



**TechLaw**  
*Quality & Integrity*

**Washington Department of Ecology**

**Air Operating Permit Program  
Final Audit Report**

**For Calendar Year 2003**

**Submitted by TechLaw, Inc.**

**Contract #30700**

**Work Request Number 0461-04-03-01**

**June 25, 2004**

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**ABBREVIATIONS**

AA = Administrative amendment  
AOD = Agreement of Discontinuance  
AOP = Air operating permit  
BCAA = Benton Clean Air Authority  
CRO = Central Regional Office  
CY = Calendar year  
ERO = Eastern Regional Office  
FY = Fiscal year  
HQ = Headquarters  
NA = Not applicable  
NOC = Notice of Construction  
NWAPA = Northwest Air Pollution Authority  
ORCAA = Olympic Region Clean Air Agency  
PSCAA = Puget Sound Clean Air Agency  
SCAPCA = Spokane County Air Pollution Control Authority  
SWCAA = Southwest Clean Air Agency  
USEPA = United States Environmental Protection Agency  
WAC = Washington Administrative Code  
WDOE = Washington Department of Ecology  
YRCAA = Yakima Regional Clean Air Authority

## **1.0 EXECUTIVE SUMMARY**

TechLaw, Inc. has completed the annual routine performance audits and the annual random individual permit reviews for calendar year 2003. This report discusses the purpose of this project and the approach utilized to conduct the work. We then present the results of the audits and reviews, both on program-wide and agency-specific bases. Conclusions and recommendations regarding significant issues complete this report.

Overall, we found the Air Operating Permit (AOP) program in the State of Washington to be functioning well. Many dedicated people ensure its success on a daily basis. The program has matured to a “steady-state” condition, wherein most activities have become standard practice across the various agencies, and the system is not prone to upsets.

We discovered many noteworthy practices, such as good information management and multiple compliance inspections of several sources. The individual permits that we reviewed were generally complete, clearly written and readily enforceable. File materials were typically well organized and accessible. Any exceptions to these observations are discussed in more detail later in this report.

Our auditors also observed some specific opportunities to improve the program’s performance. Most notably, some agencies are understaffed relative to their current workloads. These shortcomings typically affected timely permit issuance as well as the level of compliance and enforcement activities. As requested by some agencies, we have recommended a range of options to fill these personnel gaps — including the development of staffing guidelines to help agencies better estimate the additional resources that they require.

WDOE and the local agencies may also wish to revise this audit program to better evaluate the AOP program in its current state. For example, some of the program audit and permit review criteria do not definitively identify programmatic problems or their causes. Some of these will require revision, while others have become obsolete based on the maturity of the program. We encourage WDOE, in partnership with the local agencies, to make the necessary adjustments — so that the participants maximize their return on this consulting investment.

## **2.0 INTRODUCTION**

### **Purpose**

WDOE is required to conduct periodic audits of its AOP program as directed in WAC 173-401-920. This mandate encompasses the four WDOE regions and seven delegated local agencies that manage the AOP program throughout the state.

TechLaw, Inc., was engaged to perform annual routine performance audits of these entities per WAC 173-401-920 (b), as well as annual random individual permit reviews in accordance with WAC 173-401-920 (c). Our audits and reviews focused on the agencies’ AOP-related work performed during calendar year 2003.

This report describes the approach we utilized to achieve these goals, the positive practices we found at the program and agency levels, and areas for improvement as the AOP program continues to mature.

**Approach**

As an initial step of this project, TechLaw provided notice in the WDOE Permit Register to announce a public meeting held on April 15, 2004. Mr. Greg Terdich, TechLaw’s Lead Consultant, and Dr. David Dobb, TechLaw’s Project Manager, then conducted pre-audit discussions with WDOE headquarters staff on that date, and also attended the public meeting. The purposes of the public meeting were to inform interested members of the regulated community, and the public at large, about the conduct of the audit program, and to address their concerns about this matter. No representatives of industry or the public attended this meeting.

TechLaw also developed annual performance audit and individual permit review checklists that mirrored WAC 173-401-920 (b) and (c), respectively. We then scheduled audit dates with the WDOE Regions and local agencies. We randomly selected permits for review using the high-low coin toss methodology, which repeatedly halved the population of permits until a single permit remained. In all cases, we avoided permits that were reviewed during last year’s audit cycle.

We utilized a team of three auditors in order to meet WDOE’s timeframe for this project. Our auditors visited the first two locations as a group to ensure consistency in our data gathering and interpretations. Individual auditors conducted the remainder of the agency visits. Table 2-1 below provides the audit schedule and auditors in attendance.

**Table 2-1. Audit Schedule (2004)**

<b>Location</b>	<b>Date</b>	<b>Auditor(s)</b>
WDOE – Industrial Section	April 27	S. Dubble, A. Motsinger, G. Terdich
ORCAA	April 28	S. Dubble, A. Motsinger, G. Terdich
NWAPA	April 29	S. Dubble
SWCAA	April 29	G. Terdich
PSCAA	April 30 & May 3	S. Dubble, G. Terdich
WDOE – CRO	May 4	S. Dubble
YRCAA	May 5	S. Dubble
WDOE – ERO	May 5 & 6	A. Motsinger
SCAPCA	May 5 & 6	A. Motsinger
BCAA	May 6	S. Dubble
WDOE – Hanford	May 17	S. Dubble

Our auditors conducted interviews with agency representatives, and gathered and reviewed data, at each site. We began each visit by focusing on the annual performance audit, then reviewing the randomly selected permits. Only PSCAA required more than one full day onsite to complete the audit duties.

Our team then analyzed the data we collected and compiled it into a draft report that was delivered to WDOE on June 5, 2004. We received comments from the agencies regarding the draft report on June 18, and the final report was submitted on June 25. TechLaw will conduct a presentation of the report at WDOE Headquarters on June 29, 2004, at 1:30 pm.

### **3.0 AUDIT RESULTS**

This section describes the positive practices and areas for improvement found during this engagement. We address these on both program-level and site-specific bases.

#### **Program-Wide Discoveries**

##### *Annual Audits*

**Positive Practices.** TechLaw found that most agency locations employed the following noteworthy practices:

- The staff we met appeared to be dedicated to, and very knowledgeable about, the AOP program and the sources for which they were responsible.
- Data were readily retrievable and well organized.
- The number of agency requests for additional information prior to permit issuance was generally reasonable.
- There were no objections to permit conditions by the public, and only one objection by a source — indicating a balanced approach to regulatory guardianship.
- Facilities generally achieved compliance quickly after a permit violation.
- Most agencies conducted a full, annual compliance inspection at each source; some performed additional inspections based on the compliance status or complexity of the source, and observed source tests and other activities.

**Improvement Opportunities.** TechLaw noted some program-wide opportunities for improvement as outlined below:

- Several agencies are experiencing workload issues and/or insufficient staff. This has resulted in lapsed permits and/or reduced compliance and enforcement activities (e.g., fewer inspections and monitoring report reviews than appropriate).
- Although readily retrievable, the data at several agencies are stored in multiple systems with varying levels of access. At some locations, three or more people were required to obtain the audit data from separate, stand-alone systems. Database and spreadsheet designs, and the information stored therein, vary considerably across most agencies.
- The degree and focus of enforcement activities vary significantly from agency to agency, independent of staffing levels.

- USEPA rarely reviews the AOPs submitted to them, but usually takes most of the time period allotted for review before returning it unreviewed. This unnecessarily slows down permit issuance.
- A few NOV issuances lagged for nine months to longer than two years after a violation was identified.
- Tracking of AOP program expenditures is highly inconsistent across the various agencies.

### Individual Permit Reviews

**Positive Practices.** Our auditors noted the following positive points during this phase of the project:

- Permit files were generally well organized and complete.
- The permit engineers were very knowledgeable about the sources and permits.
- The permits were clearly written, easy to understand, and most of them contained all of the required information.
- Several agencies were able to work with the sources on pollution prevention initiatives during the permitting process.

**Improvement Opportunities.** Some general areas for improvement were also found:

- Because this is a “desktop” review, evaluation of the permits relative to several of the audit criteria is somewhat subjective (e.g., if all emission units are included and all applicable requirements have been met, which might require a facility visit to verify this information).
- WAC 173-401-920 (c) (xi) requires the AOP permits to state that USEPA may be petitioned. In this regard, most permits stated that interested parties could appeal under Section 505(b) of the FCAA. Although this approach uses the language specified in WAC 173-401-620 (i), some readers of the permits may not readily interpret this statement as intended by WAC Section 920. The WDOE Policy and Rules Unit may wish to clarify this verbiage in WAC 173-401-620 (i) and future permits.
- Fee calculations can be complex and problematic. They tended to be based on emissions from CY2001, the workload in CY2002, partial FY2002/FY2003 accounting, and were billed at the end of FY2003 for CY 2003 fees. There are also some inconsistencies between agencies. For example, BCAA uses a different complexity fee assessment than WDOE, and their consultant costs (not their hours) are included in the workload analysis.
- Permit engineers could increase their efforts to identify and encourage pollution prevention initiatives during the permitting process.
- Many agencies set the application deadline for renewal of permits at the minimum 6 months of the 6 to 18 months allowable per WAC 173-401-710(1), which also states an intention to “ensure that the terms of the permit will not lapse before the permit is renewed.” WAC 173-401-710(3) protects sources that have met application deadlines and completeness requirements by indefinitely extending the terms and conditions of the expiring permit. WAC 173-401-700(2) allows up to 18 months from receipt of a completed application for a permitting authority to take final action on the permit application. Combining these criteria creates a potential one-year extension in permit issuance, and possibly longer if the permitting authority exceeds the 18 months allotted. In many cases it appears to be standard practice to allow permits to pass their expiration date before issuing the renewal. While acceptable within the above guidelines, applying an earlier deadline per WAC-401-710(1)

that allows renewal issuance before expiration would more clearly meet the intent of WAC 173-401-610, which unambiguously sets permit duration to “a fixed term of five years.”

### **Agency-Specific Information**

#### *Annual Audits*

Tables 3-1 and 3-2 below summarize the results from the annual routine performance audits. Table 3-1 contains the data for the WDOE Regions, while Table 3-2 represents the delegated agencies. The data were split for space considerations, and we separated the agencies into logical groupings and arranged them in alphabetical order therein. The two leftmost columns in these tables follow the numbering and wording provided in WAC 173-401-920 (b).

We defined “lapsed” permits as those that were past the expiration date stated on the current permit. During this audit period, all sources in this “lapsed” category had met renewal application deadlines as determined by the relevant permitting agency and were continuing operations under the permit shield and per WAC 173-401-710(3). Many of the processes described in the specified audit items span periods of greater than one year. Additionally, the agencies and sources utilize varying accounting time periods including differing State and Federal fiscal years, the calendar year, and time periods based on dates of permit issuance. This presented some challenges in applying some of the audit items to a single calendar year. To the extent possible within the various accounting/timekeeping systems, the defining events that we captured occurred in calendar year 2003. For example, Item 1 in Table 3-1 refers to permits that passed expiration in 2003, Item 2 to applications received or in process during 2003, and subsequent items generally refer to permits issued during 2003.

**Positive Practices.** The following positive practices were noted, and are presented in no particular order:

- WDOE – CRO and ERO have issued all permits and modifications in a timely manner.
- WDOE – CRO had particularly clear permits with definitions of timeliness, contact addresses, and clear instructions for all required actions.
- SWCAA will utilize source test results to revise a Notice of Construction for a source.
- WDOE – ERO, ORCAA, PSCAA and SCAPCA conduct multiple onsite inspections per year for their larger sources.
- WDOE – Industrial and CRO, as well as NWAPA, ORCAA and YRCAA perform all compliance inspections on an unannounced basis.
- Most agencies have well organized enforcement programs.
- WDOE – Industrial and ORCAA capture AOP program expenditures as required in WAC 173-401-920 (b) (viii).
- BCAA was particularly creative in identifying possibilities for improvement in their own unique circumstances, as well as for the program as a whole.

**Table 3-1. Summary of Annual Audit Data — WDOE**

<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>INDUS-TRIAL</u>	<u>CRO</u>	<u>ERO</u>	<u>HAN-FORD</u>
1.	How many permits lapsed?	2	0	0	0
1.A. & 1.B.	Explanation of lapse / Comments	1 work-load; 1 waiting for new MACT to take effect	NA	NA	NA
2.	What is the total number of permit applications or applications for permit modifications?	1 New 2 Renew 0 Mods	3 Renew 1 Mod 1 AA	1 New 3 Mods 3 AAs	3 Mods
2.A.	Average application processing time	Still in process	Renew = 11.5 months; Mods = 2.5 months AA = 10 months	New = 11 months; Mods = 6 months; AA = 5 days	2 to 29 months
2.B.	Number of disapproved applications	0	0	0	0
	Reason(s) for disapproval	NA	NA	NA	NA
2.C.	Number of permit applications regarding which permitting authority had to return to source to request additional information	3	3 Renew 1 Mod	1 New 3 Mods	1
	Number of times permitting authority had to return to source before permit deemed complete	Several for each	1	1 to 10; Avg = 4	2
3.	To how many permits did the EPA object? To what percentage of permits did EPA object (including objection upon petition from public)?	0	0	0	0
3.A.	Grounds for objection	NA	NA	NA	NA
3.B.	Agency response	NA	NA	NA	NA
3.B.i.	Deficiency remedied	NA	NA	NA	NA
3.B.ii.	Timeliness (That is to say, within ninety days? Did administrator issue permit?)	NA	NA	NA	NA

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<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>INDUS-TRIAL</u>	<u>CRO</u>	<u>ERO</u>	<u>HAN-FORD</u>
4.	How many permits were subject to legal/administrative challenge?	0	1 Renew	0	0
	What percentage of permits was subject to legal/administrative challenge?	0	20%	0	0
4.A.	Challenging party	NA	Source	NA	NA
4.B.	Grounds for challenge	NA	Monitor. Reqmts.	NA	NA
4.B.i.	Substantive	NA	1	NA	NA
4.B.ii.	Procedural	NA	0	NA	NA
4.C.	Outcome of challenge/prevaling party	NA	Dismissed	NA	NA
4.D.	Agency response	NA	Revised permits	NA	NA
5.	How many administrative enforcement actions were taken for failure to meet permit requirements?	21 (11 penalties issued)	0	3 (1 penalty issued)	1 unofficial
	How many notices of violation were issued?	10	0	2	0
5.A.	Date issued; time elapsed since violation discovered	13 days to 9 months; usually 2 months	NA	1 to 2 months	5/19/03; 4 years
5.B.	Reason	Emission exceeds	NA	Records, inspections	Non-approved test method used on all 70 boilers
5.C.	Result (That is to say, penalties? Orders of agreement? Legal challenge?)	Monetary penalties	NA	Monetary penalties	Re-tested with correct method
5.D.	Source returned to compliance; date; (if not, explain)	Most on same day	NA	5 months; 6 months and ongoing	9/30/03
6.	What was the frequency of inspections at each facility?	1 / year	1 / year	1 to 4 per year	1 / year
6.A.	Announced	0	2 source tests	19 (1 to 3 hours notice)	All due to security

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<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>INDUS-TRIAL</u>	<u>CRO</u>	<u>ERO</u>	<u>HAN-FORD</u>
6.B.	Unannounced	All	4 compli- ance	10	0
6.C.	Comparison with baseline data	Same	Same	Same	Varies
7.	How many accidental releases, as defined in Section 112(r) of the Federal Clean Air Act, occurred?	0	0	0	0
7.A.	Reason identified	NA	NA	NA	NA
7.B.	Agency response	NA	NA	NA	NA
7.C.	Resulting changes to terms of permit, if any	NA	NA	NA	NA
7.D.	Comparison with baseline data	Same	Same	Same	Same
8.	What was the amount of the expenditures per permit issuance?	\$78 to \$60,600	\$32,558 for all permits	Not tracked by source	Approx. \$100,000
8.A.	Average for program	\$13,900	Approx. \$6,500	\$18,181	Approx. \$100,000
8.B.	Average for source category	Kraft Mills = \$8,400  Sulfite Mills = \$1,900  Metal Process = \$21,400	Other = Approx. \$6,500	Other = \$18,181	Hanford = Approx. \$100,000

AA = Administrative amendment      HQ = Headquarters      NA = Not applicable  
 Administrative enforcement action = All NOV's, warnings, monetary penalties, consent orders, etc.

**Table 3-2. Summary of Annual Audit Data — Delegated Agencies**

<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>BCAA</u>	<u>NWAPA</u>	<u>ORCAA</u>	<u>PSCAA</u>	<u>SCAPCA</u>	<u>SWCAA</u>	<u>YRCAA</u>
1.	How many permits lapsed?	1	4	5	0	1	1	2
1.A. & 1.B.	Explanation of lapse / Comments	No P.E. on staff; understaffed; new source review	Late changes, new requirements in effect in a few months	Small staff; new source review is priority	NA	Working on EPA mandate to do new permits first	Waiting for source tests to assign numerical limits	Senior P.E. left; understaffed; new source review
2.	What is the total number of permit applications or applications for permit modifications?	1 issued; 2 in process	6 Renew 8 Mods	5 Apps 2 Mods	3 Apps 2 Mods	2 Renew 2 Mods	1 New 1 Renew	2 Renew 2 Mods
2.A.	Average application processing time	7.5 years for issued permit; estimate 2 to 3 years for in-process	13 months	1 @ 9 months; 6 in process	All in process (some initial 1995 apps still in process = 9 years)	6 to 18 months	New in process; renew ≈ 11 months	2 months for 1 minor, others still in process >12 months
2.B.	Number of disapproved applications	0	0	0	0	0	0	0
	Reason(s) for disapproval	NA	NA	NA	NA	NA	NA	NA

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2.C.	Number of permit applications regarding which permitting authority had to return to source to request additional information	2	0	5	1	6 (includes 2002 apps)	3	3
	Number of times permitting authority had to return to source before permit deemed complete	1	0	2 to 3 in writing, plus phone calls	1	1 to 4	2 in writing, plus phone calls	2 to 10
3.	To how many permits did the EPA object?	0	0	0	0	0	0	0
3. (cont.)	To what percentage of permits did EPA object (including objection upon petition from public)?	0	0	0	0	0	0	0
3.A.	Grounds for objection	NA	NA	NA	NA	NA	NA	NA
3.B.	Agency response	NA	NA	NA	NA	NA	NA	NA
3.B.i.	Deficiency remedied	NA	NA	NA	NA	NA	NA	NA
3.B.ii.	Timeliness (That is to say, within ninety days? Did administrator issue permit?)	NA	NA	NA	NA	NA	NA	NA

**Table 3-2. Summary of Annual Audit Data — Delegated Agencies**

<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>BCAA</u>	<u>NWAPA</u>	<u>ORCAA</u>	<u>PSCAA</u>	<u>SCAPCA</u>	<u>SWCAA</u>	<u>YRCAA</u>
4.	How many permits were subject to legal/administrative challenge?	0	0	0	0	0	0	0
	What percentage of permits was subject to legal/administrative challenge?	0	0	0	0	0	0	0
4.A.	Challenging party	NA	NA	NA	NA	NA	NA	NA
4.B.	Grounds for challenge	NA	NA	NA	NA	NA	NA	NA
4.B.i.	Substantive	NA	NA	NA	NA	NA	NA	NA
4.B.ii.	Procedural	NA	NA	NA	NA	NA	NA	NA
4.C.	Outcome of challenge/prevaling party	NA	NA	NA	NA	NA	NA	NA
4.D.	Agency response	NA	NA	NA	NA	NA	NA	NA
5.	How many administrative enforcement actions were taken for failure to meet permit requirements?	0	29 (3 warnings, 26 penalties)	8	113 (13 penalties, 49 warns. 51 NOVs)	13 (2 AODs)	6	3
	How many notices of violation were issued?	0	29	8	100	11	6	3
5.A.	Date issued; time elapsed since violation discovered	NA	0 to 168 days; Avg = 45 days; Median = 29 days	1 day to 8 months; usually <2 months	0 to 339 days; most in 1 month	0 to 32 days; Avg = 11 days	0 days to 2 months	5 days to 5 months

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5.B.	Reason	NA	Spills, exceeds, reporting, operations	Exceeds, reporting, operations	Exceeds, reporting, operations	Exceeds, reporting, records	Exceeds, new equip, operations	Oversight, operations
5.C.	Result (That is to say, penalties? Orders of agreement? Legal challenge?)	NA	Monetary penalties	Monetary penalties	Monetary penalties, AODs	Monetary penalties, AODs	Monetary penalties	Monetary penalties
5.D.	Source returned to compliance; date; (if not, explain)	NA	Usually same or next day	1 day to 1 month	Usually same or next day	Usually same or next day	Highly variable due to types of violations	17 to 61 days
6.	What was the frequency of inspections at each facility?	0	At least 1 / year	1 to 5 per year	1 to 6 per year based on compliance status	1 to 3 per year typically	At least 1 / year	At least 1 / year
6.A.	Announced	0	Source tests, NOC inspections, some leak checks & complaint	Source tests, NOC inspections, record review	Source tests, NOC inspections	11	Source tests	Some source tests

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<u>ITEM NO.</u>	<u>AUDIT ITEM</u>	<u>BCAA</u>	<u>NWAPA</u>	<u>ORCAA</u>	<u>PSCAA</u>	<u>SCAPCA</u>	<u>SWCAA</u>	<u>YRCAA</u>
6.B.	Unannounced	0	All compliance, Some complaint	All compliance	Most compliance	5	Highly variable due to types of violations	All compliance, some source tests
6.C.	Comparison with baseline data	Same	Same	Same	Similar	Same	Same	Same
7.	How many accidental releases, as defined in Section 112(r) of the Federal Clean Air Act, occurred?	0	0	0	0	0	0	0
7.A.	Reason identified	NA	NA	NA	NA	NA	NA	NA
7.B.	Agency response	NA	NA	NA	NA	NA	NA	NA
7.C.	Resulting changes to terms of permit, if any	NA	NA	NA	NA	NA	NA	NA
7.D.	Comparison with baseline data	Same	Same	Same	Same	Same	Same	Same
8.	What was the amount of the expenditures per permit issuance?	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked
8.A.	Average for program	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked
8.B.	Average for source category	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked	Not tracked

AA = Administrative amendment      HQ = Headquarters      NA = Not applicable  
 Administrative enforcement action = All NOV's, warnings, monetary penalties, consent orders, etc

Annual Audits (continued)

**Improvement Opportunities.** The following areas of concern are noted for specific organizations:

- BCAA, ORCAA, SCAPCA and YRCAA find it difficult to issue permits before they lapse due to workload issues and/or insufficient staff.
  - BCAA does not have a Registered Professional Engineer on staff, and is not in the process of hiring one. Instead, they supplement their staff with a consultant PE. Their permit issuance timeframe consistently exceeds 2 years.
  - ORCAA and SCAPCA staffs are not large enough to issue all AOP permits before expiration due to USEPA mandates that focus these agencies on new source review and initial permits, respectively.
  - The senior permit engineer at YRCAA has quit, and the agency is not in the process of hiring a new one.
- BCAA did not appear to have an enforcement or inspection program during CY2003.
- WDOE – Hanford does not issue “official” enforcement actions or NOVs, but does communicate with the facility operators. This lack of documentation may place WDOE at risk of public dissatisfaction.
- WDOE – Industrial and Hanford took considerable time to issue some enforcement actions/NOVs.
- BCAA conducted no source inspections during 2003.
- Although WDOE – Industrial and ORCAA capture AOP program expenditures as required in WAC 173-401-920 (b) (viii), these organizations, as well as all of the other agencies, do not utilize these data to manage their operations.
- WDOE – Policy and Rules Unit did not prepare the annual report to the legislature regarding the AOP audits performed in 2003. Therefore, TechLaw was not able to incorporate by reference the relevant information contained in that report, as required by WAC 173-401-920 (b).
- WDOE – Policy and Rules Unit has not provided us with the most recent fiscal audits for the Industrial Section, CRO, ERO or Hanford.
- According to staff at the WDOE Regions, WDOE – Policy and Rules Unit maintains all expenditure data for the Department. We have only received this information from the Industrial Section and CRO to date.

Individual Permit Reviews

Our random individual permit reviews revealed a high degree of consistency across these permits. Most of the permits met the audit criteria to a substantial degree. Therefore, we have not tabulated agency-specific data here for the random permit reviews, as was previously done for the annual program audits.

We wish to note that it is quite difficult during a desktop review to determine if all emission units have been identified in the permit, if all applicable requirements have been met, etc. Nonetheless, our auditors have determined, based on the materials reviewed,

that these criteria have been met to a substantial degree except where otherwise noted below.

**Positive Practices.** As noted earlier in the corresponding section under Program-Wide Discoveries, TechLaw observed a high degree of quality and consistency in the individual permits that we reviewed at all of the agencies. Consequently, we are not repeating those accomplishments here on an individual facility basis.

**Improvement Opportunities.** Notwithstanding the prior statement, our auditors noted some exceptions to the WAC requirements:

- Due to the complexity of the Hanford Nuclear Reservation, we were unable to determine within the scope of this audit if all major emission points and applicable requirements were included in the AOP. There has been recent information suggesting the presence of hydrogen sulfide, PCBs, and possibly hydrogen selenide, none of which are addressed in the permit. There is an evaporator on the site that has never been emissions tested for the permit. Due to the degree of uncertainty regarding the exact composition of materials in the “incompatible” waste storage tanks and drums, and the evolving nature of the radiochemistry, a current and comprehensive assessment and analytical characterization of actual emissions would be useful.
- Hanford is subject to both AOP requirements and Washington Department of Health radiation safety requirements. It appears that when a requirement is addressed under the Health requirements, it is usually not addressed in the AOP requirements. A review of both sets of requirements, which was beyond the scope of this audit, would be needed to verify that all requirements were included.
- For the permit reviewed at BCAA, the files did not include enough information to substantiate the compliance status for the source and its emission units.
- SWCAA and PSCAA do not routinely include operation and maintenance requirements in their permits.

#### Fiscal Audit Review

TechLaw reviewed the most recent fiscal audits performed by the State Auditor where available. NWAPA, ORCAA, PSCAA, SCAPCA and SWCAA provided these reports to us. The audit reports indicated that the accounting and financial management practices utilized by these agencies met acceptable accounting standards.

WDOE has not provided us with their most recent financial audit reports. BCAA and YRCAA are conducting their audits in 2004. Consequently, we are unable to comment on those reports at this time.

## **4.0 CONCLUSIONS AND RECOMMENDATIONS**

Based on the audits we performed for this project, TechLaw concludes that the AOP program has matured into a robust vehicle to protect the air resources throughout the State of Washington. Overall, we found that the state and local agencies are sincere in their efforts to meet and enforce the AOP program requirements, and have employed competent staff and information management systems to achieve these goals. We commend the many people we have met who steadfastly support this program.

In addition to these positive attributes, we have found a number of areas where the overall AOP program or individual agencies/Regions could benefit from improved activities. Many of these have already been discussed in the Audit Results section above. Our recommendations to address the most significant issues are presented below.

As noted previously in the Audit Results section, several organizations appear to be understaffed relative to their ongoing workloads. This is especially true for BCAA and YRCAA, which have marginal engineering capabilities on their staffs at this time. Furthermore, BCAA has a small number of AOP sources, which creates challenges in setting their fees to cover even minimum staffing because general and administrative costs can be spread across only a few permittees.

Most agencies also indicated that USEPA mandates such as new source review requirements, and the lack of USEPA review during AOP issuance, have negatively impacted their overall AOP program performance. These agencies should thoroughly evaluate their current and expected workloads, and hire additional resources as needed. Another alternative to consider is contracting for these resources if they comprise less than a full-time equivalent (FTE), or are only required for temporary workload leveling.

Some of the agencies we audited expressed interest in sharing personnel across multiple agencies. This option should be explored for hiring new employees where two or more agencies are located within a reasonable travel distance. Another possibility would be to share contracted resources, which could allow sharing across a larger geographical area.

We understand that some agencies may have difficulty estimating their personnel needs, even when their workloads can be predicted accurately. We encourage the audited agencies to cooperatively develop staffing guidelines for various workload scenarios, based on their past successes.

Several of the agencies were found to maintain their AOP data on multiple systems and in multiple formats. While this information was readily retrieved for us, it appeared that only certain individuals could access some of the data. Our experience shows that such data management practices can lead to problems if key personnel leave their positions. Therefore, some consolidation of, and expanded access to, these systems seems warranted.

Based on our review of the Hanford Nuclear Reservation AOP permit and our familiarity with the site, TechLaw is concerned that all major emission units are not included in the permit. For example, an evaporator and the large, underground, high-level mixed waste tanks are not addressed.

As a final issue, TechLaw wishes to address the overall efficacy of the audit program utilized for this project. Our independent findings, as well as our discussions with various agency personnel, indicate that the current audit program has reached the point of diminishing returns. While many of the annual audit and individual permit review criteria satisfactorily test the “health” of the AOP program, others do not provide accurate measures or have outlived their usefulness. For example, the “Number of times permitting authority had to return to source before permit deemed complete” could be caused by several factors, including:

- Lack of facility competence
- Changes to design of the emission unit
- Vague or incomplete information requests submitted by the agency
- Complexity of the facility

Consequently, this audit item does not identify the cause of a problem, nor if one even exists. This begs further information, or leads to speculation on the part of the reader.

Similarly, “How many notices of violation were issued?” produces an ambiguous answer. For example, WDOE – CRO and BCAA have few AOP sources and issued no NOVs in 2003, while PSCAA issued 100. Measures such as these should be normalized based on the number and complexity of AOP sources regulated by each agency.

Working with USEPA to encourage either actually providing the benefit of their review, or a more timely notice of their decision to not review a permit, would enhance the program.

Authority to monitor Section 112[r] releases and related responsibilities are not delegated to local agencies, although they would be in a position to help coordinate rapid local response. The Policy and Rules Unit should determine if there are sufficient potential Section 112[r] sources to justify including local agencies in the process, or may eliminate this audit item due to its general inapplicability.

WAC 173-401-920(b)(viii) does not state the purpose of the specified expenditure tracking. Moreover, most of the local authorities do not capture these data, and none of the agencies utilize this information to manage their organizations. Therefore, the Policy and Rules Unit should assess the overall usefulness of this information. We feel this requirement could be eliminated if it delivers little or no value to the agencies, the regulated community, and the public. If these requirements are kept in place, the State Auditor may be a more appropriate party to perform a thorough review of these costs as part of the required fiscal audits.

In conclusion, we encourage WDOE and the delegated local agencies to review and revise the audit items in WAC 173-401-920 (b), (c) and (d) so that they better portray the condition of the AOP program at its present level of advancement.