Business and the Environment Conference
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AIR PERMIT BASICS

Minor Source Permitting

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Air Quality Engineer

SWCAA
Southwest Clean Air Agency

Southwest Clean Air Agency

- Local air agency authorized under Washington Clean Air Act (RCW 70A.15)
- Multi-county jurisdiction
- Executive Director
  - Uri Papish
- Board of Directors
  - 10 Elected officials
  - 1 Member-at-Large

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What Pollutants are Regulated?

- **Criteria Air Pollutants – EPA criteria documents**
  - **40 CFR Part 50 – National Primary and Secondary Standards**
    - Oxides of nitrogen (NOx)
    - Carbon monoxide (CO)
    - Sulfur oxides (SO_2)
    - Lead (Pb)
    - Ozone (O_3) – NO_x and VOC as precursors
    - Particulate matter (TSP vs. PM_{10} vs. $PM_{2.5}$)
  - **WAC 173-476 – State Primary and Secondary Standards**
- **188 Hazardous Air Pollutants (HAP) (federal)**
  - 1-Bromopropane added in June 2020
- **> 580 Toxic Air Pollutants (TAP) (state)**
- **Green House Gas pollutants (GHG) (federal-state)**

Toxic Air Pollutants

- Regulated under WAC 173-460 (2019 / 1998)
- Has separate but complementary permitting process (Toxics New Source Review including T-BACT)
- Over 580 compounds to be considered
- 1998 List includes all EPA hazardous air pollutants
- Class A – Cancer causing
- Class B – other health impacts
- Some have a small quantity emission rate (SQER) that minimizes review process and time
- All need to be identified and quantified in application

What Emission Standards Apply?

- NAAQS – National Ambient Air Quality Standards for each pollutant
- Best Available Control Technology (BACT) for all new sources, and modifications with an increase in emissions
- Reasonably Available Control Technology (RACT) for emission units that are modified with a decrease in emissions
- Maximum Achievable Control Technology (MACT) for emission units subject to a federal MACT standard
- New Source Performance Standards (NSPS) for emission units subject to a federal NSPS
- Visibility consideration for state plan

Who Needs a Permit?

- All new non-exempt sources and modifications with an increase in emissions (SWCAA 400-109)
- Emission unit (EU) – any part of a stationary source that emits to ambient air (SWCAA 400-030)
- Very small sources are exempted (SWCAA 400-109 (3))
- SWCAA 400-109 - Who needs to apply
- SWCAA 400-110 - How permit is issued

Common Permitted Sources

- Boilers / Process heaters
- Stationary diesel utility engines
- Rock crushers and screens
- Asphalt plants
- Dust collectors
- Fabrication operations (painting/welding/plating)
- Emergency/backup electrical generators

- Non-road engines (SWCAA 400-045)
  - Engines on track mounted rock crushers and screens

Minor Source Permit Types

- **Small Unit Notice (SUN) – SWCAA 400-072**
  - "Permit by rule" - $319 fee per unit
  - Applies to selected source categories
- **Air Discharge Permit (ADP) – SWCAA 400-110**
  - Minor new source review
    - < 100 tpy criteria air pollutants
    - < 10 tpy single hazardous air pollutant
    - < 25 tpy combine hazardous air pollutants
    - < 100/250 tpy single pollutant
  - Criteria and toxic pollutants
  - Synthetic minor (Title 5 Opt Out)

Other Air Permit Types

- **Non-Road Engines – SWCAA 400-045**
  - Based on engine size
- **PSD – Prevention of Significant Deterioration – Major Sources**
  - 40 CFR Part 52.21
  - Department of Ecology issues all PSD Permits in Washington
- **Title IV – Acid Rain Permit**
  - Acid rain sources (WAC 173-406)
  - Issued concurrently with Title V permit
- **Title V – Air Operating Permits**
  - Program is coordinated by Department of Ecology (WAC 173-401)

Small Unit Notification (SUN)

- A SUN may be used in lieu filing a permit application
- Applicant files a notification containing specified information. No public notice or comment period.
- Only available for the following source categories:
  - Batch coffee roasters — <100 lb capacity
  - Gas fire boilers/heaters — 0.4-2.0 MMBtu/hr
  - Emergency engines — <1,000 horsepower
  - Non-perchloroethylene dry cleaners — <84 lb capacity
  - Rock crushing equipment — Individual pieces at existing operations

SWCAA Southwest Clean Air Agency

SUN Processing

- Submit notification to SWCAA
- Review by SWCAA
- Confirmation letter issued by SWCAA

ADP Application Process

- Pre-application meeting / call
- Application submittal
- Application notice
- Review by applicant
- Public comment period (if necessary)
- Public hearing (if necessary)
- Final air discharge permit
  - Issue/modify/deny based on public involvement

ADP Application Contents

- Process flow sheets and equipment layout diagrams.
- Manufacturer, model number, size, serial numbers (for each piece of equipment).
- Quantify average and maximum hourly throughput values, average yearly totals, and maximum concentrations for each pollutant.
- Applicant's calculation of the kinds and amounts of emissions for each emission point, materials handling operation or fugitive category (both controlled and uncontrolled).
- Plot plan including identification of proposed emission points to the atmosphere, distance to property boundaries, height of buildings and stack height above ground level.
- Identification of raw materials and/or product specifications (physical and chemical properties) and typical ranges of operating conditions as related to each emission point (toxic air contaminants require a separate summary); Safety Data Sheets (SDSs) should be included for all compounds used.
- Identification of the methods/equipment proposed for prevention/control of emissions to the atmosphere.
- Information sufficient to demonstrate the ability of the emission controls proposed as being consistent with those provided in the applicable regulations (BACT/NSPS/RACT/NESHAPS/LAER analysis).
- The kinds and amounts of emission offset credits proposed for assignment when operations are within a non-attainment boundary (see SWCAA 400-120 and 400-130).
- Estimates of the proposed project ambient impact under average and least favorable conditions where pertinent to PSD (WAC 173-400-141) or Toxic Air Pollutants (WAC 173-460) (1998) requirements.
- **All applications need to be accompanied with a completed SEPA checklist or SEPA determination.**

ADP Application Timeline

Pre-application	Telephone Call / Meeting
Submit application	30 days for completeness review
Complete application	Varies
Issue a permit	60 days after complete application
Draft permit	30 comment period (if necessary)
Public hearing	30 days min notice (if necessary)
Final Permit	Effective immediately
Appeal	30 day from receipt

Common Problems

- Incomplete application
- Construction / operation without permit
- Changes in proposed equipment / processes
- SEPA documentation missing
- Testing requirements not completed
  - Reminders sent to facilities 3-4 months in advance

ADP Permit Contents

- Identification of Emission Units / Facility
- Emission Limits – short / long term
- Operating Limits / Requirements
- Startup/Shutdown/Malfunction (SSM)-
  Limits/requirements
- Monitoring / Recordkeeping / Reporting
- Emission testing Requirements / Protocols

Registration Program

- Fee program that pays for inspections, emissions inventory, enforcement and business assistance
- Does not apply to major or exempt facilities
- Fee is based on 3 parts – SWCAA 400-100
  - tons per year of criteria air pollutants / $57
  - tons per year of toxic air pollutants / $31
  - number of emission units / $112
- Fee assessed annually in January for fiscal year that covers July 1 to June 30 – dates set by statute
- This is NOT a permit fee but if unpaid can result in forfeit of permit

SWCAA WEB Resources

www.swcleanair.gov

air permits

www.swcleanair.gov/permits/index.asp

forms and applications

www.swcleanair.gov/forms/index.asp

regulations

www.swcleanair.gov/regs/index.asp

facility details

www.swcleanair.gov/epages/facilityselect.asp

pollutants

www.swcleanair.gov/epages/pollutants

SWCAA
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Contact For More Information

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