Air Operating Permit Program Report

Fiscal Year 2021
(July 1, 2020 – June 30, 2021)

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For the
Air Quality Program

Washington State Department of Ecology
Olympia, Washington

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Introduction

The Air Quality Program works to limit and reduce air pollution so that everyone in and around Washington can live in a healthy environment, has clean air to breathe, and improved visibility.

Our strategic plan ensures our employees and other stakeholders are working toward common goals. Work performed to meet these strategic goals is supported by funds from the Air Quality Program and fee programs.

This report summarizes the Air Operating Permit Program financial details, performance, and program activities for Fiscal Year 2021 (July 1, 2020 – June 30, 2021).

Air Operating Permit Program Summary

The Air Operating Permit (AOP) Program is an air pollution control program, based in federal law, designed to standardize air quality permits and the permitting process for major sources of air emissions.

Under Section 502(b) of the 1990 federal Clean Air Act (CAA) amendments, all sources subject to the permitting requirements under the air operating permit must pay an annual fee. These fees must cover all reasonable direct and indirect costs required to develop and administer the permit program.

To ensure financial accountability, Ecology audits the AOP program every other year. The AOP program services summarized in this report are consistent with the Washington Clean Air Act, Chapter 70A.15 Revised Code of Washington (RCW) and Chapter 173-401 Washington Administrative Code (WAC). These provide regulatory authority for the program.

Budget Planning

Before each biennium, Ecology must conduct a workload analysis. This analysis is a projected budget for the work to be performed in the next biennium. This includes publishing a draft on Ecology’s website by February 28th that allows for a sixty-day public comment period before publishing the final draft by June 30th. The analysis includes resource requirements for both the direct and indirect program costs. At the start of each biennium, the analysis is updated to reflect any new legislatively mandated cost changes.

In June 2018, Ecology completed the workload analysis for fiscal years 2020 and 2021 (July 1, 2019 – June 30, 2021), and posted it on Ecology’s website. The analysis was also sent to individuals on a distribution list who requested to receive notice about AOP fees.

To be added to the distribution list, contact Trischa Lohr Barlet at trischa.lohrbarlet@ecy.wa.gov.
Air Operating Permit Program Financial Performance

Total program revenue and expenditure

For FY 2021 (July 1, 2020 – June 30, 2021), Ecology’s AOP program budget and projected revenue was $2,386,503. The workload analysis identifies the cost of Ecology staff performing various AOP work and sets the revenue for the program (Chapter 173-401-900(3) WAC). The program’s opening and closing balance is a working capital reserve required to maintain a positive fund balance throughout the fiscal year. Opening fund balances greater than nine months’ worth of estimated expenditures in the following fiscal year are eligible for rebates as described in the “rebates and credits” section of this report.

Table 1. Comparison of Fiscal Years 2020 and 2021

<table>
<thead>
<tr>
<th></th>
<th>Fiscal Year 2020</th>
<th>Fiscal Year 2021</th>
</tr>
</thead>
<tbody>
<tr>
<td>AOP account opening balance</td>
<td>$1,369,422</td>
<td>$1,841,330</td>
</tr>
<tr>
<td>Actual revenue (fees)</td>
<td>$2,292,495</td>
<td>$2,386,503</td>
</tr>
<tr>
<td>Actual expenditures</td>
<td>$1,820,587</td>
<td>$1,624,172</td>
</tr>
<tr>
<td>AOP account closing balance</td>
<td>$1,841,330</td>
<td>$2,603,661</td>
</tr>
</tbody>
</table>

The program largely underspent due to a temporary reduction in expenditures during the COVID-19 pandemic, resulting in a surplus of $762,331.

Air operating permit fee revenue

Chapter 70A.15 RCW and Chapter 173-401 WAC stipulates that Ecology costs be distributed according to a three-tiered model with each of the three tiers being equally weighted. The three tiers are based upon:

- The number of sources under Ecology’s jurisdiction
- The complexity of the sources under Ecology’s jurisdiction
- The size of the sources, measured by the quantity of each regulated pollutant emitted

Ecology billed and collected $2,274,954 from 26 facilities with AOPs during FY 2021. Fees are assigned to each source (Chapter 173-401-900(5)(b)) and are due annually by February 28th (Chapter 173-401-930(1)). The amount billed included:

- Tier 1: Flat fee of $29,166.08 per facility
- Tier 2: Complexity fee of $76.91 per hour of oversight
- Tier 3: Emission fee of $45.02 per ton

Development and oversight revenue

Development and oversight (D&O) costs are Ecology’s costs to:
• Develop and administer the state operating permit program
• Oversee the program administration by the delegated local clean air agencies

All sources with an AOP pay Ecology’s D&O costs (Chapter 173-401-900(5)(a)). The costs for Ecology sources are included in their flat fee (Tier 1). Washington’s seven local clean air agencies paid Ecology $111,548.55 during FY 2021. Local clean air agencies’ D&O fees are due annually by March 31st (Chapter 173-401-935(2)).

Expenditures

Chapter 173-401-940 lists the activities authorized to be performed using funds supported by the state AOP program. During FY 2021, Ecology spent $1,624,172 administering these activities:

• Program administration and support
• Permit processing
• Permit management
• Delegation and regulation
• Technical assistance
• Public outreach and education
• Ambient monitoring and oversight

Table 2. Fiscal Year 2021 Expenditures

<table>
<thead>
<tr>
<th>Expenditures</th>
<th>Amount</th>
</tr>
</thead>
<tbody>
<tr>
<td>Salaries and Wages</td>
<td>$995,958.41</td>
</tr>
<tr>
<td>Employee Benefits(^2)</td>
<td>$351,718.83</td>
</tr>
<tr>
<td>Professional Service Contracts</td>
<td>$0.00</td>
</tr>
<tr>
<td>Goods and Services(^3)</td>
<td>$82,168.50</td>
</tr>
<tr>
<td>Travel</td>
<td>$11,834.23</td>
</tr>
<tr>
<td>Capital Outlays(^4)</td>
<td>$174.75</td>
</tr>
<tr>
<td>Grants, Benefits, &amp; Client Services(^5)</td>
<td>$0.00</td>
</tr>
<tr>
<td>Intra-Agency Reimbursements(^6)</td>
<td>$182,317.44</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$1,624,172.16</strong></td>
</tr>
</tbody>
</table>

Air operating permit program presumptive minimum test

The Environmental Protection Agency (EPA) establishes an annually-adjusted minimum fee called “presumptive minimum\(^7\)” that is expected to cover AOP program costs. The presumptive

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\(^2\) Survivors insurance, disability insurance, retirement, etc.
\(^3\) Materials, supplies, communications, postage, utilities, subscriptions, etc.
\(^4\) Furnishings, equipment, and software purchases with a useful life greater than one year
\(^5\) Charge to permittees for using electronic payment service (E-Pay)
\(^6\) Reallocation of expenditures and accruals within an agency
\(^7\) https://www.epa.gov/title-v-operating-permits/historical-permit-fee-rates
minimum rate for federal FY 2021 (September 2020 – August 2021) was $52.79 per ton of emissions. Ecology sources emitted 16,845 tons of regulated pollutants, so Ecology’s program presumptive minimum was $889,247.

In 2021, Ecology collected $2,386,503 in revenue. Ecology revenue was greater than the presumptive minimum for 2021, so it was presumed sufficient to cover AOP program costs.

Rebates and credits

In the past, the Office of Financial Management (OFM) allowed Ecology to accrue a negative cash balance until fees were received later in the fiscal year. Since 2015, OFM has required Ecology to maintain a positive monthly cash balance in each dedicated account it manages. This is a challenge in the AOP account because expenditures are ongoing, yet total revenue is received in annual payments nine months into each fiscal year. Fiscal years begin July 1 and end June 30, and revenue is generally received at the end of February through the end of March. In order to maintain a positive cash balance in the AOP account, Ecology has been slowly building a working capital reserve in this account.

No rebates were given for the FY 2021 billing. Rebates have been suspended until the opening fund balance of a fiscal year is greater than nine months’ worth of estimated expenditures in the next fiscal year (determined by prorated available expenditure authority). The opening fund balance in FY 2021 was $1.8 million. Expenditure authority in the AOP account for FY 2021 was $2.9 million. When prorated for 9 months’ worth of expenditures, a working capital reserve (opening balance) of $2.1 million was required.

However, the program largely underspent during FY 2021, resulting in a surplus. Rebates will be given for the FY 2022 billing.

Program Performance

Ecology performed the following activities to support the air operating permit program:

- Permit processing – application reviews, writing draft and final permit renewals, permit amendments and modifications, public notices and hearings, public comment responses, operational reviews, appeals.

- Permit management – inspections, stack test oversight, emissions reports, complaint investigations and oversight, modeling, asbestos, and facility annual compliance certifications.

- Program administration and support – program management, data management, fee administration, emissions inventory support, permit workshops and training, clerical support, administrative enforcement, program coordination, audits, local program oversight, permit register, public records requests, rules and regulation guidance, and general outreach.
- Technical assistance – source assistance and interagency agreements.

![AOP Program Work Activities](image)

**Figure 1. Air Operating Permit Work Activities**

**Staffing Levels**

Ecology staff are calculated as full time equivalents (FTE). This measurement helps budget analysts estimate labor costs. One FTE is a unit that indicates the workload of one full-time employee working 40 hours per week. OFM assumes 2,088 work hours equal one FTE in a fiscal year. To calculate actual FTEs, the number of hours worked is divided by 2,088.

The program was staffed to cover required work during FY 2021. In some instances, the actual FTE is more or less than the projected FTE due to shifting of staff resources and vacancies.

**Table 3. Projected vs. Actual FTE**

<table>
<thead>
<tr>
<th>AOP Staffing Areas</th>
<th>Projected Direct FTEs</th>
<th>Actual Direct FTEs</th>
</tr>
</thead>
<tbody>
<tr>
<td>Program Management - Ecology Headquarters</td>
<td>0.40</td>
<td>0.31</td>
</tr>
<tr>
<td>Science and Engineering Section</td>
<td>1.46</td>
<td>1.37</td>
</tr>
<tr>
<td>Policy and Planning Section</td>
<td>0.03</td>
<td>0</td>
</tr>
<tr>
<td>Technical Services Section</td>
<td>0.41</td>
<td>0.33</td>
</tr>
<tr>
<td>Central Regional Office</td>
<td>1.16</td>
<td>0.88</td>
</tr>
<tr>
<td>Eastern Regional Office</td>
<td>3.78</td>
<td>2.14</td>
</tr>
<tr>
<td>Solid Waste Mgmt. Program - Industrial Section</td>
<td>4.72</td>
<td>3.48</td>
</tr>
<tr>
<td>Nuclear Waste Program - Hanford</td>
<td>2.25</td>
<td>1.48</td>
</tr>
</tbody>
</table>
### Emissions Inventory

An emissions inventory is a list of pollutants discharged into the air during a specific period. Ecology collects emissions data according to federal regulations. The inventory is used to determine significant sources of air pollution, provide the public with air emissions data, and establish trends.

Air pollution sources submit their emissions data using the Washington Emissions Inventory Reporting System (WEIRS). WEIRS is an electronic data collection system that allows facilities with an AOP and local clean air agencies to report their emissions data.

The information in WEIRS is submitted to EPA so they can develop the National Emissions Inventory (NEI). The NEI is released every three years based on data submitted by state, local, and tribal clean air agencies. The inventory consists of criteria pollutants, criteria precursors, and hazardous air pollutants from air emission sources. The data allows EPA to identify trends and establish air quality standards.

Ecology’s emissions inventory group manages the database for major stationary sources of air pollution. Fee eligible emissions are calculated from the most current available data. For FY 2021 fees, emissions data from calendar year 2019 was used. In Ecology’s jurisdiction, sources with an AOP produced a total of 16,845 tons of fee eligible emissions:

- 2,308 tons of particulate matter of 10 microns in diameter or smaller (PM$_{10}$)
- 5,764 tons of sulfur dioxide (SO$_2$)
- 7,226 tons of nitrogen oxides (NOX)
- 1,547 tons of volatile organic compounds (VOC)

### Permit Processing

An AOP expires five years after it is issued. Ecology completes the initial permit issuance or renewal process in an average of eighteen months. If a source has submitted a complete application to Ecology within six to twelve months of expiration, the source may continue operating under their current permit (Chapter 173-401-705 WAC). Sources can submit an application for AOP modifications and amendments at any time.

Permit activity and timeliness during FY 2021:

- 5 permit renewals
- 1 initial permit issued

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• 1 administrative amendment
• 1 permit modification issued
• No new initial permit applications received
• 2 outstanding initial permit applications (>18 months)
• 2 outstanding significant permit modifications (>18 months after receipt of application)
• 8 extended permits beyond the 5-year term

Table 4. Ecology Air Operating Permit Timeliness Tracking

<table>
<thead>
<tr>
<th>Total Sources</th>
<th>Active Permits</th>
<th>Initial Permits Issued</th>
<th>Outstanding Initial Applications</th>
<th>Expired Permits</th>
<th>Extended Permits</th>
<th>% Extended</th>
<th>% Outstanding + Extended</th>
</tr>
</thead>
<tbody>
<tr>
<td>26</td>
<td>25</td>
<td>1</td>
<td>2</td>
<td>0</td>
<td>8</td>
<td>32%</td>
<td>38%</td>
</tr>
</tbody>
</table>

**Permit Management**

Ecology prioritizes compliance and enforcement with the AOP program and the conditions of each source’s permit. Activities associated with permit management are facility inspections, stack test oversight, compliance evaluations, annual compliance certifications, complaint investigations and field responses, administrative enforcement, EPA reporting, and Notice of Violation processing.

Ecology completed partial compliance evaluations (PCE), full compliance evaluations (FCE), stack tests, and annual compliance certifications. Compliance evaluations are usually completed on-site to make compliance determinations for permit monitoring and reporting requirements. During Fiscal Year 2021, the following evaluations were completed:

• 5 on-site PCEs
• 35 off-site PCEs at Hanford
• 12 on-site FCEs
• 3 off-site FCEs
• 109 stack tests at 9 facilities
• 11 annual compliance certification reviews

Ecology notifies a source of a high priority violation (HPV) or federally-reportable violation (FRV) if one is found during an inspection. In turn, facilities can report a violation to Ecology and can request an evaluation. An HPV can require EPA oversight if the violation is not addressed and resolved within 180 days. Violations can result from an excess of hazardous air pollutant emissions, permit non-compliance, visible emissions, and reoccurring or unresolved issues. During Fiscal Year 2021, Ecology found:

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9 [https://echo.epa.gov/](https://echo.epa.gov/)
• 1 HPV
• 4 FRVs

Formal and informal enforcement actions include (in increasing severity):

• Notice of Correction (NOC)
• Notice of Violation (NOV)
• Administrative order
• Notice of Penalty (NOP)

In FY 2021, Ecology took the following enforcement actions related to the AOP program:

• 18 NOVs
• 7 administrative orders
• 2 NOPs

Most of the NOVs were for exceeding allowable emissions limits, exceeding downtime of emissions monitoring equipment, and excess opacity during stack tests. Before being issued an NOV, a facility is given a verbal warning and offered technical assistance. Administrative orders were issued for on-going non-compliance and violating a regional haze agreed order. Administrative orders are reviewed for penalty issuance.

Penalties

In FY 2021, Ecology did not issue any penalty fees\textsuperscript{10} for AOP violations.

Delegation and Regulation

Rulemaking

The Code Reviser’s Office reformatted Washington Clean Air Act Chapter 70.94 RCW to Chapter 70A.15 as directed by 2020 legislation. The Code Reviser’s Office removed expired sections so they are found in the dispositions section.\textsuperscript{11}

Training

Ecology provides training and assistance on AOPs to local clean air agencies, industry, and other affected groups. For the purpose of this report, training includes coordination among permit writers. Due to the ongoing difficulties of the Covid-19 pandemic, Ecology has been primarily teleworking since March 2020. Online meetings became a standard way of communicating, meeting, and attending conferences.

\textsuperscript{10} Ecology’s Docket Management System
\textsuperscript{11} https://app.leg.wa.gov/RCW/dispo.aspx?cite=70.94
Emissions inventory training

Annually, the emissions inventory group provides training on the Washington Emissions Inventory Reporting System (WEIRS). Attendees typically include AOP facility managers, contractors, and state and federal agencies.

Permit writers training

The Integrated Compliance Information System (ICIS-AIR) is a federal database used by permit writers and authorized personnel. EPA offers online training courses containing six integrated modules that Ecology staff can use to learn about minimum data requirements when entering data into ICIS. Staff can attend Environmental Compliance History Online (ECHO) data verification training webinars to ensure proper verification of data is entered into ICIS-AIR. This training is always available and EPA offers webinars annually.

Typically, Air Quality staff and local clean air agencies have the opportunity to attend an EPA Title V workshop every other year. These workshops include information about EPA policy and oversight, permit writing and content, and compliance/enforcement. However, this training has been postponed due to the pandemic.

The National Association of Clean Air Agencies (NACAA) holds monthly air permitting meetings for air agencies. These meetings provide valuable discussions and include technical trainings on new data tools.

The Pacific Northwest International Section (PNWIS) which is a branch of the Air and Waste Management Association held their annual conference in November 2020 online. This allowed a larger audience to attend the three sessions, each session being held a week apart. The conference primarily focused on source testing.

Ecology promotes environmental training courses offered by third party providers or other regulatory agencies. These courses are designed to improve the permit writer’s and inspector’s general skills and knowledge. In Fiscal Year 2021, third party training included:

- Western States Air Resources Council (WESTAR)
- EPA webinars
- APTI-Learn (through EPA)

Permit writers meetings

Permit writers have a large amount of authority and responsibility. They must stay informed about regulatory changes, so they issue effective permits that meet state air quality standards. The permitting process should be consistent and all permits should be federally-enforceable.

The Air Permit Writers Meetings are held once per quarter, with approximately 125 people on the distribution list. There is an average of seventy attendees each meeting. The meetings primarily consist of engineers and permit writers from Ecology, local clean air agencies, EPA
Region 10, Department of Health, Energy Facility Site Evaluation Council (EFSEC), Oregon Department of Environmental Quality, Oregon Lane Regional Air Protection Agency County, Alaska Department of Conservation, and Idaho Department of Environmental Quality. Other attendees are rule writers, scientists, and compliance staff.

The purpose of the meetings are to exchange information and knowledge, network about technical issues, develop work groups for implementing new federal requirements, and interpret rules and policies.

Meeting dates (all virtual meetings):

- September 17, 2020
- December 17, 2020
- March 18, 2021
- June 17, 2021

**Public Outreach**

The public participation process provides an opportunity to comment on draft permits or draft environmental reviews, participate in stages of rulemaking, and attend public meetings or hearings.

Ecology held a public comment period on the following AOP program activities. This list does not include public comment periods from other air agencies. The complete list is on Ecology’s website. 12

- July 13, 2020: U.S. Department of Energy – Continued public comment period related to permitting activities
- August 25, 2020: Gas Transmission Northwest #7 – Issuance of a draft renewal permit
- October 9, 2020: D&L Foundry – Issuance of initial draft permit
- December 24, 2020: WestRock Longview – Issuance of a draft renewal permit
- February 10, 2021: Cosmo Specialty Fibers – Issuance of final permit
- March 10, 2021: SGL Composites – Issuance of a draft permit modification
- March 10, 2021: Boise Cascade Wood Products, Arden Lumber – Issuance of a draft renewal permit
- March 25, 2021: SGL Composites – Issuance of a draft permit modification
- April 9, 2021: SDS Lumber Company – Issuance of final permit modifications
- May 10, 2021: LAB Washington – Administrative amendment to update responsible official

12 https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Air-Quality-permits/Air-operating-permits/Permit-register
Ecology invited the public to participate in meetings or provide public comments on the following AOP program activities:

- August 25, 2020: AOP Audit Committee – Public meeting notice
- October 26, 2020: AOP Audit Committee – Public meeting notice
- November 10, 2020: Proposed Complexity Level for AOP Fees

**Oversight and Monitoring**

**Audits**

The air operating permit program must have a fiscal audit every two years and a performance overview performance audit every three years (WAC 173-401-920(3)&(4)).

The purpose of a fiscal audit is to verify that the AOP account funds are being used as authorized. Ecology and the SAO completed a fiscal audit in March 2020 for FYs 2018 and 2019. The next fiscal audit will be completed during FY 2022. The audit reports are published on the State Auditor's Office website\(^{13}\) and Ecology’s website.\(^{14}\)

Every three years, Ecology and local clean air agencies conduct an overview performance audit. The audit was completed in December 2020 and a report was issued in March 2021. Chapter 173-401 WAC requires an audit advisory committee, audit framework, and options for an intensive performance audit.

The audit advisory committee was revised in 2020 and audit planning began shortly after. The audit committee consisted of three representatives from Ecology, one from each of Washington’s seven local clean air agencies, and a member from the regulated community. At the conclusion of the audit, Ecology recommended the following improvements:

- Timely permit issuance.
- Improvement in AOP statement of basis to support permit decisions.
- Continued maintenance of Standard Operating Procedures in accordance with EPA’s timely and appropriate enforcement report to identify HPVs in a timely manner.
- Timely and accurate reporting and data entry.

The committee did not recommend an intensive performance audit.

\(^{13}\) [https://sao.wa.gov/reports-data/audit-reports/](https://sao.wa.gov/reports-data/audit-reports/)

\(^{14}\) [https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Air-Quality-permits](https://ecology.wa.gov/Regulations-Permits/Permits-certifications/Air-Quality-permits)