



DEPARTMENT OF
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State of Washington

Air Operating Permit Program 2017 Performance Audit Report

Overview Performance Audit
Fiscal Years 2011 - 2015 (July 1, 2011 - June 30, 2015)

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Overview Performance Audit Fiscal Years 2011 – 2015

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Executive Summary

Introduction

Washington's Air Operating Permit program undergoes a routine performance audit and a random permit review each year, as required by WAC 173-401-920(3).

The rule was revised in 2016 and performance audit requirements were updated to include overview performance audits every three years and options for intensive performance audits. The revised rule also introduced a requirement to form an Audit Advisory Committee to provide Ecology with performance audit support. This report represents an overview performance audit conducted in 2017 covering fiscal years 2011 – 2015 (July 1, 2011 – June 30, 2015).

Audit Advisory Committee

The committee was formed in 2017 with representatives from Ecology, local clean air agencies, and the regulated community. The purpose of this committee is to conduct performance audits to ensure air operating permit programs are being administered and managed in accordance with RCW 70.94.162 and WAC 173-401. For the 2017 overview performance audit, the committee reviewed EPA program review reports, EPA State Review Framework Reports, and Semiannual Title V Operating Permit data for fiscal years 2011 – 2015. After reviewing the data, the committee provided Ecology with audit observations and recommendations to improve state air operating permit programs.

General Audit Observations

The state air operating permit program is being administered and managed in accordance with RCW 70.94.162 and WAC 173-401. Agencies meet requirements to maintain their delegated programs.

Timely issuance (backlog) of permit renewals was a common concern found in the reports reviewed by the committee. The percentage of outstanding and extended permit renewals ranged from 26 percent at Northwest Clean Air Agency to 81 percent at Puget Sound Clean Air Agency, with an average of 41 percent. Ecology's backlog of extended permits approaches 50 percent.

The committee observed opportunities to improve:

- the timeliness and accuracy of data entered into federal compliance information systems
- permit uniformity between agencies
- the content and quality of permit language
- the statement of basis regarding CAM, NSPS/MACT applicability, potential to emit, and permit shields.

Summary of Recommendations

There are opportunities for ongoing improvement of each agency's permitting, compliance and enforcement activities. A significant EPA concern noted in the 2014 Ecology program review report is Ecology's backlog of permits in the Eastern Regional Office. Data from Semiannual

Title V Operating Permit suggests that other local clean air agencies are also experiencing permit backlogs. Agencies should explore methods to streamline air operating permits and the permit process.

State Review Framework reports suggest that data entered into the national reporting system (ICIS) is not always accurate or timely. Agencies should allocate more time and improve procedures for managing ICIS data entry.

State permit writers have responded to EPA's recommendations to improve internal guidance for developing and updating permits, but further improvements are needed. Committee members noted improved statement of basis is needed, and consistency between agencies and other EPA Region 10 states is desirable. Ecology and local clean air agencies should review and improve internal guidance on statement of basis with specific focus on CAM, NSPS/MACT applicability, potential to emit, and permit shields.

Committee members recognize the importance of timely high priority violations enforcement actions. Agencies should update their high priority violation procedures to ensure all violations are evaluated according to EPA's timely and appropriate high priority violations policy and high priority violations are identified in a timely manner.

Recommendations for Intensive Performance Audits

Ecology asked the committee to make recommendations for intensive performance audits for one or more agencies based on the finding of this overview audit. Members agreed that an intensive performance audit was not recommended at this time.

Introduction

Washington's Air Operating Permit program undergoes a routine performance audit and a random permit review each year, as required by WAC 173-401-920(3). The last performance audit was conducted in 2011 and covered calendar years 2009 – 2010 (state fiscal year 2010). The 2011 audit broadly reviewed each clean air agency's air operating permit program, including site visits and permit reviews.

The rule was revised in 2016 and the performance audit requirements were updated. The revised rule introduced requirements for an Audit Advisory Committee, parameters for an overview performance audit, and options for an intensive performance audit (WAC 173-401-920). The revised rule requires performance audits is to be conducted every three years.

Ecology is required to establish a committee that includes representatives from Ecology, local clean air agencies, and the regulated community. The committee members are:

- Ron Stuart – Department of Ecology Air Quality Program (audit coordinator)
- Philip Gent – Department of Ecology Nuclear Waste Program
- Stephanie Ogle – Department of Ecology Industrial Section
- Derek Forsberg – Northwest Pipeline
- Robin Priddy – Benton County Clean Air Agency
- Agata McIntyre – Northwest Clean Air Agency
- Mark Goodin – Olympic Region Clean Air Agency
- Carole Cenci – Puget Sound Clean Air Agency
- Vanessa McClelland – Southwest Clean Air Agency
- April Westby – Spokane Regional Clean Air Agency
- Hasan Tahat – Yakima Regional Clean Air Agency

The purpose of the committee is to conduct performance audits to ensure state Title V air operating permit (AOP) programs are being administered and managed in accordance with RCW 70.94.162 and WAC 173-401.

For the 2017 overview audit, the committee developed an audit schedule, reviewed reports, and submitted observations and recommendations to Ecology. Observations included any trends identified by the committee and concerns they may have about agency programs. Recommendations leverage the committee's observations into actions aimed to improve the AOP program statewide.

Audit Review Methodology

The 2017 overview audit reviewed EPA state program reports and compliance assessments for fiscal years 2011 to 2015. Data sources included Semiannual Title V Permit Data Reports (TOPS), State Review Framework Reports (SRF), and EPA Title V program reviews that were completed for Washington clean air agencies during the designated audit period.

TOPS reports contain AOP permit issuance data that can be used to evaluate the type and timeliness of permit issued by agencies. TOPS reports are submitted to EPA twice a year by each local or regional clean air agency, and are available on request. Ecology requested a summary of TOPS data from EPA for years 2011 to 2015 and provided it to the committee for review.

SRF reports track compliance and enforcement performance of the Clean Air Act, Clean Water Act, and Resource Conservation and Recovery Act programs. EPA conducts the reviews every five years and does not include all state agencies in each review. SFR reports are available on EPA's website¹ and were referred to for AOP findings and recommendations. Ecology provided a summary of Clean Air Act program data from EPA's website for the committee's review.

EPA periodically reviews state and local permitting programs to oversee delegated air permitting programs. EPA Title V program reviews occur periodically and represent a broad spectrum review of each selected agency's program. Two reports conducted during the audit period were available on EPA's website²: Ecology (Round 2, 2014) and Northwest Clean Air Agency (Round 2, 2013). Ecology provided both reports to the committee for review.

Audit Observations

Permit issuance

Timely issuance (backlog) of permit renewals was a common concern found in the reports reviewed by the committee. The percentage of outstanding and extended permit renewals ranged from 26 percent at Northwest Clean Air Agency to 81 percent at Puget Sound Clean Air Agency, with an average of 41 percent. Ecology's backlog of extended permits approaches 50 percent.³

The committee thinks there may be a relationship between permit backlogs and the number of permit engineers. Puget Sound Clean Air Agency reported a significant backlog and a ratio of 6.2 permits per engineer. Other agencies with moderate to minor backlogs are thought to have 1 to 4.5 permits per engineer.⁴

The committee was concerned that permitting priorities may be interfering with AOP program efficiency. Permit writers who give priority to New Source Review (NSR) and construction permits may contribute to the AOP permit backlog because their time and attention are not focused on completing AOP work.

The committee thinks the number of extended permits may indicate a programmatic reliance on permits continuing past their 5-year terms under an application shield. There may be a reliance on the application shield to manage Title V workloads while focusing agency efforts on other higher priority work.

¹ <https://echo.epa.gov/oversight/state-review-framework/tracker-recommendations>

² <https://www.epa.gov/caa-permitting/title-v-program-reviews-washington>

³ Analysis by committee members of TOPS reports submitted to EPA during fiscal years 2011-2015.

⁴ Information provided by committee members for the agencies they represent.

Data shows significant permit modifications are infrequent for the majority of AOP permits. Data also suggests that most significant permit modifications occur in Ecology regions. The committee was concerned that Ecology may be interpreting significant modification criteria differently than other agencies.

Data reporting, timeliness, accuracy, completeness

Reports reviewed by the committee suggest that data entered into the national reporting system (ICIS) is not always accurate or timely. The committee recognizes data reporting requirements have increased and agencies may need additional training to clarify reporting requirements. The committee was concerned that agencies may not have the resources to keep ICIS updated.

The committee agreed that there have been significant improvements to address most 2011 – 2015 EPA SRF report findings.

Permit language and content

There are additional opportunities for permit writers to improve the content and quality of permit language. Committee members thought improvements may be needed in writing long-term emission limits into permits. Permits need to be clearly written to ensure enforceability. Permits should more clearly indicate how compliance with long-term emission limits will be demonstrated.

Audit materials suggest that there is an opportunity to improve statements of basis by improving or expanding necessary element language. Improvements should include:

- Better documentation of permit shields
- More detailed CAM analysis
- Better documentation of potential to emit
- Better documentation of NSPS and NESHAP applicability

EPA commented on the format of the permits including labeling CAM adequately and not listing authority for certain requirements (gap filling). The committee noted that agencies should have discretion over the format as long as permits include all of the requirements.

Compliance and enforcement

Committee members were concerned about an EPA finding that enforcement actions by a local clean air agency to address high priority violations were adequate, but were not timely.

Committee members recognize the importance of timely high priority violation enforcement actions and there is an opportunity for program-wide improvement.

SRF data also included an EPA recommendation for proper documentation of penalty assessment for one local clean air agency. The committee was concerned that this finding suggests penalty issuance may not be consistent between agencies.

EPA's program review of Ecology noted a concern about treating deviations and excess emissions consistently between regional offices. Although EPA concluded the issue was not an

ongoing concern, committee members concluded there is an opportunity for improvement for both Ecology and local clean air agency programs.

Audit Recommendations

Permit Issuance

A significant EPA concern is Ecology's backlog of permits in the Eastern Regional Office. TOPS data suggests that other agencies are also experiencing significant permit backlogs. Agencies should explore methods to streamline Title V permits and the permit process. Potential options include:

- Use the LEAN process to make the renewal process more efficient.
- Help agencies with large backlogs to develop strategies and timelines to improve performance.
- Request permit renewal applications one year before the permit expires to allow more time to issue permits.

Data reporting, timeliness, accuracy, completeness

SRF reports suggest that data entered into the national reporting system (ICIS) is not always accurate or timely. Agencies should explore training opportunities and allocate sufficient time to manage and input ICIS data. Ideas to consider to also improve accuracy and timely data entry include:

- Organize ICIS refresher training to train new permit writers and improve data entry performance.
- Develop ICIS data entry checklists for stack test data and compliance certification data.
- Use spreadsheets to keep track of monthly compliance data. Have monthly meetings with data entry personnel to ensure they are meeting minimum ICIS data entry requirements in a timely manner.

Permit Language and Content

State permit writers have responded to EPA's recommendations to improve internal guidance for developing and updating permits, but opportunities exist for further improvement. Committee members noted an improvement in statement of basis guidance is still needed and consistency between agencies and other EPA Region 10 states is desirable. Ecology and local clean air agencies should review and improve internal guidance on statement of basis, CAM, NSPS/MACT applicability, potential to emit, and permit shields.

As part of the internal guidance review, agencies should provide more justification about why CAM does, or does not, apply in the statement of basis. To support decisions about CAM and NSPS/MACT applicability, agencies should also clearly state in the statement of basis which pollutants a facility is not a major source for and why.

Focused and routine discussions should occur between agency Title V program managers on general topics to maintain reasonable consistency between programs, such as:

- How excess emissions and deviations are treated by different agencies to help program implementation be more consistent statewide.
- Ways to ensure long-term emission limits are included in permits in an enforceable way, and to provide consistency for monitoring associated with those limits.
- How other agencies or states minimize their permit backlog.

To address auditor concerns over the number of Ecology significant permit modifications compared to other agencies, Ecology should discuss what actions trigger a significant permit modification with agencies and follow up with guidance if necessary.

Compliance and Enforcement

The committee noted the importance of timely high priority violations enforcement actions. Agencies should update their high priority violation procedures so that all violations are evaluated according to EPA's timely and appropriate high priority violations policy and high priority violations are identified in a timely manner.

To improve communication and performance, agencies should participate in EPA's quarterly high priority violations conference calls.

Recommendations for Intensive Performance Audits

Ecology asked the committee to make recommendations for intensive performance audits for one or more agencies during the audit process. Members agreed that an intensive performance audit was not recommended at this time.

List of Abbreviations

AOP – Air Operating Permit

CAM – Compliance Assurance Monitoring

EPA – Environmental Protection Agency

HPV – High Priority Violation

ICIS – Integrated Compliance Information System

LAA – Local Air Agency

LEAN – Lean is a customer-centric methodology used to continuously improve any process through the elimination of waste in everything you do

MACT – Maximum Achievable Control Technology

NESHAP – National Emission Standards for Hazardous Air Pollutants

NSPS – New Source Performance Standards

NSR – New Source Review

NWCAA – Northwest Clean Air Agency

PCE – Partial Compliance Evaluation

PSCAA - Puget Sound Clean Air Agency

SRF – State Review Framework for Compliance and Enforcement Performance

TOPS – Semiannual Title V Permit Data Report

TITLE V – Operating Permit Program as part of the 1990 Clean Air Act Amendments

WAC – Washington Administrative Code