance evaluations (FCEs). Chart 3. lists this data for each agency.



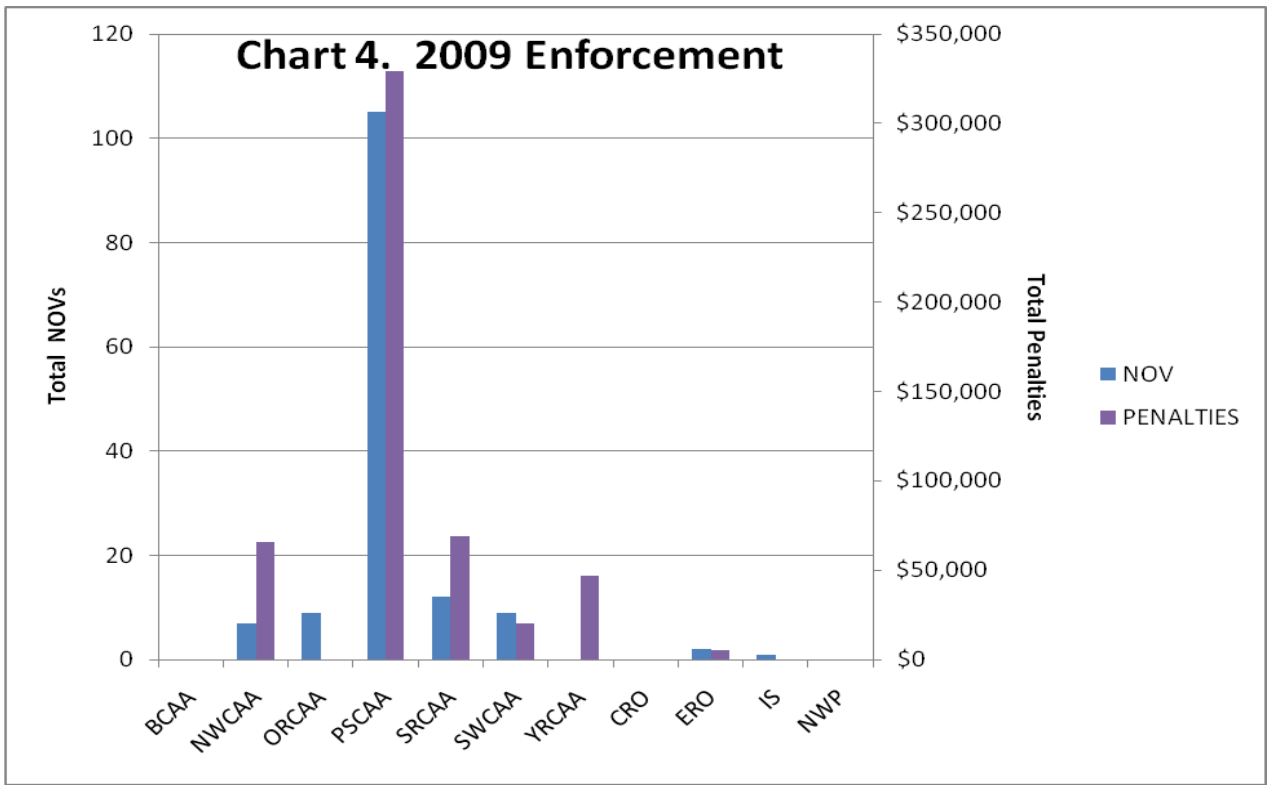
EPA does not require the states and locals to report PCEs. However, some agencies perform more than one site visit per year at their larger sources which may not include inspection of the entire facility during that one visit. These partial inspections are reported to EPA and are counted towards performance of the FCE. For agencies that do not report PCEs to EPA, this information was requested directly from the agencies.

Not all agencies perform an FCE annually at every source. EPA's compliance monitoring strategy allows each agency up to two years to perform an FCE, and at mega sources (such as Hanford and the refineries) each agency has up to three years to complete an FCE.

YRCAA and ORCAA performed an FCE at each of their sources in 2009. PSCAA performed FCEs at most of their facilities in 2009, some facilities had two FCEs performed. PSCAA, NWCAA and Ecology's NWP and CRO performed as many, if not more, on-site PCEs as FCEs.

Enforcement Activity

Information gathered during the audit site visits was used in conjunction with information collected from EPA's AFS database to measure enforcement activities at each agency. Chart 4. lists the number of notices of violation (NOVs) issued and civil penalties assessed by each agency.



There was a broad range of enforcement responses across the agencies. In general, very few enforcement activities were noted from the four Ecology offices, with no NOVs or civil penalties issued at Ecology CRO and Ecology Nuclear Waste Program. Ecology Industrial Section did not assess any civil penalties.

No NOVs or civil penalties were issued at Benton Clean Air Agency (BCAA), and no civil penalties were issued at ORCAA. While YRCAA did not issue any NOVs in 2009, they assessed civil penalties for NOVs that had been issued in 2008. PSCAA had the highest amount of NOVs and civil penalties issued in 2009.

The table below shows a comparison of the number of AOP sources in each agency's jurisdiction, the number of NOVs issued to AOP sources and the number of AOP sources who received NOVs.

	BCAA	NWCAA	ORCAA	PSCAA	SRCAA	SWCAA	YRCAA	CRO	ERO	IS	NWP
# AOPs	2	20	15	32	10	12	4	5	10	11	1
# NOVs	0	7	9	105	12	9	0	0	2	1	0
# Sources NOVs Issued to	0	4	2	21	2	5	0	0	2	1	0

More than half of PSCAA's AOP sources received NOVs in 2009. SWCAA issued NOVs to just under half of their AOP sources. NWCAA and SRCAA issued NOVs to one-fifth of their AOP sources. Several agencies had sources that received multiple NOVs.

Individual Agency Audit Reviews

Ecology Programs – Reviewed by April Westby

AQP – CRO Site visit conducted on April 8, 2010 from 10:30 am to 3:30 pm with Lynnette Haller and Jared Mathey

During 2009, Ecology CRO had five sources subject to the AOP program. One permit (Greater Wenatchee Landfill) was lapsed from April 2, 2009 until the renewal permit was issued on September 8, 2009. A complete renewal application was received March 11, 2008 therefore the application shield was in place. Currently, there are no lapsed permits. No initial or renewal AOP applications were received in 2009.

The random permit selected for the audit was Goldendale Generating Station Permit No. 06AQ-C025 (Second Revision), issued on December 23, 2008. The Statement of Basis for Goldendale Generating Station contained a detailed and thorough description of emission units and associated control equipment, and potential emission estimates. The source is subject to NSPS and Title IV (Acid Rain) requirements. The Statement of Basis identified that the source is subject to the AOP program because it is subject to the acid rain program (facility PTE is not major for any criteria air pollutants and not major for HAPs). CAM does not apply because the source employs CEMs for NOx and CO (CAM does not apply when there is a continuous compliance determination method). Applicability of Section 112(r) of the Federal Clean Air Act (FCAA) was not documented in the Basis; it was listed as an inapplicable requirement with the basis for the inapplicability determination in Table 6.0 of the permit.

Emission units were well described in the permit, but the control equipment associated with the emission units could be better identified.

Procedural requirements for permit issuance were met for the Goldendale Generating Station permit.

Inspection reports, FCE determination, semi-annual monitoring reports, monthly air reports, quarterly NSPS reports, WEDs emission inventory, and complaints were reviewed. The most recent inspection report did not follow the AOP format and did not address compliance with each condition and/or applicable requirement of the permit. It is difficult to determine compliance with the applicable requirements for each emission unit based on the inspection report.

The most recent FCE determination completed on September 30, 2008 lists requirements that were not met. There were 8 conditions listed, ranging from late reports, excess CO emissions, etc. However, since none of them were HPV, no enforcement actions (NOVs, etc.) were taken, per Ecology CRO's policy.

There have been no changes to Ecology CRO's permitting process as a result of recent audits. Ecology CRO thinks their descriptions of applicability, tables of emissions, and flow diagrams are particularly helpful to sources and inspectors in better understanding the source.

NWP Site visit conducted on April 9, 2010 from 8:00 am to 1:00 pm with Doug Hendrickson

Ecology NWP has only one source in its jurisdiction, US Department of Energy Hanford (Hanford). Although the permit for the source includes "sub-permits" issued by Washington State Department of Health and Benton Clean Air Agency in addition to the sections issued by NWP, NWP is the "permitting authority" for the entire permit. There is a 5-year contract between Ecology NWP and the Department of Health for performance of fee eligible activities that are carried out by the Department of Health. Every quarter, the Department of Health invoices Ecology for the AOP activities performed.

No initial or renewal AOP applications were received in 2009, although Ecology NWP did process Revision E to AOP in December 2009 to incorporate NOCs issued and revised Department of Health requirements. The AOP revision was processed as an administrative amendment.

The random permit audited for Ecology NWP is US Department of Energy Hanford, which was originally issued on December 29, 2006 and has been revised five times since it was issued. The version reviewed during the audit was Revision E, which was issued on December 18, 2009. The Statement of Basis does not identify why the source is subject to the AOP program (i.e., which pollutants the source is major for, etc). Per Ecology NWP, the facility is major for NOx and PM. Emission units are described in the permit, but control equipment associated with those units are not well described. During the audit, it was noted that control equipment is listed in the text of each NOC, but was not included in the permit table of the permit. The facility is no longer subject to the requirements of 112(r), as the facility reduced their chlorine usage to below the threshold quantities. It was not easy to identify which requirements were gapfilled in the permit.

Procedural requirements for permit issuance were met for the initial issuance of the AOP and for the most recent Revision (E).

Inspection reports and correspondence were reviewed. Inspection reports clearly state compliance status of each emission unit. The facility does not have any CEMs or COMs on-site. The facility did not conduct any source testing in 2009.

There have been no changes to Ecology NWP's permitting process as a result of recent audits. NWP thinks they have a good tracking system for all changes made since the last renewal. NWP also thinks their aggregated consolidated documents to incorporate Ecology, Health, and BCAA requirements are especially useful.

AQP – ERO Site visit conducted on April 27, 2010 from 8:00 am to 12:30 pm with David Wendland and Brenda Smits

During 2009, Ecology ERO had ten sources subject to the AOP program. Currently, three sources have curtailed operation due to economic reasons (Vaagen Brothers, Stimson Lumber, and Guy Bennett Lumber). During 2009, there were no lapsed permits. No initial or renewal AOP applications were received in 2009. Ecology ERO continued to work on an initial application (Ponderay Newsprint Co.) received March 9, 2007, issued final on April 22, 2010.

The random permit audited for Ecology ERO is Boise Cascade Lumber 07AQ-E240, issued on December 26, 2007. The Statement of Basis identified that the facility is major for CO. Emission units and control equipment were well described in the permit. The Statement of Basis also contained a good PTE analysis and a good explanation of CAM applicability for emission units. Applicability of Section 112(r) of the Federal Clean Air Act (FCAA) was not documented in the Basis; it was listed as an inapplicable requirement with the basis for the inapplicability determination in Section 4. of the permit.

Semi-annual monitoring reports, CAM reports, FCE, inspection reports, deviation reports, and correspondence were reviewed from agency files. No complaints were received in 2009. The source does not have any CEMs. The inspection report followed the AOP layout and clearly identified the information Ecology ERO evaluated during the FCE process to determine the compliance status for each emission unit.

Procedural requirements were followed for issuing the Boise Cascade Lumber permit.

There have been no changes to Ecology ERO's permitting process as a result of recent audits. They have started putting the compliance history, permitting history, and flow charts in the Statement of Basis. They have started including lengthy regulations as attachments to the AOP, rather than putting them directly into the permit.

Industrial Section Site visit conducted on April 20, 2010 from 8:00 am to 1:00 pm with Bob King, Teddy Le, Ewa Kotwicka, Robert Carruthers, Judy Schwieters, and Marc Heffner

During 2009, Ecology Industrial Section had eleven sources subject to the AOP program: eight pulp mills and three aluminum smelters. Two facilities (Weyerhaeuser Cosmopolis and Goldendale Aluminum) are currently not in operation, but are maintaining their permits and paying fees. During 2009, there were five lapsed permits. Alcoa Wenatchee's permit was lapsed from January 2, 2009 until the renewal permit was issued on March 1, 2010. Weyerhauser Longview's permit was lapsed from March 17, 2006 until the renewal permit was issued on December 15, 2009. Boise Cascade Wallula's permit lapsed on December 1, 2009. Goldendale's permit lapsed on November 1, 2009. Intalco's permit lapsed on April 15, 2009. Industrial Section expects to issue the Boise Cascade Wallula renewal permit in the near future. Goldendale has not submitted a renewal application to Ecology Industrial Section. Intalco submitted a renewal application on October 15, 2008, but they have not received a determination that their application is complete.

The random permit selected for the audit was Alcoa Wenatchee Permit 000068-0, issued on March 1, 2010. The Statement of Basis does not identify why Alcoa Wenatchee is subject to the

AOP program (i.e., pollutants for which the source is major for, etc.). The permit does not include a list of control equipment associated with any of the emission units, but the Statement of Basis does list the control equipment. The permit and Statement of Basis do not include the size or any other descriptor for the emission units. The facility is subject to MACT and CAM requirements. However, the Statement of Basis does not include an explanation of CAM applicability for emission units. It was not easy to identify which requirements were gapfilled in the permit and how gapfilled requirements assure compliance with applicable requirements. The appeal information was contained in the cover letter with the permit, but was not found in the permit itself.

Correspondence, inspection reports, compliance certification, stack test summary, vegetation survey, air emission inventory, MACT reports, semi-annual monitoring reports, monthly air monitoring reports, site specific OM&M plan and test plan in the agency files were reviewed.

The most recent inspection report is in a letter format and does not follow the AOP. It is difficult to determine compliance with the applicable requirements for each emission unit based on the inspection report. The inspection letter states that the primary purpose of the inspection was to determine Alcoa's compliance with requirements for O&M in a manner consistent with good air pollution practice (WAC 173-415-030(6)). The inspection letter states that a secondary goal was to determine compliance with requirements of the AOP.

Procedural requirements for permit issuance were met for the Alcoa Wenatchee permit. Per Ecology Industrial Section, there were no affected states within radius of facility to notify.

Ecology Industrial Section has modified their permitting process as a result of recent audits. They have begun formatting the Statement of Basis following a template suggested by the Ecology AOP Permit Coordinator, which includes providing more detail and a description of the facility. These practices were implemented in the Weyerhauser Longview renewal permit.

Local Air Agency Programs – Reviewed by Crystal Alford (unless otherwise noted, only those permits that lapsed during 2009 are identified)

Yakima Regional Clean Air Agency site visit conducted April 8, 2010 11:00 am to 2:30 pm with Hasan Tahat

YRCAA is in the process of updating the public notice section of their website so draft AOPs and Statements of Basis are available for review. At the time the audit was scheduled, the Shields renewal draft permit and Statement of Basis were posted. After the comment period ended, the draft documents were removed from the website, however the final AOP and Statement of Basis have not yet been posted. YRCAA intends to post final documents as they are renewed or reissued, until all AOPs and Statements of Basis are posted on-line. For this audit, electronic copies of permits and Statements of Basis were requested.

The random permit selected for the audit was Canam Steel Corp (Canam) Y005-01. The Statement of Basis identifies this source as subject to the AOP program because it is a major source, however it is unclear for which pollutant(s) the source is considered major (Basis says the source emits significant quantities of VOC, TAPs/HAPs, PM_{10}). The Basis contains an explanation of the process, facility block diagram showing emission points and roof vents and

flow diagrams, and a list of all issued Notices of Construction Approval Orders. It includes a discussion about the applicability of 40 CFR 63 Subpart MMMM, which the source is considered an area source for through issuance of an Order to limit VOC and HAP emissions. YRCAA did not identify any other MACTs or NESHAPs that apply to this source.

Not included in the Basis was identification of which pollutant the source is major for, clear identification or listing of the emission units at the facility (only the block diagram references emission units 2-7), a compliance history, discussion of the applicability of CAM and 112(r), or a discussion of any gapfilled monitoring.

Within the permit itself, applicable requirements are paraphrased. There are only three terms in the General Terms and Conditions section of the permit identified as "state only" enforceable; and two applicable requirements in the Overall Facility Requirement Table 1 that are identified as "state only" enforceable (most agencies identify many more, especially in the Standard Terms and Condition Section and Facility-wide Requirements table). Emission units listed in the headers of the emission unit specific tables could be better identified with the addition of control device, size, etc. The Permit Shield section of the permit refers back to the applicable/generally applicable/inapplicable requirements Table in the Statement of Basis, citing that the source has received a permit shield from any requirement identified as inapplicable in the table. YRCAA should specifically list these in the permit itself. The appendix to the permit contains alternate methodology to determine emissions from paint, solvent and thinners.

The initial permit was issued March 21, 2000. A complete renewal application was received February 14, 2005. The renewal permit was issued September 8, 2006. The permit register contained notices of the draft permit on June 26, 2006 and issuance of the final permit on September 10, 2006.

The FCE does identify overall compliance status of the source, however, it is difficult to determine the compliance status of each emission point. The FCE documentation does include a compliance monitoring activity summary (report reviews, inspection dates, emission inventory review, stack tests, compliance status).

Agency source files have separate folders for reports/reviews, permit application review, NOCs, inspection/FCEs, correspondence, emission inventories, etc.

Changes that YRCAA has made since the last audit include posting of draft AOP documents for public comment periods on the agency website. They also intend to post final AOP documents as they are renewed. They have begun using a procedural checklist for issuing the AOP.

YRCAA recently issued a second renewal permit to Shields Bag and Printing Co. The Statement of Basis and permit were briefly reviewed to document YRCAAs most recent permitting practices. The Shields Statement of Basis had a more detailed permit history, more thoroughly identified emission units and control devices, and a more complete discussion of area source applicability. The permit still did not included identification of the pollutant for which the source is considered major (VOC is listed as the most significant pollutant emitted from the facility). Applicability of CAM and 112(r) is not discussed in the Basis. Gapfilling monitoring is not identified or explained (if there were any).

The permit has emission units identified, addresses if the unit is CAM applicable, has identified many more "state only" enforceable requirements, and has a separate Method of Compliance Determination with the MRRRs listed (instead of being included in the applicable requirement table). Still not included in the permit is the list of Permit Shields granted to the source (Permit Shield section refers back to the Statement of Basis for an identification of the Shields granted), and gapfilled monitoring is not identified.

Benton Clean Air Authority site visit conducted April 9, 2010 8:30 am to 12:00 pm met with Robin Priddy

BCAA does not have permits and Statements of Basis available on their web-site. Electronic copies of these documents were requested prior to conducting the site visit.

The random permit selected for review was Northwest Pipeline GP No. 04-01, second renewal issued September 18, 2009, following expiration of the first renewal on September 1, 2009. The permit lapsed for 17 days, but the application shield was in place as BCAA received a complete renewal application August 2, 2008.

The Statement of Basis contains a discussion of Title V applicability, identifying the facility's potential-to-emit (PTE) NOx and CO above major source thresholds. However, the annual PTE listed in Table 1 in Section 8.3 identifies VOC PTE at 103 tpy which is above major source threshold, as well.

Emissions units are listed in Section 8 of the Basis, however no information regarding air pollution controls, size, capacity, rating, installation year, or associated new source review permits is included. Section 9 of the Basis contains a list of insignificant emission units, along with a description of the basis for the determination.

The Basis included a permitting history for the source, but did not include a compliance history. Table 2 lists the requirements applicable to the source and identifies them as either "emission related, administrative, or not applicable based on current operations". Contained in the footnotes to Table 2 is the rational for the inapplicability of the PSD program, NSPS requirements (except for Subpart A and GG) and Compliance Assurance Monitoring. This information would be better discussed in the text of the basis, not buried in a footnote. The Monitoring Recordkeeping and Reporting Section of the Basis discusses "gap-filled monitoring" created for condition 8M and why it was necessary.

The permit includes requirements applicable facility-wide and requirements applicable to the Saturn 10 T-1300. As in the Basis, no information regarding air pollution controls, size, capacity, rating, installation year, or associated new source review permits is included. The applicable requirement cited in the permit condition is paraphrased. Section 4 of the permit provides the shield from Section 112(r) for this source and explains why the source is not subject to this requirement.

FCE documentation includes a review of general and specific conditions and monitoring recordkeeping and reporting requirements directly from the permit, following the format of the

compliance certification report submitted by the source. The inspection checklist does not list the emission units, making it difficult to determine the compliance status of each emission unit. Northwest Pipeline is on a two year FCE schedule and no FCEs were conducted in calendar year 2009.

Procedural requirements including notice of complete application on September 10, 2008, draft permit on July 10, 2009 and issuance of the final permit on September 25, 2009 were listed in the permit register. The proposed permit was sent to EPA July 5, 2009. Legal notice was placed in the local paper on July 5, 2009. The final permit was sent to EPA September 18, 2009.

Agency files include stack test results, inspection reports, report reviews, correspondence, permit applications and review files, and documentation of public notices. No complaints were received about or NOVs issued to this source, otherwise these documents would have been found in the files.

BCAA uses an AOP application completeness determination checklist to assist them in determining and documenting that a complete application has been received. The agency also uses a checklist to ensure they have addressed all appropriate requirements in the permit.

Changes BCAA has made since the last audit was performed include:

- switching the general and specific applicable requirement sections in the permit to a table format – they were using an outline format before,
- updating their MRR for VEs, which is patterned after SWCAA's VE MRR condition, and
- clarifying that Northwest Pipeline is excluded from meeting the requirements of 112(r), based on the fact that Northwest Pipeline is a Department of Transportation-regulated pipeline.

Spokane Regional Clean Air Agency site visit conducted on April 12, 2010 8:15 am to 11:00 pm with April Westby

The random permit selected for review was FiberTech Industries Inc. (FiberTech) AOP-10 Renewal 1, issued February 22, 2008, following expiration of the initial permit on January 29, 2008. The permit lapsed for 24 days, but the application shield was in place as a complete renewal application was received January 3, 2007.

The Statement of Basis describes the Title V applicability, and includes a complete discussion of emission units and associated control devices, although the installation date of the emission units was not included for all units. The Basis included a permitting history that lists all permits issued by the agency to the source, and a compliance history that lists all the notices of violation issued to the source. The insignificant emissions units are listed along with the basis for the determination.

The basis for CAM inapplicability is well explained and each gapfilled MRRR is identified. The Gel Coat and Fiberglass Lamination process is identified as subject to 40 CFR 63 Subpart WWWW: Reinforced Plastics and Composites Production. The Basis states that while the source does not use chemicals regulated under 40 CFR Part 68, a permit shield will not be granted for those requirements because the source is not restricted from using materials subject

to regulation under these provisions, therefore, requirements of 112(r) are considered an applicable when triggered requirement for this source.

The permit includes requirements applicable facility-wide and requirements applicable to the Gel Coating and Fiberglass Lamination process, and Wood-working Dust Collection emission units. The applicable requirements cited in the permit conditions are not paraphrased. Monitoring Recordkeeping and Reporting Requirements are listed after the applicable requirement tables. The inapplicable requirements are listed in the permit shield at the end of the permit.

FCE documentation includes a review of facility-wide and emission unit specific conditions and monitoring recordkeeping and reporting requirements directly from the permit, following the same format as the permit. The checklist identifies the emission units and associated control devices, so it is easy to determine the compliance status of each emission unit. Monitoring and certification reports were reviewed by the agency. An FCE was conducted with 1 ½ days notice on December 11, 2009.

Procedural requirements included notice of the draft permit on November 25, 2007 and issuance of the final permit on February 25, 2008 in the permit register, however, notice of a complete application was not found. The proposed permit was sent to EPA December 27, 2007 and notice to affected states was made November 20, 2007. Legal notice was placed in the local paper on November 22, 2007.

Agency files are arranged by source and separated into folders that contain all MACT reports; all monitoring reports and compliance certifications; all complaints, correspondence, inspections, and permits issued; and all stack test reports. No complaints about the source were reported to the agency and no NOVs were issued to this source in 2009.

Changes SRCAA has made during renewals since the last audit was performed include:

- placing a copy of the plot plan, site diagram, and flow chart in the Statement of Basis,
- discussing credible evidence in Northside Landfill AOP page 15, and
- adding tables to the Basis and permit that list equipment ratings, air pollution control equipment, fuels, and permits issued.

The most current AOP issued by SRCAA is for the City of Spokane Northside Landfill. The Statement of Basis and permit were briefly reviewed to document SRCAAs most recent permitting practices. The Statement of Basis includes a permitting and compliance history for the source, identification and description of the emission units and associated control devices, summary of most recently reported actual emissions from the source, basis for CAM inapplicability, discussion of NSPS applicability. The permit includes a table that identifies and describes each emission unit and control device.

Olympic Region Clean Air Agency site visit conducted on April 20, 2010 10:00 am to 1:30 pm with Mark Goodin, Jim Wilson, Robert Moody and Debbie Moody

The random permit selected for the audit was Simpson Door McCleary #03AOP281, first renewal permit issued May 18, 2005. A complete second renewal application was received on November 20, 2009.

The Statement of Basis (referred to as TSD-technical support document-by ORCAA) identifies this source as major for PM and CO based on actual emissions (Table 4.1) and potential emissions (Table 4.2), even though potential emissions calculated by Simpson Door for CO are 16 tpy. The TSD includes detailed descriptions of emission units, associated control devices, equipment sizes, fuel burned, operating ranges, O&M parameters, fate of dust collector catches, etc. The installation date was included for emission unit #3- Auxiliary Package Boiler, but not for the other emission units. Insignificant emission units are listed in Tables 3.2, along with the basis for the determination.

Permitting history is provided for emission units in a Table in Section 6 of the TSD. Compliance history is not discussed. The TSD discusses potential requirements from 40 CFR 63, Subpart DDDD: Plywood and Composite Wood Products Manufacturing and Subpart DDDDD: Industrial/Commercial/Institutional Boilers and Process Heaters. Neither NESHAP is applicable as Simpson Door is a minor source of HAPs. Emission Unit #3 is subject to fuel sulfur monitoring requirements from 40 CFR 60, Subpart Dc, as called out in permit conditions 5.3b and compliance monitoring condition 6.9, but applicability of this subpart is not identified or discussed in the TSD.

Section 5.2 includes a thorough discussion regarding CAM inapplicability (Section 5.2). The TSD does not discuss the gapfilling performed in the permit, however, Table 7.1 will identify the regulatory basis as WAC 173-401-615 for conditions that have been gapfilled. There is no discussion in the TSD of the applicability of Section 112(r) of the FCAA.

The permit paraphrases applicable requirements. Each emission unit is identified in the permit with a table listing all the applicable requirements for that unit, but does not include mention of any control devices, installation dates, NOCs, size/capacity/rating information, etc as is described in detail in the TSD. The MRRR section follows the tables of applicable requirements. The permit lists 112(r) as an inapplicable requirement in Table 10.1 Requirements Determined Inapplicable or Exempt Unless Triggered By Action or Emission Increase.

The FCE follows a narrative format, not specific to emission units identified in the permit, but does list any specific emission units that are determined to be out of compliance. The inspection checklist generally follows the layout of the permit, except that it is organized according to where the information to complete the checklist will be collected from (ORCAA files, entrance interview, source records, inspection, office follow-up, and exit interview). Emission unit specific conditions are identified. Source files contain stack tests, emission inventory, reports, correspondence, inspections, complaints, NOVs, billing, and NOC and AOP folders for each calendar year. It was easy to find information and review each source's file.

Procedural requirements included notice of the draft permit in the February 25, 2005 permit register, however, issuance of the final permit on May 18, 2005 and notice of a complete application were not found. The proposed permit was sent to EPA, notice was sent to affected states, and legal notice was placed in the local paper on February 15, 2005.

Changes that ORCAA has made to the permitting process following the last two audits and EPA Program Review include:

- A complete and comprehensive listing of EUs and IEUs in permit
- Assure that federal regulations adopted by reference into local and state regulations are cited in the permit with the local and state regulations that adopt them
- Spell out notification requirements for actions such as off-permit changes in the permit
- Include more cross referencing in permits where compliance is assured by monitoring several parameters
- Assure that the permit includes monitoring that assures compliance or explanation in TSD why no monitoring is needed
- Incorporate specific applicable MACT/NSPS requirements into permits, instead adoption by reference
- Identify "gapfilling" monitoring requirements and explain in TSD how they are needed to assure compliance with applicable requirements
- Discuss how CAM (or other surrogate parameter levels) established relative to compliance with a standard assures compliance with that standard
- Discuss 112(r) applicability in TSD
- Include permitting and compliance histories in TSD
- Distinguish between "fee units" and "emission units" in TSD
- Improve renewal efficiency
- Document notice to affected states in file record
- Follow procedural requirements to communicate opportunities for public involvement
- Avoid extensive cooperation with the source when developing the substantive requirements of the permit to minimize the impression that it is not an open process
- Include details in TOPS reports to EPA that specify which permits are being counted
- Verify accuracy of AFS data
- Title V training should be accounted for as Title V expenses and reimbursed using the fees collected from Title V sources

One unique monitoring requirement that ORCAA included in the Compliance Monitoring Conditions section of Simpson Door's permit was Table 6.1 Target Operating Ranges for Pollution Control Equipment. This Table identifies the monitoring requirement (e.g., pressure drop), target operating ranges for each emission unit (e.g., ½ to 4 inches water column), the measurement or sampling frequency (e.g., daily), and the records of monitoring that must be retained (e.g., date, time of monitoring, monitoring results operating condition). It does not appear that recording any corrective action taken to maintain operations within the target operating ranges is required, although that may have been the intention.

The most recently issued permit and TSD is for Westport Shipyards, issued final October 6, 2009. The Statement of Basis and TSD were briefly reviewed to document ORCAAs most recent permitting practices. Westport Shipyards TSD followed the same format to list the applicable requirements as for Simpson Door, but the Westport Shipyards TSD included a compliance history for the source and extremely detailed MACT applicability tables. Comments on Westport Shipyards permit are the same as the comments on Simpson Door's permit. The permit directly cites the federal MACT. The agency should cite WAC 173-400-075 for MACT

requirements because the legally enforcement provision comes from the State Regulation, which adopt these rules by reference.

Northwest Clean Air Agency site visit conducted on April 26, 2010 11:20 am to 3:30 pm with Mark Asmundson, Mark Buford, Toby Mahar, Erica Shuhler, Julie O'Shaughnessy and Gail King

The random permit selected for the audit was Tenaska Cogeneration #006R1M3 issued April 22, 2005. A complete renewal application was submitted September 29, 2009. The first renewal permit expired April 22, 2010. The second renewal permit has not been issued yet.

Section 1 Introduction in the Statement of Basis identifies the facility as a major source of NOx and CO, however, Section 2.1 General Overview and Section 4. Emissions states the facility is major for the pollutants NOx, CO and SO_2. All emission units were identified in the Basis, including associated air pollution control equipment, and equipment description (e.g., size, rating, fuel, etc). The installation date was not included in the discussion in Section 3, however, the permitting history does identify the equipment installation dates. Table 8.1 in Section 8. of the Basis lists IEUs and the basis for their insignificance. A permitting history, which includes issuance of the initial AOP, renewal AOP and three modifications of the renewed AOP with summaries of the changes made during each issuance, is provided. The compliance history lists the dates of on-site inspections by NWCAA since the issuance of the first AOP and a summary of enforcement actions taken by NWCAA since the source began operating.

The Basis includes sections devoted to discussion of applicable NSPS (40 CFR 60 Subpart Db, GG and Kb), inapplicability of NESHAPs (40 CFR 63), inapplicability of CAM (40 CFR 64), applicability of the Accidental Release Program (40 CFR 68), and the exemption from the Acid Rain Program (parts of 40 CFR 72, 73, 75, 77, and 78) granted by EPA. The Basis identifies that no emission trading or alternative operating scenarios were requested by the permittee and states that no streamlining was performed to condense overlapping applicable requirements or provide alternative emission limitations. The Basis explains generally when gapfilling may be performed and how to identify terms in the permit that have been gapfilled – in Tenaska's permit, the regulatory citation will reference "WAC 173-401-615(b)&(c), 10/17/02". The Basis does not describe how or why any monitoring that was gapfilled was necessary to "reasonably assure continuous compliance". Permit conditions that contain terms that are not well defined or monitoring recordkeeping or reporting for which the rationale is not readily apparent are discussed in Section 7. Permit Elements and Basis For Terms and Conditions.

The applicable requirements in the permit are paraphrased. The Table in Section 1 provides a detailed description of each emission unit and air pollution controls. The permit breaks the applicable requirements into Section 4 Generally Applicable Requirements and Section 5 Specifically Applicable Requirements. In Section 5, only the last condition (5.23) contains an emission unit specific heading - No. 2 Diesel Storage Tank. Conditions 5.1 through 5.22 don't specify that these requirements are applicable to the gas combustion turbines (only). Gapfilled monitoring requirements are listed as "directly enforceable" in MR&R column, the only citation of WAC 173-401-615(b) & (c) is in the introductory statement to the applicable requirement section. The agency should cite WAC 173-400-115 for NSPS requirements in addition to 40

CFR Part 60 because the legally enforcement provision comes from the State Regulation, which adopts these rules by reference.

The permit was renewed April 22, 2005 and expired April 22, 2010. A complete renewal application was received September 29, 2009. Notice of receipt of a complete renewal application was posted in the permit register December 24, 2009. No draft permit has been issued yet.

FCEs are performed annually and are generally unannounced. An FCE at Tenaska was performed August 27, 2009. NWCAA has made significant improvements in documenting the FCE of the source.

Files include stack test reports and RATAs performed at the facility, FCE documentation and report reviews, correspondence, and emission inventories. There were no complaints or NOVs at Tenaska for 2009, or those would have been included in the files for the source.

Procedural requirements are tracked in a table of the permit checklist used by NWCAA. A complete application for the first permit renewal was received June 9, 2004. Notice was posted in the permit register of a complete application on July 12, 2004, of the draft permit on September 27, 2004, and of the final permit on April 25, 2005. Interested citizens were mailed notice of the draft permit on September 15, 2004. A legal notice regarding the draft permit was published in the local paper September 20, 2004. The proposed permit was sent for EPA review March 11, 2005.

The proposed initial permit for Sierra Pacific is one of the most recent permits written at NWCAA. The Statement of Basis and permit and most recent inspection checklist and FCE documentation (based on the proposed permit) were briefly reviewed to document NWCAA's most recent permitting practices. The same good practices and recommendations for the Statement of Basis and permit reviewed for Tenaska can be made for Sierra Pacific. The FCE documentation and inspection checklist patterned in the format of the permit for Sierra Pacific are one of the best viewed during this audit.

Changes made by NWCAA since the last audit include development of a database to track compliance status of each AOP source, which includes compliance history, NOVs, complaints, report reviews, stack test summary, etc. This system was based on the system described by Idaho at the AOP conference for regulators prior to the 2009 Annual PNWIS Conference in Cle Elum.

Puget Sound Clean Air Agency site visit conducted on April 27, 2010 8:15 am to 3:25 pm with Steve Van Slyke, Agata McIntyre, Gerry Pade, Claude Williams, and Rosemary Busterna

The random permits selected were Puget Sound Naval Shipyard #21177 and Lafarge North America #14046.

Puget Sound Naval Shipyard
Puget Sound Naval Shipyard AOP #21177 is the original permit, issued to the source December 31, 2003. The permit is currenty lapsed. A complete renewal application was received November 26, 2007. No notice of complete application was found in the permit register.

The Statement of Basis discusses the pollutants for which the source is considered major – VOC and Total HAPS, but the emission inventories for different years identify actual emissions of other pollutants over the major source threshold levels (PM_{10}, Xylene). Compliance and enforcement histories over the last five year permit term are included. The Basis includes an explanation of certain applicable requirements. Monitoring, Maintenance and Recordkeeping procedures are discussed. Inapplicable requirements are listed and the basis for inapplicability identified. The Basis identifies obsolete requirements that will not be included in the permit. A summary of public comments to the draft permit, agency response to comments and any changes made to the draft permit because of the comments are discussed. In addition, AOP Minor Modification 1 is discussed – no public comments were received.

Not discussed in the Statement of Basis was applicability of federal regulations, gapfilling, 112(r), or CAM. There were no summaries or tables identifying and describing emission units or associated control devices.

The permit identifies emission units in tables prior to the listing of applicable requirements for those emission units. A description of the process is provided, emission units and any associated air pollution control equipment are identified, size/rating/capacity information, equipment identification number, specific NESHAP/ NSPS applicable to the units, and any associated NSR approval orders are specified. Inapplicable requirements associated with the emission unit are identified following each emission unit specific section. The permit contains paraphrasing of the applicable requirement. Gapfilling monitoring can be identified by citations listing WAC 173-401-615(b) & (c). Monitoring, Maintenance and Recordkeeping conditions are labeled with the specific emission units they cover. 112(r) is identified as an applicable when triggered requirement. The permit directly cites the federal NESHAP and NSPS requirements. The agency should also cite WAC 173-400-075 for NESHAP requirements and WAC 173-400-115 for NSPS requirements (or the appropriate section of PSCAA's Regulations, if adopted by reference into the local regulations) because the legally enforcement provision comes from the State or Local Regulation, which adopts these rules by reference.

The initial permit was issued December 31, 2003 and expired December 31, 2008. Legal notice was published in the local paper on February 25, 2003, and a public hearing was held on March 27, 2003.

Lafarge North America

Lafarge North America AOP #14046 is the original permit, issued to the source May 15, 2004. The permit is currently lapsed. A complete renewal application was received May 14, 2008. No permit register entry was found for receipt of a complete application.

The Statement of Basis discusses the pollutants for which the source is considered major – NOx and SO_2, but the emission inventories collected for different years identify actual emissions of

other pollutants over the major source threshold levels (PM_{10} and CO). The Basis includes a thorough description of the process, emission units and control devices (size, fuels, capacity, construction date, etc). The Basis discusses the initial AOP application, which was received complete on January 20, 1995 and source compliance history up through January 29, 2002.

Explanations of certain applicable requirements are provided. Applicability of 40 CFR 63 Subpart LLL: Portland Cement is discussed in I.B.26. NOC/Orders of Approval are discussed in Emission Unit Applicable Requirements, Section I.B. Monitoring Maintenance and Recordkeeping procedures are described. IEUs are identified with the basis for their insignificance.

Obsolete requirements and permits issued without specific approval conditions are listed in a table. Public comments to the draft permit, the agency response to those comments and any changes made to the permit are listed. The Basis includes a discussion of how WAC 173-434 Solid Waste Incineration is an applicable requirement due to some of the fuel burning practices in the kiln, which resulted in a compliance schedule and issuance of an administrative order that are included in the permit. Modification 1 to the permit is discussed, public comments are summarized, and the agency response and changes to the permit, are listed.

Not discussed in the Statement of Basis was applicability of 112(r), CAM or the need for gapfilling monitoring.

The original permit was issued May 15, 2004, and expired on May 15, 2009. A complete renewal application was submitted May 14, 2008. Notice of a complete application was not published in the permit register. This permit is currently lapsed.

Emission unit specific applicable requirements are listed in the Emission Limits and Performance Standards Section of the permit. Emission units are listed in tables prior to the applicable requirements with details (source ID #, size, installation date, NOC #, emission unit and control devices, etc). The tables list a paraphrasing of the applicable requirement. Gapfilling monitoring is not specifically discussed, but can be identified by citations listing WAC 173-401-615(b) & (c). Some Monitoring, Maintenance and Recordkeeping conditions identify the specific emission unit to which that monitoring applies. The permit includes compliance schedule requirements. Insignificant emission units are listed with the basis for their insignificance. The permit addresses when reporting per 112(r) is required (applicable when triggered). A list of inapplicable requirements and the basis for their inapplicability is included.

The agency should cite WAC 173-400-075 for NESHAP requirements and WAC 173-400-115 for NSPS requirements (or the appropriate section of PSCAA's Regulations, if adopted by reference in the local regulations) in addition to 40 CFR Part 63 and 40 CFR Part 60 because the legally enforcement provision comes from the State or Local Regulation, which adopts these rules by reference.

The initial permit was issued May 15, 2004 and expired May 15, 2009. A complete renewal application was received May 14, 2008. A copy of the legal notice published in the local paper for the initial permit issuance was not found in the agency file. The proposed permit was sent to EPA March 17, 2004.

FCE documentation for both sources includes individual lists of equipment reviewed during each site visit and the particular AOP requirements evaluated during that visit. FCE summary sheets created from actions reported in the database include report reviews, emission inventories, on-site inspections, stack test report reviews, summary of warnings, NOVs, civil penalties; complaints, etc.

Files of older documents are kept offsite. Most documents are submitted electronically or scanned and stored in the database. Paper records are also submitted with official signatures. The database developed and used by PSCAA tracks permits, inspections, correspondence with the source, enforcement actions, source test results, emission inventories, report reviews, etc for each source. The database is interfaced with AFS so mandatory activity reporting to EPA is uploaded directly from PSCAA's database into EPA's system.

PSCAA is concerned about the back log of new applications and lapsed permits. The permit writing team is working to prioritize workload to manage issuance of outstanding permits. (NOC backlog preventing work on AOP)

The most recently renewed AOP was issued to Toray on July 1, 2009. The Statement of Basis and permit were briefly reviewed to document PSCAAs most recent permitting practices. In addition to the good practices noted above for the Puget Sound Naval Shipyard and Lafarge permits, the Statement of Basis for Toray included a thorough description of emission units, applicability of various federal NSPS and NESHAPs in a unique question and answer segment similar to the format used by EPA when writing newer federal regulations, discussion of CAM applicability and identification of changes made to the AOP during renewal. The same comments apply to the Toray permit as were discussed for the Puget Sound Naval Shipyard and Lafarge permits, above. The permits reviewed at PSCAA were some of the best permits reviewed during the audit.

Southwest Clean Air Agency site visit conducted on April 28, 2010 8:35 am to 1:30 pm with Paul Mairose, John St. Clair, and Randy Peltier

The random permit selected was Emerald Kalama Chemical SW99-10-R1, renewed December 4, 2001. A complete second renewal application was submitted on June 5, 2006. The draft of the second renewal was issued March 25, 2010. The draft permit was reviewed for purposes of the audit, since the draft permit reflects the most current permitting practices at SWCAA.

The Statement of Basis identifies Title V applicability (but does not have a complete PTE for all Emission Units under worst-case operating scenarios). The Basis provides a thorough discussion of the process, emission units (size/capacity, fuel, controls, construction/installation date, emissions, CAM applicability, applicability of federal requirements & if applicable, a brief bulleted list of requirements, etc). It lists the insignificant emission units and the basis for their insignificance. It includes a detailed listing of operating terms and conditions, including 40 CFR 60 Subparts Dc and Kb, 40 CFR 61 Subpart FF, 40 CFR 63 Subparts A, F & G, and H. The Basis identifies the obsolete terms and conditions from existing Air Discharge Permits. There is a discussion of future requirements (40 CFR 63 Subparts EEEE, EEE, FFFF) that will likely be applicable to this source. All Air Discharge Orders are listed in a Table in the Basis. The Basis

identifies that CAM is not currently required, but may be in the future when pollutant specific requirements are included in the AOP.

The Basis contains an explanation of the monitoring terms and conditions, identifies if gapfilling is used, explains why gapfilling is needed, and identifies which requirements (federal, state or local regulations or Air Discharge Permits) the monitoring is used to provide a reasonable assurance of compliance with (by itself or in combination with other monitoring requirements). An explanation of recordkeeping terms and conditions is included. Appendices to the Basis contain alternative monitoring approvals from EPA. The Basis discusses AOP actions and includes a facility plot plan.

Tables within the permit identify the emission unit (size, fuel, limits) and control devices. The applicable requirements appear to be paraphrased, however, the permit does not discuss if they are paraphrased or a direct citation of the requirement. Plant wide and process specific emission units in each process are identified with the applicable requirements they are subject to. The permit lists and explains non-applicable requirements. Monitoring, recordkeeping and reporting conditions cite regulatory effective dates of underlying requirements and identify state/local only enforceable requirements at the beginning of each condition, instead of at the end.

The complete initial permit application was received June 2, 1995. The initial draft permit was issued April 30, 1999, a second draft permit was issued May 17, 2001. The proposed initial permit was issued October 15, 2001. The final initial permit was issued December 4, 2001.

A complete renewal application was received June 5, 2006. The draft renewal permit was issued March 25, 2010. Notices to affected states and interested parties were mailed on March 25, 2010. A legal notice was published in the local paper March 31, 2010. The permit register listed notice on April 10, 2010 of the draft permit, however, no notice of receipt of a complete application was posted to the register.

An FCE was completed on November 9, 2009. The FCE documentation includes a summary of actual and potential emissions for 2008, discusses review of reports submitted to the agency, lists the applicable NSPS and NESHAPs to which the source is subject and those the source may be subject to in the future, includes a detailed list of emission units, and a narrative of the on-site inspection. The on-site inspection checklist follows the permit format, discusses verification of each applicable requirement, monitoring, recordkeeping and reporting conditions, and checks on requirements from any Air Discharge permits not incorporated into the AOP yet. SWCAA does not clearly state the compliance status of the facility in the FCE documentation, however, the reporting format makes it easy to determine compliance status of each emission unit simply by reading the FCE documentation.

Facility files include stack tests, report reviews, FCE documentation, complaints, enforcement, permit reviews, etc.

Changes SWCAA has made during renewal since the last audit was performed include:

- removed “compliance method” from the applicable requirements tables and moved it into the body of the permit, and
- moved SIP & Statel/Local effective dates ahead to front.

The Emerald Kalama Statement of Basis and FCE documentation and inspection checklist/report were one of the best reviewed during this audit.

Conclusions

Review of Washington's AOP program reveals continued opportunities for on-going improvement of permitting, compliance and enforcement activities carried out by each agency for sources subject to the AOP program. It appears that the permits in Washington are generally well written and contain a complete listing of applicable requirements. Permits and their Basis should be evaluated during renewal for opportunities to incorporate audit recommendations. Discussions related to a specific document or permit-related activity are listed below.

Statements of Basis
Agencies can improve their Statements of Basis by identifying the basis for AOP applicability; by thoroughly describing the source's process(es) and utilizing plant schematics and flow charts; discussing the source's compliance history, at least for the last five years of the most recent permit cycle; by listing emission units, control devices, capacity or rating, installation date, and permitting history; by explaining MACT/NESHAP, NSPS, CAM, and 112(r) applicability; and by describing how any enhanced monitoring (gapfilling) added to the permit assures compliance with applicable requirements.

Many Statements of Basis did not contain a complete listing of pollutants for which the source was considered major. Many agencies reported that they rely on the analysis submitted with the original application to determine which pollutants the source is major for and do not re-evaluate for additional major pollutants during renewals. Some agencies stated that PTEs at complex sources with multiple emission units that operate under various operating scenarios can be very challenging to calculate.

It is important that each agency accurately identify the major pollutants at each source. Mandatory federal CMS reporting obligations, specifically determining if the HPV policy applies to an enforcement case, are determined based on whether the violation relates to a pollutant for which the source is considered major. If all the pollutants for which the source is considered major have not been identified, then the applicability of the HPV policy may be evaluated incorrectly. This can lead to under-indentifying and underreporting HPVs to EPA.

Permits
Agencies can continue improving the content of their permits by listing emission units, control devices, capacity or rating, installation date, permits issued and any operational requirements when identifying source specific applicable requirements. All legally enforceable provisions (i.e., WAC 173-400-070, -075, -115 or local regulations that adopt the federal regulations by reference) should be included with federal NSPS and MACT/NESHAP requirements when citing the applicable underlying requirement.

Many agencies had permits that lapsed, but permit shields were in place because the source had submitted a complete renewal application. In 2009, approximately one third of the AOP sources

in Washington had expired permits. In addition, there are outstanding new initial applications for which the permits have not yet been issued. Agencies with lapsed permits and outstanding new applications should continue to focus resources to make issuance of these permits a priority.

FCEs
Agency FCE documentation is improving. More agencies are summarizing the results of their review of various reports, tests, monitoring data, etc to use in conjunction with on-site visits to document they have met their FCE obligations. Inspection checklists are being developed that follow the AOP; identify the emission units and associated control devices and list the applicable requirements from the permit that each unit is subject to; and clearly show how each emission unit was assessed for compliance with all applicable requirements from the permit. Several agencies have developed or are enhancing databases designed to track and better document completion of an FCEs.

Enforcement
The level of enforcement response across the agencies continues to vary significantly. Some agencies did not issue any NOVs and/or civil penalties in 2009. Per EPA guidance, civil penalties should be used to deter noncompliance. To ensure a level playing field for Washington AOP sources, all agencies should be following federal HPV and FRV guidance to ensure that enforcement action taken at AOP sources in the state meet these expectations.

AFS Compliance and Enforcement Information
EPA's AFS database was used to collect data relative to compliance and enforcement activities for AOP sources. The data input into AFS was compared during the audits against agency records as a QA / QC of the AFS data. When agency records of compliance and enforcement activities did not match what was reported to EPA, follow up was conducted to correct any issues identified.

Recommendations

Many agencies have made positive changes to their AOP program based on suggestions from previous audits. Agencies should continue to refine their programs with each permit issuance. This report identifies what the auditors believe to be some of the better Statements of Basis, permits and FCE documentation seen at the agencies during the audits.

It is recommended that each agency and Ecology office individually address the issues identified in the report section pertaining to their agency or office. In addition, with each future permit renewal or initial permit issuance, the following recommendations should be implemented:

Permit Availability:

- Post all permits and Statements of Basis on agency web-sites.

Permit Issuance:

- Issue lapsed permits and outstanding new initial permits.

Permit / Statement of Basis Content:

- Include complete listing of major emission units, insignificant emission units, associated control devices, size/capacity/rating/fuel of emission units, year installed, and permitting history in permit and Statement of Basis;
- Include identification of all major pollutants in Statement of Basis;
- Include permit and compliance history discussion in Statement of Basis;
- Include process description, plant schematics and flow charts in Statement of Basis;
- Include CAM applicability, NSPS / MACT applicability, and how gapfilled requirements assure compliance in Statement of Basis and 112(r) applicability in permit; and
- Ensure legally enforceable provisions (i.e., WAC 173-400-075 and WAC 173-400-115) are cited with MACT and NSPS requirements in the permit.

FCE / Inspection Reports:

- Ensure inspection checklists follow the AOP and clearly show that each emission unit was assessed for compliance with all applicable requirements in the permit;
- Ensure that FCE documentation clearly identifies the information evaluated during the FCE process.

Enforcement Activities:

- Follow federal HPV and FRV guidance to ensure that enforcement action taken in the state is more uniform;
- Look for opportunities to coordinate with peers across the state and region to ensure more uniform enforcement of air operating permit requirements.

List of Abbreviations

112(r) – Section 112(r) of FCAA, Risk Management Plan
AFS – AIRS Facility Subsystem
AIRS – Aerometric Information Retrieval System
AOP – Air Operating Permit
BCAA – Benton Clean Air Authority
CAM – Compliance Assurance Monitoring
CMS – Compliance Monitoring Strategy
CRO – Ecology's Central Regional Office
EPA – Environmental Protection Agency
ERO – Ecology's Eastern Regional Office
FCAA – Federal Clean Air Act
FCE – Full Compliance Evaluation
FRV – Federally Reportable Violation
HAP – Hazardous Air Pollutants
HPV – High Priority Violation
MACT – Maximum Achievable Control Technology
NESHAP – National Emission Standards for Hazardous Air Pollutants
NOV – Notice of Violation
NSPS – New Source Performance Standards
NSR – New Source Review
NWCAA – Northwest Clean Air Agency
NWP – Ecology's Nuclear Waste Program
ORCAA - Olympic Region Clean Air Agency
PCE – Partial Compliance Evaluation
PCHB – Pollution Control Hearings Board
PSCAA - Puget Sound Clean Air Agency
QA / QC – Quality Assurance / Quality Control
SRCAA – Spokane Regional Clean Air Agency
SWCAA – Southwest Clean Air Agency
WAC – Washington Administrative Code
YRCAA – Yakima Regional Clean Air Agency