



DEPARTMENT OF
ECOLOGY
State of Washington

Washington Air Operating Permit Program Audit Report

Calendar Year 2010

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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 Mark Goodin from Olympic Region Clean Air Agency performed the audit and the review for calendar year 2010.

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 clean air agencies and Mark Goodin, from Olympic Region Clean Air Agency, performed the audit of Ecology's four offices.

The reviews evaluated individual agency programs based on the requirements listed in WAC 173-401-920(3)(b) and (c). A focus this year was the utility of the permits as stand-alone enforceable documents. In other words, could a user determine applicable requirements from the Permit itself, or would a user need to consult an outside source of information such as the CFR to determine applicable requirements?

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 pre-audit public meeting was held at the Eastern Regional Office of Ecology in Spokane on March 16, 2011. 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. 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 2010) and TOPs database (permitting activities for the first half and second half of 2010). 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. Application processing time is largely dependent on the complexity and compliance history of the source. Average application processing time takes from three to four months of part time work all the way up to a year to complete. For larger, more complicated sources with on-going enforcement issues, some permits may take up to two years to issue. Agencies reported applications are generally received administratively complete and no applications had to be disapproved on grounds they did not contain the required application components. However, it was also found that most applications required at least one request for additional information in order to complete a draft permit or permit renewal. 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 choose to encompass all operating scenarios in their applications rather than requesting that the permit specify “alternate operating scenarios”. Permit appeal information is included either in the permit itself or is communicated in the draft and final permit notices sent to interested parties. State or local only requirements are identified with applicable requirements. Source inspections are performed unannounced when possible.

Agencies vary on whether or not specific maintenance requirements are included in the permit itself. ORCAA, CRO and PSCAA take an approach of both incorporating those specific operation and maintenance (O&M) requirements into the permits that are necessary for assuring compliance and requiring general O&M plans be developed and implemented for certain equipment. Most other agencies do not incorporate specific maintenance requirements in the permit, but do require the source develop and follow an operation and maintenance plan for certain equipment. Enforceability of specific measures in O&M plans required by permits was not investigated through this audit.

Procedural requirements for providing public notice of permit actions in accordance with WAC 173-401-800(2) are generally followed. As discussed in the last two audit reports, 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).

Routine Performance Audit - Agency Comparisons

A comparison of permitting activity 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 the evaluation of the random individual permit(s) reviewed for each agency follows.

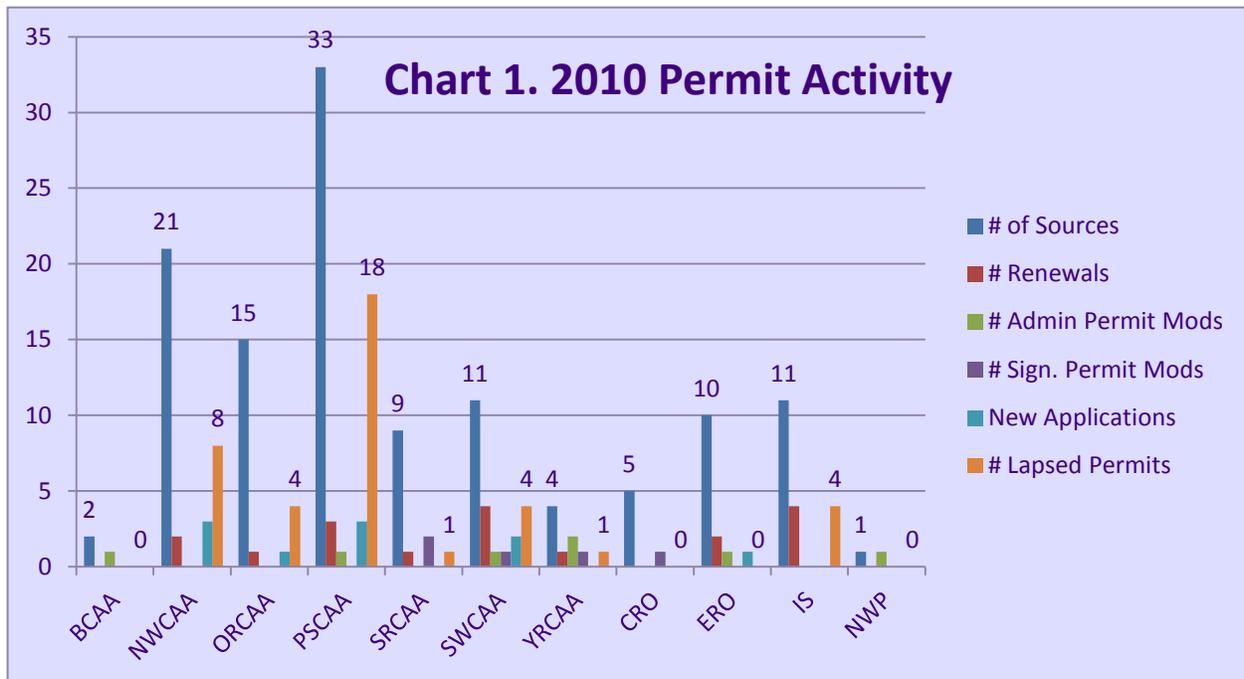
Permit Activity

Many Washington permitting agencies are on, or will soon be triggering, their second round of permit renewal cycles. A few agencies are still working to get the first renewal permits issued. Several agencies have received new applications from sources that have become AOP applicable and require issuance of initial permits. Permit modifications triggered by new requirements becoming applicable midway through permit terms have significantly added to agency permit workload. In particular, changing and uncertain status of certain federal regulations such as the Boiler MACT have caused significant workload issues at local agencies.

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), and Northwest Clean Air Agency (NWCAA) have had applications for initial permits for more than 18 months prior to the start of 2010 for which initial permits were not finalized in 2010.

Every agency except Ecology’s Nuclear Waste Program (Ecology NWP), Ecology ERO, Ecology CRO and Benton Clean Air Agency (BCAA) had permits that lapsed (expired before the renewal was issued) in 2010. Currently, the oldest lapsed permit in the state is PSCAA’s King County Solid Waste Division Cedar Hills Regional Landfill, which expired January 4, 2006. The draft renewal AOP for this source has been delayed while on-going enforcement issues are resolved.

In general, 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, is looking to either contract out some of their AOP workload or hire additional permit writing staff to address this

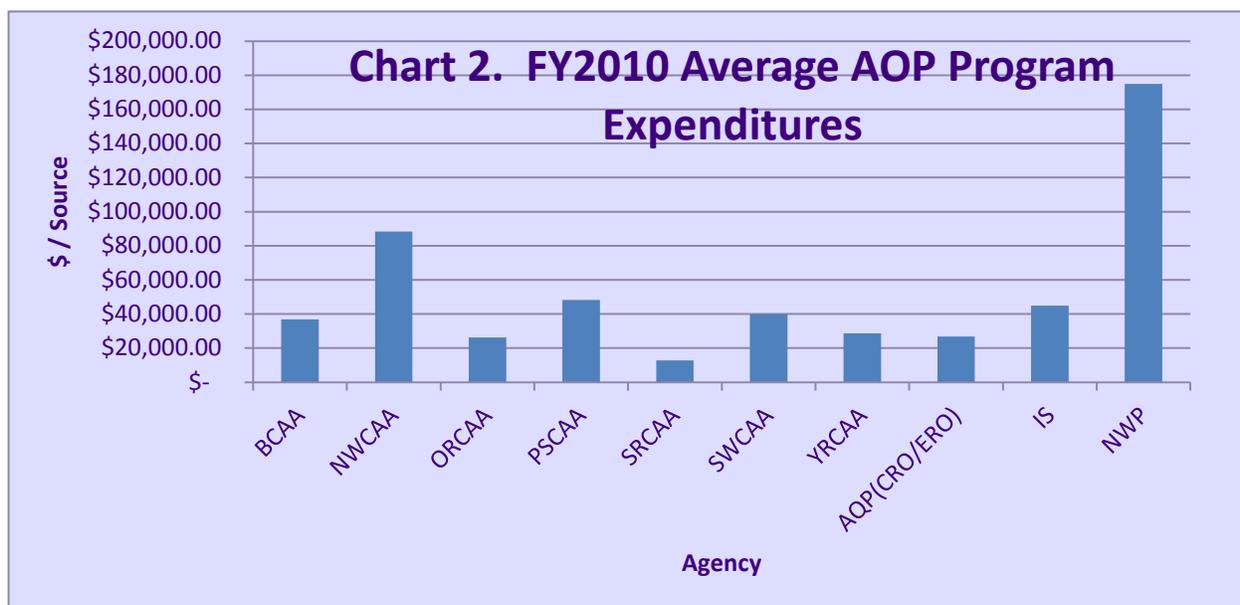
problem. Industrial Section had over a third of their AOPs lapsed in 2010. However, four of the lapsed permits were issued renewals during 2010.

AOP Program Expenditures

AOP program expenditures were collected from each agency for State fiscal year 2010 (July 1, 2009 through June 30, 2010). Program expenditures include the staffing costs associated with permit program activities such as permit writing, public hearings, permit appeals, permit compliance and enforcement, billing, data management, and administration, as well as other indirect expenses.

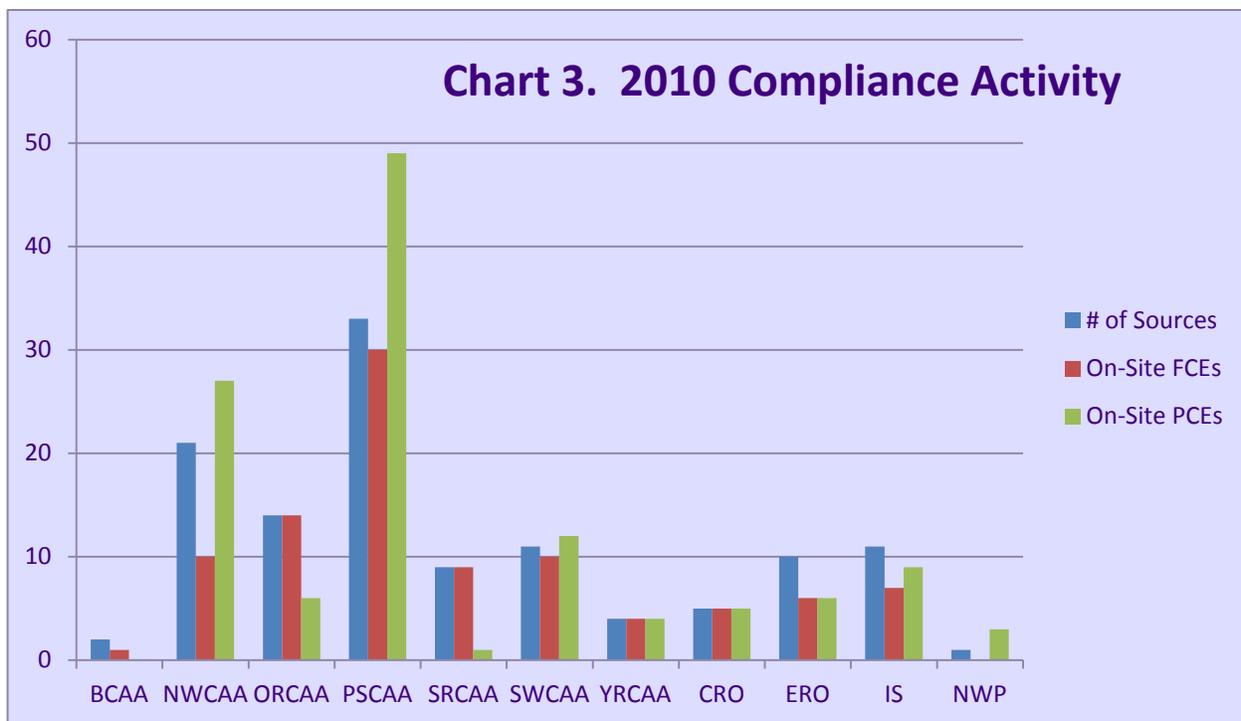
Most agencies do not track AOP program expenditures by source, but by activity or function within the AOP programs: permitting, enforcement, administration etc. However, several agencies do track staff time of certain key activities such as “permit writing” by source. For the purposes of this report, total AOP program expenditures for each agency were divided by the total number of permit sources to obtain the average program expenditure by source, contained in Chart 2. The average AOP expenditure for Ecology is grouped by program: Air Quality Program (CRO and ERO), W2R Program’s Industrial Section and NWP.

It should be noted that the workload associated with certain types of sources (refineries, pulp and paper mills and aluminum mills) result in certain permits having significantly higher expenditures than may be represented by the averages shown below.



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.



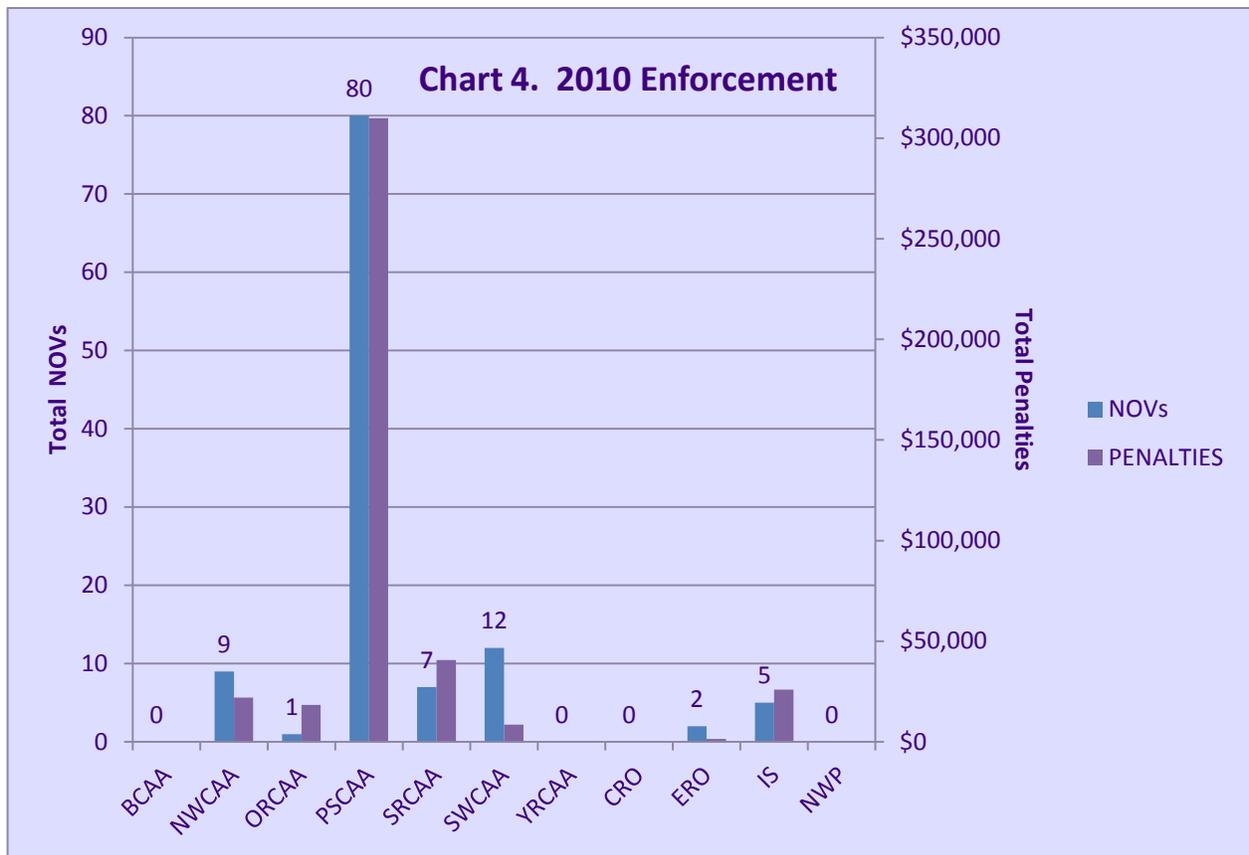
EPA does not require states and locals to report PCEs. However, some agencies perform more than one site visit per year at their larger sources which may not include inspection of the entire facility during that one visit. These partial inspections are reported to EPA and are counted towards performance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

ORCAA, SRCAA, YRCAA and Ecology's CRO performed an FCE at each of their sources in 2010. PSCAA and SWCAA performed FCEs at most of their facilities in 2010; PSCAA performed two FCEs at some of their facilities. NWCAA, PSCAA, SWCAA, YRCAA, Ecology's CRO, ERO, Industrial Section and NWP 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. No NOV's or civil penalties were issued at Ecology's CRO and Nuclear Waste Program, BCAA and YRCAA. PSCAA had the highest number of NOV's and civil penalties issued in 2010.

	BCAA	NWCAA	ORCAA	PSCAA	SRCAA	SWCAA	YRCAA	CRO	ERO	IS	NWP
# AOPs	2	21	15	33	9	11	4	5	10	11	1
# NOV's	0	9	1	80	7	12	0	0	2	5	0
# Sources NOV's Issued to	0	7	1	19	5	7	0	0	2	5	0

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

Half or more AOP sources in PSCAA, SWCAA and SRCAA's jurisdiction received NOV's in 2010. Ecology's Industrial Section issued NOV's to just under half of their AOP sources. NWCAA issued NOV's to one-third of their AOP sources. Several agencies had sources that received multiple NOV's.

Random Individual Permit Reviews by Agency

Ecology Programs – Reviewed by Mark Goodin

AQP – ERO Site visit conducted on Monday, May 23, 2011 with David Wendland and Brenda Smits

The random permit selected for the audit was the permit for Washington State University Pullman (AOP No.07AQ-E211). The renewal for this permit was issued on July 30, 2007.

The Washington State University Pullman permit (Permit) and associated Statement of Basis (SOB) are very well organized and clearly written. The Permit is organized with equipment specific applicable requirements in table format for each piece of equipment. Each condition references a specific monitoring, record keeping and reporting (MRR) condition, which are contained in a separate section. This format is the typical format used in most Title V permits in Washington. ERO's MRR conditions are comprehensive and clearly written.

The Permit includes separate tables of equipment-specific applicable requirements for each major emissions unit and a summary table of emissions units is provided in the SOB. However, it is difficult to distinguish control equipment and measures from either the Permit or SOB. For this reason a more comprehensive and thorough summary of emissions units and air pollution control devices is recommended for the permit and SOB. A summary table of emissions units provided in the Permit would enhance the utility of the permit as a “stand alone” document and its usefulness in compliance evaluations and to the public. More comprehensive and complete descriptions of emissions units and control devices in the SOB would lessen the need to consult Notice of Construction (NOC) applications and associated agency approvals. It is recommended that the basic information needed to determine applicable requirements plus BACT determination information be included for each emissions unit either in permit or SOB: type, size, date constructed/modified, make & model numbers, approved fuels, air pollution controls, etc.

The Permit appears to contain all applicable requirements, but this determination was difficult to make from the Permit and SOB alone. Determining applicability of relevant federal subparts such as 40 CFR Part 60, Subpart Db and the federal reciprocating engine requirements with respect to individual emissions units was difficult. For this reason it is recommended the SOB contain discrete sections regarding applicability of each emissions unit and relevant federal rule. These sections should document the basis of each determination and each outcome. In addition, for those regulations determined applicable, it would be helpful if the SOB describe the extent of the applicable requirements from the applicable federal rule. For example, if a boiler is an “affected” facility” under 40 CFR Part 60, Subpart Dc, but only subject to the general standards, stating so in the SOB would be helpful to anyone using the permit who does not have first-hand knowledge of the permitting history of the facility. In addition, there did not appear to be anything in the Permit or SOB regarding the Compliance Assurance Monitoring (CAM) rule. It is recommended that the SOB include a section that addresses CAM applicability.

For those requirements determined inapplicable, besides stating this outcome and the basis in the SOB, some permits identify them by citation in the permit shield condition. Providing an explicit permit shield that specifically cites those requirements determined to be inapplicable is useful from a compliance enforcement standpoint because it provides a summary of those requirements already determined inapplicable. Having this information available from the permit improves the usefulness of the permit and avoids the user (compliance manager, regulator or public) from having to go to the SOB or elsewhere to determine this information.

The Permit reviewed for ERO was unique in that it effectively used “streamlining” to condense overlapping and redundant requirements into single conditions. Equivalency of redundant and overlapping requirements are thoroughly explained in the SOB. Though other permits reviewed during the audit also used “streamlining,” ERO’s Permit made the most use of this technique and provided the most thorough explanations in the SOB.

Several conditions in the Permit generally require equipment be operated in a manner consistent with an approved O&M plan, but specific O&M measures are not included in the permit. For purposes of assuring compliance with applicable requirements it is recommended that the Permit contain those O&M measures necessary for assuring compliance.

The Permit specifies all monitoring, recordkeeping and reporting (MRR) requirements that apply and “gap fills” where an applicable requirement does not provide ample MRR. ERO’s permits are structured such that specific monitoring, record keeping and reporting requirements are contained in a separate section from the applicable requirements themselves. This permit format allows ample room to thoroughly describe MRR requirements. As a result, ERO’s MRR conditions are thoroughly and clearly explained in the Permit.

ERO’s records indicated permit renewal and revision procedures were met. The 2010 revision included public notice of the draft revision as well as notice to affected states. The Timeline provided in section 3.3 of the SOB provides a good record of the permit review history since the renewal application was initially submitted.

Compliance status for each emissions unit can be easily reviewed from the annual compliance certifications, ERO’s evaluation of the annual and semiannual compliance certifications and ERO’s FCEs. Other records such as inspection reports, semiannual monitoring reports and records from AFS were reviewed and found to correspond with information in the Annual Compliance Certification.

Noteworthy:

- ERO streamlined overlapping and redundant requirements into single conditions. Equivalency of redundant and overlapping requirements is thoroughly explained in the SOB. ERO’s Permit provided complete and thorough explanations of streamlined requirements in the SOB.
- ERO’s MRR conditions are thoroughly and clearly explained in the Permit.

Recommend:

- SOB contains discrete sections regarding applicability of each relevant federal regulation that documents the basis of the determination and the outcome. In addition, for those regulations determined applicable, it would be helpful if the SOB describe the extent of the applicable requirements from the applicable federal rule.
- Include an explicit rather than general shield for inapplicable requirements in the permit.
- The Permit includes those O&M measures necessary for assuring compliance.
- In addition to the descriptions provided in the SOB, recommend identifying and describing emissions units and control devices in table format in the permit itself.
- Provide more comprehensive and complete descriptions of emissions units and control devices either in the permit or SOB. It is recommended that the basic information needed to determine applicable requirements plus BACT information be included for each emissions unit either in permit or SOB.

AQP – CRO Site visit conducted on Tuesday, May 24, 2011 with Lynnette Haller and Ryan Vicente

The random permit selected for the audit was the permit for the Roosevelt Regional Landfill (AOP No.08AQ-C090). The last renewal for this permit was issued on December 31, 2008, and it was revised through a significant permit modification on September 16, 2010.

The Roosevelt Regional Landfill permit (Permit) and associated Statement of Basis (SOB) are very thorough, well organized and clearly written. As a result it was one of the easiest to review and complete the statewide audit for. The Permit is unique in that it includes all equipment-specific monitoring, record keeping and reporting (MRR) requirements side-by-side with each applicable requirement. This format proved very “user friendly” during the audit since all MRR requirements associated with an applicable requirement could be reviewed without having to toggle between pages.

The Permit refers to major emission units/points and control devices within the conditions themselves, but contains no emissions unit descriptions within the permit itself. Descriptions of emission units/points, process descriptions and control devices are provided in the SOB. While this is an acceptable way to describe emissions units and control devices, the Permit would benefit from having a summary table that identifies and describes them. A summary table would provide a comprehensive description of emissions units and control devices from the permit itself, thus enabling the utility of the permit as a “stand alone” document and enhancing its usefulness in compliance evaluations and to the public.

Also, though emissions unit and control device descriptions are provided in the SOB, more comprehensive and complete descriptions are recommended. Adding better descriptions would lessen the need to consult Notice of Construction (NOC) applications and approvals. It is recommended that the basic information needed to determine applicable requirements plus BACT determination information be included for each emissions unit in SOB: type, size, date constructed/modified, make & model numbers, approved fuels, air pollution controls, etc.

All relevant requirements (landfill requirements for this random permit selected) are addressed either in the Permit or the Basis Statement. Applicable requirements are adequately incorporated into the permit. The permit does a great job at incorporating both NSPS and NESHAP for landfills by including all the detailed operation and maintenance (O&M) requirements prescribed by these subparts rather than simply referring to the subparts for these details. Applicable requirements from approval orders are comprehensively incorporated as well. Compliance Assurance Monitoring (CAM) applicability is adequately explained in the SOB and is incorporated into the permit appropriately. All relevant, but inapplicable requirements are adequately addressed in the SOB.

The Permit includes adequate and appropriate operation and maintenance measures (O&M) for assuring compliance with applicable requirements. The permit specifies the specific O&M measures required where applicable. For NSPSs and NESHAPs, O&M requirements are specifically incorporated into the permit. For requirements to develop and implement O&M plans, the minimum O&M measures to be included in the plan are specified in the permit condition itself.

The Permit specifies all monitoring, recordkeeping and reporting (MRR) requirements that apply and “gap fills” where an applicable requirement does not provide ample MRR. CRO’s permits are structured such that specific monitoring, record keeping and reporting requirements are contained adjacent in the table with the emissions limits themselves. This provides the user of the permit a “One-stop-shop” for each emissions limit, thus minimizing if not eliminating toggling between different sections of the permit.

CRO’s SOB for the Permit provides a comprehensive description of the basis for all conditions in the permit. It provides thorough applicability determinations for key federal requirements like the CAM rule. In addition, it includes specific sections on key Title V permitting considerations such as: Streamlining, Gap-filling and Operational Flexibility. The Background and Timeline sections of the SOB allow for quick assessment of the Permit history.

CRO’s file records indicated permit renewal and revision procedures were met. The 2010 revision included public notice of the draft revision as well as notice to affected states. The Timeline provided in section 3.3 of the SOB provides a good record of the permit review history since the renewal application was initially submitted.

Inspection reports, FCE determination, semi-annual monitoring reports and other documents on file at CRO were reviewed. After FCEs are completed, CRO summarizes results in a FCE checklist that addresses all conditions in the permit. This was a very useful tool during the audit in that it gave a comprehensive and complete summary of the FCE results. Other records such as the inspection reports, annual compliance certifications, semiannual monitoring reports and records from AFS corresponded well with the FCE checklist information. This feature of CRO’s Title V compliance enforcement program appears to meet one of the recommendations from the previous audit, which was that compliance with each condition and/or applicable requirement of the permit be addressed in the agency’s FCE records.

Noteworthy:

- CRO's permits are structured such that specific monitoring, record keeping and reporting requirements are contained adjacent in the table with the emissions limits themselves. This organization provides the user of the permit a "One-stop-shop" for each emissions limit, thus minimizing if not eliminating toggling between different sections of the permit.
- CRO's permits include a "Timeline" in section 3.3 of the SOB that provides a good record of the permit review history.
- Specific O&M measures are incorporated into the permit.
- CRO uses a checklist format to document findings from both the review of the annual Compliance Certification and the FCE. This approach works well and provides a comprehensive and clear assessment of compliance.

Recommend:

- Adding explanation of the scope of enforceability in section 13 of the SOB to the beginning of the permit itself, which is where it should be located.
- In addition to the descriptions provided in the SOB, recommend identifying and describing emissions units and control devices in table format in the permit itself.
- Provide more comprehensive and complete descriptions of emissions units and control devices either in the permit or SOB. It is recommended that the basic information needed to determine applicable requirements plus BACT information be included for each emissions unit either in permit or SOB.
- Need to clarify that CRO's assessment of compliance documented in their FCE and Certification checklists covers the finite period of time represented by the reports reviewed to complete the checklist, and do not rule out additional credible evidence.
- Moving Federal CFC requirements from "Permit Administration" section to the "Source-Wide" applicable requirements table as these requirements contain substantive operating requirements for a landfill rather than administrative requirements.

Nuclear Waste Program - Site visit conducted on Wednesday, May 25, 2011 with Oliver Wang

Ecology Nuclear Waste Program (NWP) has only one source in its jurisdiction, US Department of Energy Hanford (Hanford). Although the permit for Hanford 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. The Hanford permit expires on 12/31/2011. A renewal application is due to the NWP by 7/1/2011.

The Hanford permit (Permit) and associated Statement of Basis (SOB) are adequate and found to generally meet the permit requirements in Chapter 173-401 WAC. The Permit is quite complicated due to the complicated nature of the Hanford Reservation itself, the number of emissions units and multiple agencies with jurisdiction.

Though there were no opportunities for challenges to the permit in 2010, Revision D to the permit was challenged in 2008 (according to Responsiveness Summary posted on the ECY website). According to the 2008 Responsiveness Summary issued by NWP, comments received from several entities and the public. Outcome of the public process for Revision D resulted in the NWP amending the draft permit revision. Based on records on file with NWP, requirement for public and affected state notification were met.

The Permit includes tables summarizing both significant and insignificant emissions units. This is noteworthy since the Permit was the only Ecology permit where emissions units are identified up front in the permit, and since information besides just identifying the emissions unit is provided. The tables identify the size of units and any applicable federal subparts. A summary table of emissions units with descriptions, like provided in this Permit, improves the utility of the permit as a “stand alone” document, thus enhancing its usefulness in compliance evaluations and to the public.

Though emissions units were described in the Permit, neither the Permit nor SOB describe control technologies or methods. Knowing this information up front in the permit is also desirable and is recommended for both the Permit and SOB

The permit seems to contain all the requirements to which the source is subject. However, since an “adopt by reference approach” ABR is used, underlying applicable regulations need to be accessed to determine all applicable requirements. This is problematic in that the Permit falls short of serving as a stand-alone enforcement document, which is one of the objectives of Title V permits. With respect to applicable regulations, recommend adding more specificity to the permit.

Another problem caused by the ABR approach is that citing an entire Federal regulation as applicable forces future sub-section-specific applicability determinations. For example 40 CFR Part 60 Subpart Dc in Table 1.3 adopts by reference this subpart and forces the user of the permit to consult the subpart for applicable requirements. For this reason, recommend narrowing the citation to the specific applicable requirements that apply and explaining why other key parts are not applicable in the SOB. Both the Permit and SOB would be improved by adding details on operation and maintenance measures for both emissions units and control equipment.

The on-site inspection frequency for the NWP is at least 20 days per year. A FCE is completed annually. The AFS formal enforcement action record for 2010 does not show any formal enforcement actions for 2010. However, the AFS FCE report for 2010 did indicate that Hanford was out of compliance on two separate dates in 2010 [5/11/10 & 9/2/10]. Not being able to reconcile this during the audit site visit is viewed as an indication that enforcement records need improvement.

Noteworthy:

- The Permit includes tables summarizing both significant and insignificant emissions units.

Recommend:

- Convert the specifications for each emissions unit to the same metric as used to determine applicability with federal standards. For example, change boiler horse power ratings to megawatts or Btu/hr.
- Describe control technologies and methods in both the permit and SOB.
- More precise and organized enforcement records that provide an explanation of enforcement actions.
- Add standard term stating utility of credible evidence: ***Credible Evidence.** For purposes of submitting compliance certifications or establishing whether or not a person has violated or is in violation of this permit, nothing shall preclude the use, including the exclusive use, of any credible evidence or information relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.*
- For shielded regulations such as 40 CFR 63, Subpart ZZZZ and 40 CFR subpart DDDDD include sections in the SOB that support/document the exemption.
- Could not find shield, applicability determination or condition for 40 CR Part 60, Subpart JJJJ. Since the facility contains engines, this subpart should be addressed somewhere in
- Could not find anything in the Permit, Permit Shield, or SOB that addresses CAM applicability. Should add specific section in the SOB that addresses CAM applicability.
- The facility includes several boilers subject to 40 CFR Subpart Dc. Though Dc is cited, the general requirements from 40 CFR Subpart Da were not found in the permit such as the requirement to properly maintain control equipment (§60.11(d)). This should be added to the permit.
- The equipment specific limits in Table 1.3 of Attachment 1 of the permit are misleading in that they include an opacity limit for steam generating units less than 5 MMBtu/hr, but not for units greater than 5 MMBtu/hr. Suggest having specific opacity limits covering all sizes of boilers at the facility.
- Citing 40 CFR Part 60 Subpart Dc in Table 1.3 adopts by reference this subpart and forces the user of the permit to consult the subpart for applicable requirements. Suggest narrowing the citation to the specific applicable requirements that apply and explaining why other key parts are not applicable in the SOB.
- Looks like the largest boiler is less than 30 MMBtu/hr. Therefore, need something in the permit, SOB or both that rules out §60.43c(e)(1) particulate standards for oil fired units.

Industrial Section - Site visit conducted on Tuesday, June 7, 2011 with Robert Carruthers

The random permit selected for the audit was the permit for Simpson Tacoma Kraft, # 000085-0. The last renewal for this permit was issued on July 27, 2005.

The Simpson Tacoma Kraft permit (Permit) and associated Statement of Basis (SOB) are adequate and found to generally meet the permit requirements in Chapter 173-401 WAC. Since

the Permit is expired and in process of being renewed, it does not reflect IS's current permit format or guidelines.

The Permit organizes emissions units into separate sections, but does not contain any summary emission units. As a result, the user must go through the permit to get an overview of the type and numbers of emissions units at the facility. The SOB is organized similarly. It would be helpful to add a summary table of emissions units in the front of the permit that simply identifies major emissions points, specifications for each and the associated air pollution controls. This would provide the user of the Permit a "birds-eye-view" of the permit as well as an understanding of the type and size of equipment being regulated without having to compile this information from reading through the permit. A summary table of emissions units with thorough descriptions would also improve the utility of the permit as a "stand alone" document, thus enhancing its usefulness in compliance evaluations and to the public.

In addition, it is recommended the SOB contain more comprehensive descriptions of equipment and associated control devices/measures. As a general rule, descriptions should include all information needed to make an independent applicability determination (type of unit, model #, size, when permitted, when modified, approved fuels) plus BACT information such as (pollution controls, operating parameters, CEMs). More comprehensive and complete descriptions of emissions units and control devices within the Permit and SOB would lessen the need to consult Notice of Construction (NOC) applications and associated agency approvals when the user of the Permit does not have first-hand knowledge of the regulatory history of the facility.

All relevant regulations appear in either the Permit or SOB. However, since the approach used in the permit is an "Adoption by Reference" (ABR) approach, specific regulations must be consulted in order to get details on specific applicable requirements from these regulations. This is problematic in that the Permit falls short of serving as a stand-alone enforcement document, which is one of the objectives of Title V permits. With respect to applicable regulations, recommend adding more specificity to the permit. These recommendations are listed below.

40 CFR Part §60.11(d) should be moved from condition #12 in the facility-wide section of the permit to the equipment-specific sections for power boiler #7, recovery furnace #4 and other emissions units for which it applies. This is recommended since §60.11(d) is an emissions unit specific requirement that does not apply to all emissions units at the facility and since monitoring compliance with it should be tailored specific to each subject emissions unit. Including it in the appropriate equipment specific sections of the permit would allow identification of the "good air pollution control practices" specific to each subject emissions unit. Keeping the condition in the facility-wide section implies that the requirement applies to all emissions units at the facility.

The Permit does not contain requirements for "Actions Requiring Prior Approval" such as New Source review (NSR). Though it can be argued that actions requiring prior approval such as NSR are permitting requirements that impose specific requirements only when triggered, it could be argued equally well that NSR requirements are always applicable. In addition, including them in a permit incurs at least an annual consideration of them by the compliance manager and responsible official when the Annual Compliance Certification is made. This alone is ample reason to include at least the NSR requirement in the permit. In addition, it should be noted that

all other Ecology regional offices and most local Washington air agencies include such requirements in their permits.

Both the Permit and SOB would be improved by adding details on operation and maintenance measures for both emissions units and control equipment in the Permit and SOB where appropriate. Specific O&M requirements necessary for assuring compliance with applicable emissions limitations should be incorporated into the permit and described in the SOB.

Due to the ABR approach used it is difficult to determine specific CAM requirements. The SOB states that condition E1a is the CAM condition for particulate emissions however, this condition does not include CAM-specific requirements. Condition E1a does not specify when monitored opacity levels constitute an excursion from the particulate emissions limit, which is a requirement of CAM: *“The permit shall specify the level at which an excursion or exceedance will be deemed to occur, including the appropriate averaging period associated with such exceedance or excursion. For defining an excursion from an indicator range or designated condition, the permit may either include the specific value(s) or condition(s) at which an excursion shall occur, or the specific procedures that will be used to establish that value or condition. If the latter, the permit shall specify appropriate notice procedures for the owner or operator to notify the permitting authority upon any establishment or reestablishment of the value.”* Also, there does not appear to be any requirement for a Quality Improvement Plan (QIP), which is also a CAM requirement.

IS’s records indicated renewal public involvement procedures were met for the Permit reviewed. The July 2005 renewal record included public notice of the draft renewal as well as notice to affected states. All expected records documenting the public process were found in the permit review file including Legal Notice, Permit Register notice, mailing list for Affected States notification, and notice of Proposed permit to EPA.

Inspection reports, FCE determination, semi-annual monitoring reports and other documents on file were reviewed. FCEs occur every other year for an industry type (i.e., pulp and paper, aluminum smelter). Inspections are conducted annually. Site visits occur at least 4 times a year and cover both air and water emissions. Compliance status for each emissions unit can be determined from the records on file: annual compliance certifications, IS’s evaluation of the annual and semiannual compliance certifications and FCE reports. Other records such as inspection reports, semiannual monitoring reports and records from AFS were reviewed and found to loosely correspond with information in the Annual Compliance Certification. Therefore, recommend more attention in IS reports regarding the time period to which compliance evaluations apply.

Noteworthy:

- Compliance /enforcement records show that IS acts swiftly on all permit deviations including state only permit deviations with appropriate enforcement actions.
- The IS has already taken actions to address many of the areas of improvement suggested in this audit.

Recommend:

- Add summary table of emissions units in the front of the permit that identifies major emissions points, specifications for each and the associated air pollution controls.
- More comprehensive descriptions of emissions units and associated control devices/measures in the SOB.
- Add requirements for actions requiring prior approval such as: requirements for replacement or substantial alteration of existing control equipment; requirements for temporary or portable sources; and, requirements for New Source Review.
- 40 CFR Part §60.11(d) should be moved from condition #12 in the facility-wide section of the permit to the equipment-specific requirements for power boiler #7, recovery furnace #4 and other emissions units to which it applies.
- Add standard term stating utility of credible evidence:
- Add specific requirements to the permit, even for work practice and monitoring requirements. For example, CAM requires the maintaining necessary parts for routine repairs of monitoring equipment [§64.7(b)]. This should be included in the equipment-specific section in the permit. Another example is the CAM requirement to define an “Excursion” [§64.6(c)(2)].
- Add standard term to cover Emergency as Affirmative Defense provisions in WAC 173-401-645(1).
- Add applicable requirements from orders when there is more than three years left on the Title V permit. When PSD-06-02 was issued in 5/22/07 there was still more than 3-years left in the permit term (expires 8/1/10). However, it does not appear the permit was reopened to incorporate these requirements. For example, PSD-06-02 imposes a NOx limit on power boiler #7 that could not be found in the permit.
- Condition 21 in the facility-wide section of the permit appears to be outside the scope of requirements for permits according to Chapter 173-401 and Part 70 in that it is an enforcement policy rather than an applicable requirement. Suggest removing it from the permit.
- It would greatly help if the SOB included a more complete facility description including tables showing PTE and actual emissions.

Local Air Agency Programs – Reviewed by Crystal Alford

Yakima Regional Clean Air Agency site visit conducted May 3, 2011 with Hasan Tahat

YRCAA has been posting public notices of draft AOPs and Statements of Basis on their website for review. At the time the audit was scheduled, only a public notice for a draft modification of the Terrace Heights Landfill AOP and Statement of Basis were posted. The comment period for this draft modification ended November 26, 2010, but the draft documents were still available for viewing. No other AOP documents were available on the agency website. For this audit, an electronic copy of Yakima Resources’ permit and Statement of Basis were requested.

The random permit selected for the audit was Yakima Resources Y007-01. The initial permit expired October 2, 2005. A complete renewal application was received April 1, 2005. The renewal permit was issued May 9, 2007. The permittee is in the process of closing the site and requesting revocation of the permit.

The Statement of Basis identifies this source as subject to the AOP program because it is a major source with emissions of significant quantities of CO, NO_x, PM₁₀, and VOC. The permit register entries for the most recent permit action identify actual emissions of CO, NO_x and PM₁₀ above 100 tons per year for this source. Recommend identifying the pollutants the source is major for in the Basis.

The Basis contains a description of the process, plant layout map, Small and Large Log Mill, Plywood Plant, and Air Conveying System flow diagrams. A list of all Notices of Construction Approval Orders, and Correction Orders is included. Emission units are identified in Table 1-1, fugitive emission sources are identified in Table 1-2, and insignificant emission units are identified in Table 1-3.

The Basis includes a discussion of the applicability of 40 CFR 63 Subpart DDDD Plywood and Composite Wood Products and Subpart DDDDD Industrial Commercial Institutional Boilers and Process Heaters, stating that the source is subject to these requirements. It would be helpful to have a discussion of potential HAP emissions from the facility, as the applicability of these requirements to this source would be based on whether the source is major for HAPs.

The Basis lists compliance requirements for 40 CFR 60 Subpart A and Dc to the four natural gas fired boilers installed to replace the Dutch Oven hog fuel boilers per Consent Order #952028186. The Basis states that the only applicable requirement from these provisions was recording daily fuel usage. This requirement was traced back to the permit.

The Basis adequately covers the basis for applicability of 40 CFR 68, Chemical Accident Prevention Program. It states that no regulated substances are used or stored in sufficient quantities to trigger the requirements of this Program.

CAM was evaluated for the four natural gas boilers, stoker fed hog fuel boiler controlled by wet scrubber and four veneer dryers controlled by wet ESP. However, it would be helpful if the Basis identified the pollutant specific emission units that are subject to an emission standard or limitation (and confirm for the reader that the remaining equipment on site is not subject to an emission standard or limit), uses a control device to achieve the standard, and have pre-controlled emissions that meet or exceed major source thresholds. This would clarify for the less knowledgeable user that the numerous dust control devices operated by this source don't trigger CAM.

The stoker hog fuel boiler and wet ESP were determined by YRCAA to be the only units subject to CAM, though not yet effective for this permit cycle. However, since the current permit is a renewal issued in 2007, it appears that a CAM plan should have been submitted with the last renewal application for these units and compliance assurance monitoring included in the current permit.

Not included in the Basis were several key topics including: identification of pollutants the source is major for, HAP emission data (based on PTE) to support and clarify applicability determinations for federal requirements, a compliance history that includes discussion of the Correction Orders and Consent Decree specific to this facility, a permitting history, review of CAM plans for stoker hog fuel boiler and wet ESP or a discussion of any gap-filled monitoring.

Within the permit itself, applicable requirements are paraphrased in Tables A - D. Footnotes listing monitoring, recordkeeping and reporting requirements immediately follow each Table, allowing the user of the permit to readily locate associated monitoring, recordkeeping and reporting requirements. The numbering scheme used in the Table and Footnotes are repeated for each new Table and Footnote section. To minimize the chance for confusion, it would be useful if the Table letter (A, B, C or D) could be included with the Condition number and Footnote letter (e.g., Condition A.2 or Footnote A.b). Right now, the permit contains four Condition 1's, four Footnote (a)'s, and so on.

Table D Powerhouse Requirements clearly identifies which requirements apply to all boilers, which requirements apply only to the natural gas boilers and which requirements apply only to the stoker hog fuel boiler. Gap-filled requirements can be found in the permit where the underlying applicable requirement cited is WAC 173-401-615(1)(b)&(c). However, emission units listed in the headers of the emission unit specific Tables could be better identified with the addition of control device, size, capacity, and installation date.

Section VI of the permit identifies both WAC 173-400-075 and WAC 173-400-115 as requirements inapplicable to the facility, listing the reason code as "This facility is not in this source category". This was likely true upon the issuance of the initial permit, but should have been updated to reflect the requirements from 40 CFR 60 Subpart Dc, adopted by reference in WAC 173-400-115, which are listed in the permit for the four natural gas fired boilers.

CAM for the Stoker hog fuel boiler or wet electrostatic precipitator was not included in the permit. YRCAA identified applicability of 40 CFR 63 Subparts DDDD Plywood and Composite Wood Products and DDDDD Industrial, Commercial, and Institutional Boilers and Process Heaters, respectively, in the Statement of Basis, however, no requirements from these MACTs were included in the permit.

The initial permit was issued October 2, 2000 and expired October 2, 2005. A complete renewal application was received April 1, 2005. The renewal permit was issued May 9, 2007. The permit register contained notices of the draft permit on January 25, 2007 and issuance of the final permit on February 26, 2007. Legal notice was published in the Yakima Herald Republic and sent to affected states February 19, 2007. No new Orders have been issued to Yakima Resources since 1997.

The FCE performed September 8, 2010 identifies overall compliance status of the source, however, the source has not been operating, all emission units except the stoker hog fuel boiler have been removed from the site, and the only operations occurring are chipping and grinding activities, so there was not much to evaluate. The FCE documentation does include a compliance monitoring activity summary (report reviews, inspection dates, and emission inventory review). An on-site PCE was performed March 8, 2010.

Agency source files have separate folders for reports/reviews, permit application review, NOCs, inspection/FCEs, correspondence, emission inventories, Correction Orders, Consent Decrees, stack test results, etc.

Note, this facility is expected to close and request revocation of their permit. Recommendations for this permit can be applied to other permits, where appropriate within YRCAA's jurisdiction.

Noteworthy:

- Footnotes listing monitoring, recordkeeping and reporting requirements immediately follow each Table, allowing the user of the permit to readily locate the associated monitoring, recordkeeping and reporting requirements.
- Table D Powerhouse Requirements clearly identifies which requirements apply to all boilers, which requirements apply only to the natural gas boilers and which requirements apply only to the stoker hog fuel boiler.

Recommend:

- Post AOP and Statements of Basis on the agency website.
- Identify the pollutants the source is major for in the Basis.
- Discuss potential HAP emissions from the facility, as the applicability of most federal requirements are determined based on whether the source is major for HAPs.
- Require permittee to submit CAM plan upon permit renewal for all pollutant specific emission units subject to an emission limitation or standard with pre-controlled emissions at major source thresholds and include compliance assurance monitoring provisions in the permit.
- Label the Conditions following an alpha-numeric scheme that minimizes confusion of permit Conditions.
- Add equipment specification and associated air pollution control information to the emission units listed in the emission unit specific Tables in the permit.
- Update applicable and inapplicable requirements during permit renewal

Benton Clean Air Authority site visit conducted May 12, 2011 with Robin Priddy

BCAA is developing their website to make Permits and Statements of Basis available on-line and hope to have this information available soon. Electronic copies of these documents were requested prior to conducting the site visit.

The random permit selected for review was Agrium No. 05-0002, first renewal issued June 11, 2008 and revised July 28, 2010.

The Statement of Basis contains a historical overview of the source, including a detailed permitting and construction history, and a discussion of the manufacturing process that contains thorough descriptions of associated emission points. At the end of the permit in Section 8, all emission units and any associated air pollution control equipment are identified. This Basis has a section devoted to discussion of implementation of AOP 05-0002 Modification 1 and the underlying BACT required by the PSD permit.

Title V applicability is discussed, identifying the facility as a major source of NOx and PM. The facility is not major for HAPs, and BCAA has determined that neither 40 CFR 63 DDDDD Industrial, Commercial, Institutional Boilers and Process Heaters nor ZZZZ Reciprocating Internal Combustion Engines are applicable to this facility, as it is not a major source of HAPs. The Basis identifies the facility as subject to 40 CFR 60 Part GG Nitric Acid Plants for Plant 9

(only), as it is the only nitric acid plant at the facility constructed or modified prior to August 17, 1971. The requirements from this NSPS were included in Ecology OA DE 76-282. 40 CFR 60 Subpart Dc is listed as an inapplicable requirement based on the age of the facility boilers.

Section 3.7, Reasonable Available Control Technology, includes an explanation of how monitoring was enhanced per the gap-filling provisions to assure compliance with RACT Order 199901. BCAA discusses the permit renewal action for AOP 05-0002, identifying any new requirements or standards applicable at the time of the permit action. Insignificant emission units are listed in Table 7, 8 & 9 with the basis for the determination. However, the Basis did not include a discussion of CAM applicability. Recommend that a discussion addressing CAM applicability (or inapplicability) for pollutant specific emission units subject to an emission limitation or standard be added to the Basis.

The applicable requirements cited in Agrium's permit conditions are presented in outline format. The requirement is paraphrased, references the underlying requirement and whether it is federal or state-only enforceable, then a direct citation of the applicable requirement follows and a listing of associated test methods, monitoring, recordkeeping and reporting. The permit includes requirements applicable facility-wide and by specific process areas. Emission units, insignificant emission units and associated air pollution control equipment are listed at the end of the permit. I recommend including this information in a list or table for each specific process area and adding information regarding size, capacity, rating, and installation year. This facility is subject to 40 CFR 68 and must develop a risk management plan

The initial permit was issued January 14, 2003 and expired January 14, 2008. On August 27, 2004, Ecology issued PSD-04-01. Since the PSD was issued while the current AOP had more than three years remaining in the permit term, on June 8, 2005, BCAA notified the permittee that the permit would be reopened for cause. Modification 1 to AOP 05-0002 was issued August 2, 2006, just over two years after the PSD permit was issued. The first renewal was issued June 11, 2008. The permit lapsed for approximately five months, but the application shield was in place as BCAA received a complete renewal application June 21, 2007.

Notice posted in the permit register included complete application on September 10, 2007, draft permit on April 24, 2008, and issuance of the final permit on June 25, 2008. The proposed permit was sent to EPA April 17, 2008. Legal notice was published in the local paper and notice was sent to affected states on April 20, 2008. The final permit was sent to EPA on June 11, 2008. This information is retained in Section 7. Permit Actions of the Statement of Basis.

FCE documentation includes a review of general and specific conditions and monitoring, recordkeeping and reporting requirements directly from the permit, review of annual compliance certification, semi-annual monitoring reports, RATAs and on-site inspections. Agrium is on a two year FCE schedule and no FCEs were conducted for this facility in calendar year 2010. Agency files did not contain any complaints or any NOV's for this source for 2010.

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.

Noteworthy:

- Basis lists a detailed permitting and construction history for the facility.
- Basis has a section devoted to discussion of implementation of AOP 05-0002 Modification 1 and the underlying BACT required by the PSD permit
- BCAA discusses the permit renewal action for AOP 05-0002 and identifies any new requirements or standards applicable at the time of the permit action.
- BCAA uses an AOP application completeness determination checklist to assist in determining and documenting that a complete application has been received and to ensure they have addressed all appropriate requirements in the permit.

Recommend:

- Post AOP and Statements of Basis on the agency website.
- Discuss CAM applicability (or inapplicability) for pollutant specific emission units subject to an emission limitation or standard with pre-controlled emissions at major source levels in Basis.
- Include emission unit information in a list or table for each specific process area and add specification information, including installation year, in permit.

Spokane Regional Clean Air Agency site visit conducted on May 19, 2011 with April Westby and Brandy Ellis

The random permit selected for review was the City of Spokane, Spokane Regional Solid Waste System (SRSWS) AOP-3 Renewal 1, issued October 30, 2006, revised November 17, 1008. The permit lapsed for three months, but the application shield was in place as a complete renewal application was received July 21, 2005.

The Statement of Basis describes the Title V applicability and identifies the facility as a major source based on potential-to-emit NO_x, SO₂, CO, non-methane hydrocarbons, and HAPs. The Basis also includes a brief description of the facility that identifies emission units and air pollution control measures, permitting summary, and applicability of Chapter 173-434 WAC Solid Waste Incinerator Facilities and 40 CFR 60 Subpart Cb, incorporated into SCAPCA Regulation I, Section 6.17 Standards for Municipal Waste Combustors. Insignificant emission units are listed with the basis for their insignificance. The Basis then follows the format of the permit, discussing standard terms and conditions (changes made to this section during this renewal issuance are identified with a footnote), facility-wide emission limitations, municipal waste combustor emission limitations, miscellaneous units emission limitations, fugitive emission limitations, design parameter requirements, streamlined requirements with an explanation of the streamlining performed, and permit shield findings. Each condition is listed and the sufficiency of the monitoring, recordkeeping and reporting requirements are discussed. For units that would trigger 40 CFR 64 CAM, applicability is discussed and compliance assurance monitoring explained, condition by condition.

The Statement of Basis for revision of AOP-3 is limited to an explanation of the changes to SCAPCA Regulation 1, Section 6.17 revised May 5, 2007 to incorporate revisions to 40 CFR 60 Subpart Cb which occurred May 10, 2006. Reopening for cause was triggered May 5, 2007 and the permit revision was complete November 17, 2008.

The permit includes emission limitations and associated monitoring, recordkeeping and reporting requirements applicable facility-wide, for municipal waste combustors, for miscellaneous emission units, fugitive emission sources, and design parameter requirements. Specific emission units and fuels used are listed in tables before the applicable requirements. No air pollution control measures are listed in the tables. The applicable requirements cited in the permit conditions are not paraphrased, they incorporate the federal requirements from the municipal waste combustor emission guidelines which were adopted into SRCAA Regulation I Section 6.17. This regulation does incorporate some of the federal requirements by direct reference, requiring the user to review those requirements in addition to the permit. Streamlined permitting requirements follow the monitoring, recordkeeping and reporting section. 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 follows the conditions in the permit and identifies what was used to evaluate that requirement (e.g., on site evaluation of stack, most recent stack test report, monitoring report, month review of parameter and CEM reports) so it is easy to determine the compliance status of each emission unit.

An FCE was conducted with less than one week's notice on January 12, 2010. Evaluation of monitoring and certification reports is documented on a summary sheet that identified any issues or concerns noted when reviewing the reports, and whether any additional information was requested by the agency .

Procedural requirements included permit register notice of the draft permit on May 25, 2006 and again August 10, 2006 and notice of final permit on November 10, 2006. The proposed permit was sent to affected states and EPA May 5, 2006 and again August 10, 2006. Notice was published in the local paper on May 31, 2006 and again August 14, 2006. Notice was posted in the permit register of a draft revision to AOP-3 on August 25, 2008 and final permit revision on November 25, 2008. Notice was sent to affected states and EPA August 22, 2008. Legal notice was placed in the local paper August 27, 2008. No new approval orders have been issued to the source since the renewal was issued.

Agency files are arranged by source and separated into folders that contain all monthly reports, Cb reports; all monitoring reports and compliance certifications; all complaints, correspondence, inspections, and permits issued; and all RATAs, CGAs, and stack test reports. No complaints about the source were reported to the agency and no NOV's were issued to this source in 2010.

Noteworthy:

- Each condition is discussed in the Basis and the sufficiency of the monitoring, recordkeeping and reporting requirements are discussed. For units that would trigger 40 CFR Part 64 CAM, applicability is discussed and compliance assurance monitoring explained, condition by condition.
- Clearly explains the streamlining performed and how the streamlined requirement is at least as stringent as all the other requirements it replaces.

Recommend:

- List air pollution control measures in the tables in the permit.

Puget Sound Clean Air Agency site visit conducted on June 2, 2011 with Steve Van Slyke, Agata McIntyre, Claude Williams, and Rosemary Busterna

The random permits selected were Insulfoam #16319 written by Claude Williams and Boeing Renton #13125 written by Agata McIntyre.

Insulfoam

Insulfoam AOP #21177 was issued as an initial permit September 23, 2002, and was administratively amended November 12, 2004. The initial application was received March 11, 1999 and determined complete in a letter to the facility April 2, 1999. This permit is currently lapsed.

The Statement of Basis identifies this source as major for emissions of VOC (pentane). A brief source description, process overview, air operating permit and compliance history documenting inspections and formal enforcement actions over the previous eight years, and most recent emission inventory are provided. The emission units include two natural gas boilers with fuel oil back up rated at less than 10MMBtu/hr and expanded polystyrene process lines. According to the basis, there are no applicable federal requirements triggered for these emission units due to their size. The Basis includes an explanation of certain facility-wide and emission unit specific applicable requirements. Monitoring, maintenance and recordkeeping procedures are discussed. Inapplicable requirements are listed and the basis for inapplicability identified. 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. Gap-filled monitoring was performed, however, not specifically identified as gap-filled, other than through citation of WAC 173-401-615(1)(b) & (c).

In 2008, a permit was approved for the addition of a regenerative thermal oxidizer for destruction of pentane emissions from the expanded polystyrene process. This Notice of Construction approval order has not been incorporated into the AOP, as this permit lapsed in 2007 and has not yet been reissued. The RTO is subject to the requirements of 40 CFR Part 64 CAM, and will be included in the renewed permit.

The permit is structured such that facility-wide and emission unit specific requirements are listed in the front, followed by the monitoring, maintenance and recordkeeping procedures. At the end of the permit are the prohibited activities, activities requiring additional approval, standard terms and conditions, permit actions, permit shield, and list of insignificant emission units. A brief description of the specific emission units including process description (for expandable polystyrene process) and installation date and fuels burned for the boilers are included prior to each emission unit specific requirement tables. The permit contains paraphrasing of the applicable requirement. Gap-filling monitoring can be identified by conditions with underlying applicable requirements that cite WAC 173-401-615(1)(b) & (c). Monitoring, maintenance and recordkeeping procedures are separated into facility-wide and specific monitoring,

FCE documentation is maintained in facility files and database. FCE documentation includes on-site evaluation April 20, 2010; off-site review of deviation reports, semi-annual monitoring reports and annual certification; and stack test results.

The initial permit was issued September 23, 2002, was administratively amended November 12, 2004, and expired September 23, 2007. A complete renewal application was received on May 22, 2006; therefore the application shield is in place. No permit register entry was found for receipt of a complete application. Legal notice was published in the local paper and sent to affected sources on March 12, 2002. Notice of the draft permit was listed in the permit register on March 10, 2002. EPA was notified of the proposed permit June 11, 2002. An approval order for a regenerative thermal oxidizer was issued in 2008 that has not yet been included in the permit.

Noteworthy:

- 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 the Basis.
- The permit is structured such that facility-wide and emission unit specific requirements are listed in the front, followed by the monitoring, maintenance and recordkeeping procedures. At the end of the permit are the prohibited activities, activities requiring additional approval, standard terms and conditions, permit actions, permit shield, and list of insignificant emission units.

Recommend:

- Post receipt of a complete application in permit register.
- Issue renewal permit to replace lapsed permit.
- Timely incorporation of requirements that become applicable midway through the permit term.

Boeing Renton

Boeing Renton AOP #13125 is the original permit, issued to the source February 2, 2004. The permit has been administratively amended on six occasions and underwent a significant permit modification May 2, 2007. The permit is currently lapsed.

The Statement of Basis identifies this source as major for emissions of VOCs, THAPs, HAPs (MEK + Toluene), and NOx. A brief source description, process overview, air operating permit and compliance history documenting inspections and formal enforcement actions over the previous eight years, and most recent emission inventory are provided.

Facility-wide requirements and the adequacy of associated monitoring, recordkeeping and reporting is explained. Emission units are categorized and described by section, and include the basis for regulatory applicability (or inapplicability); what is included, what is not and why; and associated monitoring, recordkeeping and reporting specific to that emission unit (or group of emission units).

There are several NSPS and NESHAPs applicable to emission units within the facility. This Basis contains some of the most thorough applicability discussions of any of the LCAA random permits reviewed this year. An example can be found by looking at the Basis page 34 - 47

Sections 5.3.4 and 5.3.5 Fuel Burning Equipment, however, for clarity, I would recommend that the sections be listed as 5.3.4 Fuel Burning Equipment BOIL01-03, 05 & 06 (not subject to NSPS) and Section 5.3.5 Fuel Burning Equipment BOIL04 (subject to NSPS), as called out in the permit.

While in most cases gap-filled monitoring is not identified as such, the agency thoroughly explains the sufficiency of monitoring methods and frequency of monitoring prescribed in the permit, when such monitoring is not directly required by the underlying requirement.

Monitoring, maintenance and recordkeeping procedures are discussed. Inapplicable requirements are listed and the basis for inapplicability identified, however the requirements are not tied to identified emissions units. 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 also discussed.

Not discussed or included in the Statement of Basis was a complete listing of all emission units at the facility (including those without specific applicable requirements and insignificant emission units w/ the basis for their insignificance).

The permit is available on the agency website as a scanned document. If security of the original document is the concern, I would recommend lightening the shading for the headers within the applicable requirement Tables as it is very hard to read the text through the shading of a scanned document. The permit paraphrases applicable requirements. The permit is structured to identify the facility-wide and emission unit specific applicable requirements and operations without specific applicable requirements (in tables). Facility-wide and emission unit specific monitoring and maintenance requirements and O&M Plan requirements are listed. Prohibited activities and activities requiring additional approval are identified. Standard terms and conditions are listed, which include various required recordkeeping and reporting, both general and for specific emission units (based on approval order conditions, PSCAA Regulations, NSPS or NESHAP).

Due to the length of this permit, it would aid the reader to have the associated monitoring, maintenance and recordkeeping procedures and associated reporting requirements listed after the emission unit specific Compliance Requirement tables. To illustrate the difficulty for a reader, emission limits and performance standards for Fuel Burning Equipment Subject to NSPS (BOIL04) begin on page 81 of the permit, the specific monitoring and maintenance for this emission unit is found on page 128, the recordkeeping requirements on Page 156 and the reporting and notification requirements on page 166. This forces the reviewer to hunt for these requirements throughout the permit.

Emission unit specific applicable requirement sections begin with a brief description of applicable and inapplicable requirements for those units. Specific emission units are listed with details (source ID #, size, installation date, NOC #, emission unit and description, location within the facility, etc) prior to the Tables containing the Compliance Requirements. Emission unit specific Compliance Requirement tables are organized by the source of the specific requirement – for example, the emission unit specific Compliance Requirement table for BOIL04 is categorized into the following sections a) PSCAA requirements for fuel burning equipment, b) applicable requirements from the General Provisions of 40 CFR 63 Subpart A, c) applicable

requirements of 40 CFR 60 Subpart Dc, d) applicable requirements of 40 CFR 63 Subpart DDDDD, e) general requirements of 40 CFR 63 Subpart A, f) order of approval No. 9068.

The permit cites the local regulation that adopts 40 CFR Part 60 and 40 CFR Part 63 by reference as applicable requirements. The permit lists the basis for insignificant emission units under section I.C. Operations Without Specific Applicable Requirements. This section states that all other emission units and insignificant emission units, other than those categorically exempt under WAC 173-401-532, are subject to the general facility-wide requirements. It is unclear how many emission units would fall under this category. I would recommend that all the emission units that are subject to the facility-wide requirements (only) be listed or attach an appendix from the permit application. A list of inapplicable requirements and the basis for their inapplicability is included.

The monitoring, maintenance and recordkeeping procedures for several specific emission units identify specific parameter ranges to be evaluated by Boeing Renton and corrective actions that must be taken if readings are outside those ranges. This section also identifies maintenance inspections and visual checks to be performed on specific emission units.

The permit addresses when reporting per 112(r) is required (applicable when triggered). No CAM requirements were included in this initial permit but will be addressed during the renewal of the permit.

The initial permit was issued February 2, 2004 and expired February 2, 2009. A renewal application was received January 18, 2008 and notice that it was determined complete was mailed February 1, 2008. The application shield is in place as a complete renewal application was received January 18, 2008. No permit register entry was found for receipt of a complete application. A copy of the legal notice was published in the local paper of the draft permit, sent to affected states and posted on the agency's website March 29, 2002. Notice of the proposed permit was received by EPA June 27, 2002.

FCE documentation includes individual lists of equipment reviewed during each site visit and the particular requirements evaluated during that visit. The evaluation report for this facility lists the NOC approval conditions, but doesn't reference back to the AOP E.U. conditions – if those condition identifiers could be added, it would aid the user of the evaluation report reconcile what was checked for on-site against what was reported to the agency in AOP monitoring reports and compliance certifications. Further, it would be helpful if under the description section of the evaluation, the emission unit were referred to in the same manner as it was identified in the permit (for example, emergency generator permitted under NOC #9084 at 764 hp could also be listed as EG0042). It was not clear how compliance with any NESHAPs or NSPS conditions that are not already part of an agency issued approval order were verified during the evaluation, in that those requirements were not included in the database documentation of the on-site inspection. FCE summary sheets created from actions reported in the database include deviation, semiannual monitoring and NESHAP report reviews; emission inventories; on-site inspections; stack test report reviews; summary of warnings, NOV's, civil penalties and complaints.

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.

Noteworthy:

- This Basis contains some of the most thorough applicability discussions of any of the LCAA random permits reviewed this year. An example can be found on pages 34 - 47 Sections 5.3.4 and 5.3.5 Fuel Burning Equipment
- 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 the Basis.
- Emission unit specific applicable requirement sections begin with a brief description of applicable and inapplicable requirements for those units. Specific emission units are listed with specifications prior to the Tables containing the Compliance Requirements.
- Emission unit specific Compliance Requirement tables group conditions according to the source of the requirement (e.g., by local regulation, general provisions from federal requirements, applicable requirements from specific federal requirements, Approval Orders, etc).

Recommend:

- Lighten shading for the headers within the Compliance Requirement Tables for ease of reading the text through the shading of a scanned document.
- Group associated monitoring, maintenance and recordkeeping procedures and associated reporting requirements after the emission unit specific Compliance Requirement table.
- List (or attach a list in the appendix) significant emission units that aren't subject to specific requirements so it's clear which emission units are subject to the facility-wide requirements.
- Post receipt of a complete application in the permit register.
- Update the agency database to include all AOP conditions or cross reference the AOP conditions with Approval Order conditions. This should ensure that all NESHAP and NSPS requirements not included in agency issued Approval Orders evaluated during inspections are documented in agency files.
- Update the description section of the evaluation information generated by the database to refer to the emission unit in the same manner as it was identified in the permit.

Northwest Clean Air Agency site visit conducted on June 3, 2011 with Mark Buford, Toby Mahar, and Julie O'Shaughnessy

The random permit selected for the audit was Chemco #020 issued April 19, 2011. A complete initial application was received October 6, 2008.

The Statement of Basis identifies this facility as a major source of VOC and HAPs (Methanol). Emission units were discussed in the facility description section of the Basis, which includes equipment size, rating, and fuel burned. Installation dates of specific equipment are not included, however the facility history discusses when various processes were added. It would be helpful if the emission units and any associated control devices were listed with their installation

date. Criteria pollutant (including GHGs) actual emissions are reported for the three most recent years available and criteria pollutant PTEs are listed. HAP emissions are reported in tables with actual emissions from the three most recent years available.

The Basis lists a compliance (enforcement) history for the facility back to 2007. Pre-construction Approvals and Orders of Approval to Construct are discussed. The Basis includes sections devoted to thorough discussion of the applicability of various NESHAPs (40 CFR 63 Subparts DDDD Plywood and Composite Wood Products, EEEE Organic Liquids Distribution, FFFF Miscellaneous Organic Chemical Manufacturing, ZZZZ Reciprocating Internal Combustion Engines, DDDDD Industrial, Commercial, Institutional Boilers and Process Heaters), inapplicability of NSPS (40 CFR 60 Subpart Dc), and inapplicability of CAM (40 CFR 64).

The Basis lists one-time or obsolete requirements that will not be contained in the permit. Gap-filled requirements are identified by citing WAC 173-401-615(1)(b)&(c) in the Table heading information and by noting the term is “directly enforceable” under the regulatory citation. The Basis does not explain how or why any gap-filled monitoring was necessary to assure compliance.

The Basis explains the Standard Terms and Conditions, and also contains a section titled Standard Terms and Conditions for NESHAPs which discuss the administrative or other requirements that typically have no ongoing compliance demonstration and come from 40 CFR 63 Subpart A. The Basis explains why some requirements of Subpart A are not included in the Standard Terms and Conditions for NESHAPs section of the permit. Insignificant emission units are identified in a Table, with the regulatory basis for insignificance and a description of the use of the unit.

In the permit, the emission units are listed by process with associated emission control devices, and equipment descriptions (size, capacity, rating, fuel burned). The Standard Terms and Conditions are listed, which includes greenhouse gas reporting requirements, and then the Standard Terms and Conditions for NESHAPs are listed (applicable requirements from 40 CFR 63 Subpart A). NWCAA identifies Generally Applicable Requirements that apply plant-wide and include insignificant emission units.

Requirements for specific emission units are grouped by process. Applicable requirements are paraphrased. All conditions required by NESHAPs include the citation out of the local regulation that adopts the NESHAP by reference. Monitoring, recordkeeping and reporting requirements are listed in the table with the applicable requirement. Inapplicable requirements are listed in a Table with the basis for inapplicability.

The initial permit was issued April 19, 2011. The permittee was notified by letter that the initial application was complete November 7, 2008. Notice of the draft permit to affected states was made February 7, 2011. Legal notice of the draft permit was published in the local paper on February 10, 2011. Notice was posted in the permit register of the draft permit February 10, 2011, and the final permit on April 25, 2011.

FCEs are performed every two years. On-site inspections occur annually and are generally unannounced. An on-site inspection was performed at Chemco September 9, 2010. The FCE was performed as part of the on-site inspection August 19, 2009. The final AOP was not issued at the time of either of these inspections. The inspection report included a review of all the emission units identified for the facility and appeared to review applicable requirements, and monitoring, recordkeeping and reporting requirements for the facility. Reviewer recommends that the on-site report be updated to list the emission units and requirements from the AOP for each of the units.

Files include permit application files, NOV documentation, FCE documentation, review of reports submitted per 40 CFR 63 Subpart FFFF and emission inventories. The AOP was just issued so no semiannual or annual certification reports have been submitted.

Noteworthy:

- The Basis includes sections devoted to thorough discussion of the applicability of numerous NESHAPs, and inapplicability of NSPS and CAM (40 CFR 64).
- The Basis contains a section titled Standard Terms and Conditions for NESHAPs which discuss the administrative or other requirements that typically have no ongoing compliance demonstration and come from 40 CFR 63 Subpart A.

Recommend:

- List emission units and any associated control devices with their installation date in the Basis.
- Explain why gap-filling monitoring was necessary and how it was needed to assure compliance.
- Update the on-site inspection report used as part of the FCE to list the emission units and requirements from the AOP for each of the units.

Olympic Region Clean Air Agency site visit conducted on June 8, 2011 with Mark Goodin, Geoffrey Glass, and Robert Moody

The random permit selected for the audit was the initial permit issued to Sierra Pacific Cogeneration #04AOP358, issued July 13 2007.

The Technical Support Document (aka, Statement of Basis) identifies this source as major for NOx and CO based on actual emissions of criteria pollutants, HAPs and TAPs available from the most recent emission inventory prior to permit issuance. Potential emissions of criteria pollutants, HAPs and TAPs are listed from each emission unit. The TSD includes detailed descriptions of emission units, associated control devices, equipment sizes, capacity and fuel burned.

A table contains a list of all Notice of Construction approval conditions and identifies it is an applicable requirement with its associated AOP condition or if it is not an on-going requirement, it identifies it as a one-time requirement or one that does not require on-going demonstration of compliance. The TSD discusses the inapplicability of NESHAPs to this source (not major for any HAPs), 40 CFR 60 Subpart Da, and 40 CFR 60 Subpart IIII, and applicability of 40 CFR 60

Subpart Db to the hog fuel boiler. CAM for PM10 is not required until renewal of this initial permit. The TSD contains a detailed section discussing monitoring – fuel monitoring, emissions monitoring, and control equipment monitoring. The TSD states that minor gap-filled monitoring was added and Table 8 does identify the regulatory basis as WAC 173-401-615 for such conditions, but does not include a discussion of the basis for enhanced monitoring. The regulatory basis for the standard terms and conditions, facility-wide requirements and emission unit specific requirements are listed in a table.

Not discussed in the TSD is any compliance history associated with this facility nor details which explain the need for gap-filled monitoring. 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 requirements from 40 CFR 60 Subpart Db are incorporated as a single permit condition into the permit by reference. The permit directly cites the federal citation; recommend citing the specific requirements applicable to that emission unit and include the enforceable provision from WAC 173-400-115, which adopts 40 CFR 60 Subpart Db by reference.

The MRRR section follows the tables of applicable requirements. Included under the MRRs is a section called Pollution Control Equipment Monitoring which includes a table of target operating conditions for identified parameters for each piece of control technology, the averaging period or monitoring frequency for that parameter and format for maintaining records for each piece of control technology. Reviewer recommends including corrective actions to be taken if monitored parameter is observed outside the target operating range. Another unique feature of this permit is the two MRR sections that identify what the permittee will use/follow to demonstrate compliance with short term and annual emission limits.

The FCE follows a narrative format, gives a basic process description, states that facility records were reviewed, but doesn't identify which records, identifies monitored parameters observed during the site inspection and compares those values to those observed on previous site visits. Suggest using the target operating ranges in the Pollution Control Equipment Monitoring table to make it easier for reviewers of the report to know how the information recorded during the inspection compares with operating parameter ranges in the table. Observations and evaluations of specific permit conditions are annotated. Semiannual monitoring and certification reports are reviewed; quarterly reports, emission inventories and source test reports are reviewed. Source files contain stack tests, emission inventory, various reports, correspondence, inspections, complaints, NOV's, billing, NOC and AOP folders for each calendar year.

Procedural requirements included notice in the permit register of the draft permit on March 26, 2007 and final permit on July 25, 2007. The proposed permit was sent to EPA and notice was sent to affected states on March 19, 2007. Legal notice was published in the local paper on March 21, 2007.

Noteworthy:

- Potential emissions of criteria pollutants, HAPs and TAPs are listed from each emission unit in the Basis.
- Pollution Control Equipment Monitoring section of the permit includes a table of target operating conditions for identified parameters for each piece of control technology, the averaging period or monitoring frequency for that parameter and format for maintaining records for each piece of control technology.
- The permit contains two monitoring sections that identify what the permittee will use/follow to demonstrate compliance with short term and annual emission limits.

Recommend:

- Cite specific sections of federal requirements applicable to the facility or emission unit in the conditions, instead of incorporating the entire Subpart by reference.
- Cite enforceable provision from WAC 173-400-115, which adopts 40 CFR 60 Subpart Dc by reference, with applicable federal requirements in permit.
- Identify corrective actions to be taken if monitored parameter is observed outside the target operating range listed in the Pollution Control Equipment Monitoring section of the permit.
- Use the target operating ranges in the Pollution Control Equipment Monitoring table to make it easier for reviewers of the inspection report to know how the information recorded during the inspection compares with operating parameter ranges established in the table.

Southwest Clean Air Agency site visit conducted on June 9, 2011 with Paul Mairose and Wess Safford

The random permit selected was Clark Public Utilities River Road Generating Plant SW99-9-R2 issued as a second renewal April 5, 2011. A second renewal application was submitted on February 1, 2008 and determined complete on March 13, 2008.

The Statement of Basis identifies the facility as an affected source under the Title IV Acid Rain program. The facility is not a major source. The Basis provides a listing of current and obsolete air discharge permits, the issuance dates and a description of the reason for the permit action. There is a thorough discussion of the process, emission units (rating, size, capacity, fuel, controls, initial firing date, and emissions), pollution controls, and applicability of federal requirements. Insignificant emission units are identified (unit by unit) with the specific basis for their insignificance explained. The Basis explains that the startup Boiler is an affected facility under 40 CFR 60 Subpart Db, but since it combusts natural gas only and was constructed before February 28, 2005 it is not subject to any emission limits.

The Combustion Turbine is subject to 40 CFR 60, Subpart GG and the Basis identifies the emission limits, standards and monitoring the facility must comply with. The Basis discusses requirements under the Title IV Acid Rain program, and has incorporated requirements from 40 CFR 63 Subpart ZZZZ Stationary Reciprocating Internal Combustion Engines for the emergency generator and emergency fire pump.

The Basis lists obsolete requirements that have already been fulfilled. There is also a section that discusses future requirements. Identified as a requirement that may be triggered in the future is greenhouse gas emission performance standards and under what circumstances the requirements will be triggered.

The Basis does not identify if CAM is applicable to any emission units at the facility. However, permit identifies 40 CFR Part 64 CAM as a non-applicable requirement in the permit with an explanation of why CAM is not applicable to any emission unit at the facility. Recommend including this information in the Basis.

The Basis contains an explanation of the monitoring terms and conditions, identifies if gap filling is used, explains why gap filling 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. A compliance history for the previous permit term is included specifying that no Field Notices of Correction or Violations were issued. A list of Title V permit actions is included for the current permit action and previous permit actions. Appendices to the Basis contain discussions of emission testing requirements for the combustion turbines and startup boiler, and the Acid Rain Permit No. SW-ARP-2-R2.

The permit itself lists all regulations or permits the facility is subject to and identifies if the requirements are federally enforceable or if they are state or local only requirements. Emission units are listed with emission unit ID number, unit name, and unit description which includes details such as model number, fuel used, pollution controls, ratings and pollutants emitted. The requirements for complying with 40 CFR Part 68 Chemical Accident Prevention Provisions and reporting emissions of greenhouse gases are listed in the General Terms and Conditions.

Applicable requirements are listed in a table under Operating Terms and Conditions and include a column that identifies if the requirement applies plant-wide (applies to both EUs and IEUs) or to specific emission unit(s). Monitoring Terms and Conditions are listed after the table. Each monitoring term refers back to the permit requirement that requires the monitoring. Recordkeeping Terms and Conditions identify General records and Continuous Emission Data records. Reporting Terms and Conditions list the various reports and who they should be sent to. Non-applicable Term and Conditions are identified with the basis for inapplicability described. As with the Statement of Basis, the Appendices to the permit contain emission testing requirements for the combustion turbines and startup boiler, and the Acid Rain Permit No. SW-ARP-2-R2.

The first renewed permit expired August 11, 2009. A complete second renewal application was received February 1, 2008. The draft renewal permit was issued December 22, 2010. Notice of the draft was posted to the agency website and notices to affected states and interested parties were mailed on December 22, 2010. Legal notice was published in the local paper December 22, 2010. The permit register listed notice of a complete application March 25, 2008, draft permit December 25, 2010, and issuance of the final permit April 25, 2011.

An on-site inspection was completed at Clark County Public Utilities November 18, 2010. Documentation includes a summary of actual and potential emissions for 2009, a detailed list of emission units, insignificant emissions units, changes at the facility since the last inspection, pictures of emission units taken on-site during the inspection, and a narrative of observations during 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 states that there are no new requirements from any Air Discharge permits issued since the previous inspection. A compliance summary is located near the end of the report. The summary stated that there were no violations found during the on-site inspection or associated records review, that RATAs performed on CEM equipment indicate the facility is meeting applicable performance specifications, and noting that the facility was in compliance with 40 CFR 60 Subparts Dc and GG, and stating that the facility must comply with 40 CFR 63 Subpart ZZZZ by May 3, 2013.

Facility files have been organized into individually colored files for stack tests, report reviews, FCE documentation, complaints, enforcement, permit reviews, etc.

Noteworthy:

- The Basis provides a listing of current and obsolete air discharge permits, the issuance dates and a description of the reason for the permit action.
- Insignificant emission units are identified (unit by unit) with the specific basis for their insignificance explained.
- The Basis identifies if gap filling is used, explains why gap filling 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).
- A list of Title V permit actions is included for the current permit action and previous permit actions
- Each monitoring term in the MRR section refers back to the numeric permit requirement that requires the monitoring.

Recommend:

- Discuss CAM applicability (or inapplicability) for pollutant specific emission units subject to an emission limitation or standard with pre-controlled emissions at major source levels in Basis.

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 activities 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 (gap filling) added to the permit assures compliance with applicable requirements.

A few Statements of Basis did not contain a complete listing of pollutants for which the source was considered major. Some 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. Applicability of federal requirements is generally based on what pollutants the source is considered major for, and many 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 federal requirements or HPV policy may be evaluated incorrectly or missed altogether.

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 2010, approximately one third of the AOP sources in Washington had expired permits. Not all agencies were able to incorporate new applicable requirements within 18 months of promulgation when there was more than 3 years left in the term of the permit. And there are outstanding new initial applications for which the permits have not yet been issued. Agencies with lapsed permits, applicable requirements that have not been incorporated into the permit and outstanding new applications should continue to focus resources to make reopening or 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 applicable requirements from the permit. Several agencies have developed or are enhancing databases designed to track and better document completion of an FCE.

FCE checklists are useful ways to summarize the outcome of an FCE, provided that they adequately relate the status to a time-frame. Several of the checklists reviewed did not provide adequate details to discern whether the stated compliance status applied to the entire period from the last FCE or was simply the compliance status at the time the FCE was completed. Also, agencies need to determine whether statements such as “in compliance” are an appropriate finding. For situations where an agency finds no credible evidence that there is or was a violation over the period, a more appropriate statement may be “no violations noted.”

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 2010. 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 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.
- Reopen permits within 18 months to include new applicable requirements if more than three years remain in the permit term.

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 gap filled requirements assure compliance in Statement of Basis 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 and for what timeframe 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
CEMs – Continuous Emission Monitors
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