Webinar: Air Permitting Requirements for Gas Stations on Tribal Lands in Region 9



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Air Permits Section, Air & Radiation Division

U.S. EPA Region 9



- Introductions
- Air permitting basics
- Registration or permit?
- Emission Calculations
- What if I didn't register or get a permit?
- Types of permits for gas stations
- What to expect in the permitting process
- Compliance Phase
- Questions



Introductions

- Region 9's Air Permits Section, Air & Radiation Division
 - Lisa Beckham
 - Khoi Nguyen
 - Sheila Tsai
 - Darcy Emm (ITEP summer intern)
- Region 9's Grants & Program Integration Office, Air & Radiation Division
 - Lauren Maghran



Air Permitting Basics

- What is an air permit?
- New Source Review (NSR) is the preconstruction permitting program under the Clean Air Act for stationary sources of air pollution
- Requirements vary based on size and location of the air pollution source
- Requires certain air pollution sources to be reviewed and receive a permit prior to construction
- Ensures that increasing air pollution will not interfere with attainment and maintenance of the National Ambient Air Quality Standards (NAAQS)



Air Permitting Basics

- EPA's NSR program for minor air pollution sources in Indian country is generally referred to as the "Tribal Minor NSR" program. (Gas stations are usually minor sources.)
- Tribal Minor NSR program requirements for new/modified sources
 - Requires a control technology review
 - Air quality impact analysis
- The control technology review and air quality impact analysis are independent requirements
- Local air quality conditions influence required air pollution control technologies (nonattainment status)



Air Pollution from Gas Stations

- The pollutant of concern for gas stations is typically volatile organic compounds (VOC)
- What are the minor NSR permitting/registration thresholds for VOC?
 - In ozone attainment areas, potential VOC emissions of 5 tons per year (tpy) or more
 - In ozone nonattainment areas, potential VOC emissions of 2 tpy or more



Air Permitting Basics

- Existing minor sources of air pollution need to register with Region 9, Air Permits Section
 - No cost, complete form
- New or modified minor sources need NSR permit
- Am I existing, new, or modified?
 - An existing source commenced construction before September 4, 2014.
 - A new source is any source that will commence construction on or after September 4, 2014
 - A modified source is any new or existing source that modifies (aka "expands") a registered or permitted source on or after September 4, 2014.



Does my gas station need to register?

- Did you commence construction of your gasoline dispensing facility (GDF) (aka "gas station") prior to September 4, 2014?
 - If yes, maybe, see next question
 - If no, no, but may need a permit
- Will your gas station have potential emissions of NSR pollutants above the minor NSR permitting thresholds?
 - If yes, you need to register, contact Region 9 for form/assistance
 - If no, you do not need to do anything, except continue to comply with National Emission Standards for Hazardous Air Pollutants (NESHAP) for gas stations, as applicable, <u>40</u> <u>CFR part 60, subpart CCCCC</u>



Does my gas station need a permit?

- Did you commence construction your gas station on or after September 4, 2014 or are planning to build one in the future?
 - If yes, maybe, see next question
 - If no, see registration requirements
- Will your gas station have potential emissions of NSR pollutants above the minor NSR permitting thresholds?
 - If yes, you need a permit, contact Air Permits Section for further assistance in submitting an application
 - If no, you do not need to do anything, except continue to comply with National Emission Standards for Hazardous Air Pollutants (NESHAP) for gas stations, as applicable, <u>40</u> <u>CFR part 60, subpart CCCCC</u>



How do I calculate my emissions?

- EPA Region 9 has an Excel spreadsheet to help you calculate your potential to emit (PTE) – "GDF PTE Calculator"
 - Assume year is 2014 for registrations
- You need to know the number and type of pumps at the gas station
 - Number of refueling positions (usually 2 per pump for regular autos and 1 for heavy duty diesel pumps)
- Also need to know whether the gas station has an emergency generator and the size (brake horsepower rating)
- Air Permits Section can walk you through the spreadsheet over the phone, usually only takes 5 minutes



What if I didn't register or get a permit?

- Existing gas stations were required to register in 2014
 - If you have not submitted your registration please submit it now!
 - We use our database of registered sources for air planning purposes
- New or modified gas stations that need permits
 - Please apply for a permit now!
 - The NSR program is a **preconstruction** program. Permits are supposed to be in place prior to construction activities.
- Enforcement discretion



I need a permit, now what?

- START THE PERMITTING PROCESS ASAP
 - When a permit application is approved you have 18 months to commence construction before the authorization to construct expires
 - Better to have in place early then having to delay construction while waiting for a permit
- Three permitting options for gas stations in Region 9
 - GDF Permit by Rule available to gas stations outside of California
 - GDF General Permit available to gas stations within California
 - Site-specific permit available in all areas, permit tailored to the specific equipment at your gas station



GDF Permit by Rule

- National option, but excludes areas within California due to air quality issues
- Referred to as "notice and go" agree to comply with requirements in <u>40 CFR 49.164</u>, no public comment period
- What does it require?
 - Requirements based on the National Emission Standards for Hazardous Air Pollutants (NESHAP) for gas stations – <u>40</u> <u>CFR part 63, subpart CCCCC</u>
 - Stage I controls related to gasoline storage tanks and unloading gasoline from delivery truck into tanks
 - Ongoing monitoring, testing, recordkeeping and reporting requirements



California GDF General Permit

- Developed by Region 9 for gas stations in California, as GDF Permit by Rule excludes areas within California
- Application requires additional review prior to approval compared to the GDF Permit by Rule, no public comment period



GDF General Permit

- What does it require?
 - Ozone attainment areas requirements the same as the GDF Permit by Rule
 - Marginal or moderate ozone nonattainment areas requirements the same as the GDF Permit by Rule
 - Serious, severe, or extreme ozone nonattainment areas includes requirements from the GDF Permit by Rule, but also adds:
 - 98% control requirement for Stage I systems
 - Stage II controls on the pumps (CARB-certified equipment)
 - Additional monitoring and testing requirements



GDF General Permit

- Tribal sovereignty and adopting California requirements
 - The California GDF General Permit incorporates by reference CARB requirements for those gas stations required to use stage II controls.
 - Incorporation by reference does not give California any rights to regulate tribes in California
 - For example, if California changes its program those changes have no affect on a gas station covered by the GDF General Permit. Only the EPA can revise the requirements in the permit.
 - The national Permit by Rule also uses incorporation by reference for test methods that have been developed by California air agencies.



Site-Specific Permits

- This is the standard permitting process for most commercial/industrial sectors across the country
- Requires a public comment period
- Tailored to the specific source; permit by rule/general permit are pre-determined permit conditions
- When would I use this for my gas station?
 - You do not meet the requirements for a permit by rule or general permit (e.g., will dispense more gasoline than allowed)
 - Unique air quality considerations related to ozone nonattainment status



- Complete an application form (Notice of Coverage, Request for Coverage, General Application Form)
 - Include your emission calculations! GDF PTE Calculator
- Meet the endangered species and cultural resources/historic properties requirements
 - Often these requirements are also done through a BIA lease process and can be used for the EPA process
 - Must be tailored to the gas station project.
 - If no BIA process required, does not relieve you from meeting these requirements for EPA purposes
 - Often the HARDEST part of the permitting process



Permitting Process

- Key difference between species requirements and cultural resources: U.S. Fish & Wildlife is the agency protecting species, THPO for cultural resources
- Cultural resources be sure to include any cultural resource monitoring agreements in the application
- Endangered species typically more challenging analysis, many applicants hire a consultant to conduct a biological assessment
- We welcome "draft" applications being submitted in advance so we can review/comment and speed up the process when the official application is received.



Compliance Phase

- Read the permit and conditions during the application process; please ask questions
- Requirements do not stop once the permit is issued/approved
- Ongoing monitoring, testing, recordkeeping, and reporting for the life of the gas station
- Plan for resources to ensure ongoing compliance



Compliance Phase

What are your questions and concerns regarding compliance?



One last item...

Requirements related to gasoline sold:

- Federal law requires gas stations in severe and extreme ozone nonattainment areas to sell fuel that complies with the EPA's reformulated gasoline standards (RFG)
- California RFG meets federal RFG
- Everyone else can use conventional gasoline



Main Region 9 Tribal NSR page: <u>https://www.epa.gov/caa-permitting/tribal-minor-new-source-review-permitting-epas-pacific-southwest-region-9</u>

Pending and issued Region 9 Tribal NSR permits: <u>https://www.epa.gov/caa-permitting/tribal-new-source-review-permits-epas-pacific-southwest-region-9</u>

California GDF General Permit page: <u>https://www.epa.gov/caa-permitting/permits-gas-stations-tribal-lands-california</u>

GDF Permit by Rule page: <u>https://www.epa.gov/tribal-air/5-</u> <u>source-categories-gasoline-dispensing-facilities-final-rule</u>



GDF PTE Calculator v2.0: <u>https://www.regulations.gov/document?D=EPA-R09-OAR-2016-0580-0038</u>

California GDF General Permit Request for Coverage: <u>https://www.regulations.gov/document?D=EPA-R09-OAR-2016-0580-0026</u>

Registration Form: <u>https://www.epa.gov/caa-permitting/region-9-tribal-minor-nsr-</u> <u>form-existing-source-registration-form-reg</u>



Questions and Contact Info

Gas Station contacts in the Air Permits Section:

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Permitting Thresholds – Minor Source

Pollutant	Attainment Area (tons per year)	Nonattainment Area (tons per year)
Carbon Monoxide (CO)	10	5
Particulate Matter (PM)	10	N/A
Particulate Matter (PM ₁₀)	5	1
Particulate Matter (PM _{2.5})	3	0.6
Sulfur Dioxide (SO ₂)	10	5
Nitrogen Oxides (NOx)	10	5
Volatile Organic Compounds (VOC)	5	2



Permitting Thresholds – Major Source

	Attainment	Nonattainment Areas	
Pollutant	Areas	Designation	Threshold
Ozone (NOx	250 or 100 tpy (based on type of source)	Marginal	100 tpy of VOC or NOx
and VOC)		Moderate	100 tpy of VOC or NOx
		Serious	50 tpy of VOC or NOx
		Severe	25 tpy of VOC or NOx
		Extreme	10 tpy of VOC or NOx
PM _{10,} PM _{2.5}	250 or 100 tpy	Moderate	100 tpy
		Serious	70 tpy
СО	250 or 100 tpy	Moderate	100 tpy
		Serious	50 tpy
SO ₂ , NO ₂	250 or 100 tpy	N/A	100 tpy