

Air Pollution Control Program Permits Section

Air Permitting

Two types of air permits:

- New Source Review (NSR)/Construction Permit
 - Permit required prior to commencing construction
 - Allows construction and operation
 - Based on project's potential emissions
- Operating Permit/Title V (Clean Air Act)
 - Required <u>after</u> commencing operation
 - Based on entire installation potential emissions

General Air Permitting Procedure

- Installation obtains a Construction/NSR Permit for a new installation or a project at an existing installation
- 2. Installation constructs and commences operation
- 3. Installation obtains/amends Operating Permit
 - within 30 days (Basic sources), 90 days (Intermediate sources), or 12 months (Title V sources) of commencing operation

Air Permit Applicability

- Potential emissions of <u>project</u> and <u>installation</u> the determine type of permit needed, if any
- Potential emissions are based on maximum hourly design rate operating 8,760 hours per year
- Emission factors are obtained from stack testing, EPA (AP-42 or FIRE), material balance, or engineering data
- Control devices may only be considered in the potential to emit if they are inherent to the process or a federally enforceable condition requires their use

NSR Permitting Thresholds

Pollutant	Insignificant Levels	De Minimis Levels	Major Source Thresholds for Named Sources	Major Source Thresholds for Non-named Sources
1 onutuit	(lb/hr)	(tpy)	(tpy)	(tpy)
PM	-	25	100	250
PM_{10}	1.0	15	100	250
PM _{2.5}	-	10	100	250
SOx	2.75	40	100	250
NOx	2.75	40	100	250
VOC	2.75	40	100	250
CO	6.88	100	100	250
GHG (CO ₂ e)	-	75,000/100,000		
GHG (mass)	-	-	100	250
HAP	0.5 or SMAL	10 individual/25 combined		

Screening Model Action Level (SMAL) available at: http://www.dnr.mo.gov/env/apcp/docs/cp-hapsmaltbl6.pdf List of Named Sources can be found in 10 CSR 10-6.020(3)(B)

Installations in non-attainment have a major source level of 100 tpy or less, depending on the severity of non-attainment

Construction/NSR Permits

- Required for construction of a new air pollution source, or modification of an existing source
 - Depending on the potential emissions (PTE) of the project, a permit may not be required
 - The type/level of construction permit is dependent upon PTE of project
- Timeframes 90 days or 184 days
 - \$50/hr review fee charged for permit review
- Do not expire; however, construction must begin within 18 months or 24 months (dependent on permit type)

Types of Air Construction Permits

- Prevention of Significant Deterioration (PSD)
 - Major review requires air quality analysis (modeling), control technology review, and public notice
- Minor* requires air quality analysis
- De Minimis* lowest emission thresholds, can take limits to these levels to avoid PSD review
- Other portable, temporary

^{*}Can take limits in these permits to minor or de minimis levels to avoid PSD review

Applicability Determinations

("No Permit Required" letters)

- Outline why a project does not require permit
- Often use exemptions in 10 CSR 10-6.061
 - Insignificant emission exemption levels 10 CSR 10-6.061(3)(A)3
 these are compared to PTE for the entire project
- Remember the existing facility or the project's potential to emit has to be above de minimis for one pollutant (subject to 10 CSR 10-6.061) before we look at 10 CSR 10-6.061
- If the project does not need a permit, they don't need to wait for determination letter to start construction

Pre-Construction Waivers

- Allows a company to start construction prior to receiving a construction permit
- Requirements
 - Facility cannot have already started construction
 - The new project cannot be major
 - Will take into consideration controls
 - Will not take into consideration proposed limits

Air Quality Analysis (computer model)

- Required for most PSD/major construction permits and some minor permits – depends on the type and level of emissions
- Hazardous Air Pollutants (HAP)
- National Ambient Air Quality Standards (NAAQS)
- Increment
 - $-PM_{10}$, $PM_{2.5}$, SO_2 , and/or NO_x
- Class I Analysis Depending on Location

Operating Permit Thresholds

Pollutant	De Minimis Levels (tpy)	Major Source Thresholds for Named Sources (tpy) – includes fugitives	Major Source Thresholds for Non-named Sources (tpy) – excludes fugitives		
PM	25	100	100		
PM ₁₀	15	100	100		
PM _{2.5}	10	100	100		
SO _x	40	100	100		
NO _x	40	100	100		
VOC	40	100	100		
CO	100	100	100		
GHG (CO ₂ e)	100,000				
GHG (mass)	-	100	100		
HAP	10 individual/25 combined				

List of Named Sources can be found in 10 CSR 10-6.020(3)(B)

Air Operating Permits

- Required after commencing operations
 - Type of operating permit depends on the PTE of the entire installation, may not need an operating permit
- Expires 5 years after the Issuance Date permit shield
- Places all federal and state air regulations applicable to an installation in one document – tool for inspectors, facility, and citizens
- Establishes provisions for testing, monitoring, recordkeeping, and reporting to demonstrate compliance
- Entire installation

Types of Air Operating Permits

- Part 70 Installations with annual potential emissions greater than 100 tons of any criteria pollutant, greater than 10 individual/25 combined of HAP, or 100,000 tons of GHGs – public notice and EPA review required
- Intermediate Part 70 sources that take voluntary limits to less than the Part 70 thresholds (synthetic minor sources) – public notice required
- Basic (state permit only) Installations with potential emissions less than Intermediate thresholds – no public notice
- Other Part 70 required by certain MACT/NSPS

Operating Permit

- Applicable NSPS or MACT may trigger requirement to obtain an operating permit
- Permit can only be issued to installations that are in compliance with all applicable requirements.
- Site inspections are reviewed to determine compliance status and compliance history.
- Any Consent Decree's are incorporated into the operating permit.

Natural Resources

Air Permitting Information & Guidance

http://www.dnr.mo.gov/env/apcp/permits.htm

- Permits on Public Notice
- Issued Permits
- Search Pending Projects
- Search Completed Projects
- Air Construction Permit Guidance

Natural Resources

Permitting Resources

- EPA's AP-42
 http://www.epa.gov/ttn/chief/ap42/index.html
- EPA's Applicability Determination Index http://cfpub.epa.gov/adi/
- EPA's WebFIRE
 http://www.epa.gov/ttn/chief/webfire/index.html
- EPA's Air Toxics Website (MACT)
 http://www.epa.gov/ttn/atw/index.html
- Texas Webpage for NSPS and MACT
 http://www.tceq.state.tx.us/permitting/air/nav/air_supportsys.html

Natural Resources

Contact Information

Kendall Hale – Permit Section Chief <u>kendall.hale@dnr.mo.gov</u>

Mike Stansfield – Operating Permit Unit Chief michael.stansfield@dnr.mo.gov

Susan Heckenkamp – NSR Unit Chief susan.heckenkamp@dnr.mo.gov

Permit Section Phone Number 573-526-3835



Questions?