

New Source Review (NSR) Reform & Common Mistakes in Air Construction Permitting

2019 Midwest Environmental Compliance Conference

Also Karaoke night this Friday May 3 at Samuel F. Gearhart Detachment, Marine Corps League. See you there!

<https://www.facebook.com/events/2284072245214582/> Doors

at 6pm, music at 7pm

Wendy Vit, PE, Senior Environmental Engineer



April 24, 2019

Major Source Construction Permit Applicability

- Prevention of Significant Deterioration (PSD) and Nonattainment New Source Review (NSR) applicability rules generally consistent from state to state
- Major source: potential to emit (PTE) > 100 tpy criteria pollutants for “listed” source categories or > 250 tpy for other categories
- Major modification: significant net emissions increase based on projected actual (or PTE) minus baseline actual and netting analysis

Pollutant	Significant Emission Rates- Criteria Pollutants (tons/yr)
PM10	15
PM2.5	10
SOx, NOx, VOC	40
CO	100
Lead	0.6





Today's EPA NSR Reform

- Purpose is to clarify and streamline major source NSR permitting
- Latest EPA actions primarily in form of memorandums, guidance, policy changes, interpretations

NSR Reform Actions: Projected Actual Emissions

- December 2017 policy memorandum from EPA Administrator Pruitt
- EPA will not “second guess” a company’s projected actual emissions analysis as long as procedural requirements are followed

NSR Reform Actions:

Withdrawal of Once-In-Always-In

- January 2018 guidance memorandum
- Sources that reduce hazardous air pollutant (HAP) emissions below major source thresholds can be reclassified as area sources and no longer be subject to major source Maximum Achievable Control Technology (MACT) regulations
- EPA is developing a proposed rule to implement this change

NSR Reform Actions: Project Emissions Accounting

- In March 2018 guidance memorandum from EPA Administrator Pruitt
- Sources can account for emissions reductions from a project under Step 1 of NSR applicability process

NSR Reform Actions: EGU Applicability

- In August 2018, EPA proposed revisions to NSR as part of Affordable Clean Energy rule
- Would physical or operational change made to an electric generating unit (EGU) result in an increase in hourly emissions rate

NSR Reform Actions: Project Aggregation

- In November 2018, EPA finalized reconsideration of a 2009 action clarifying project aggregation for determining major source NSR applicability
- Physical & operational changes that are “substantially related” should be combined into a single project for consideration of major NSR applicability
- Presumption that activities separated by 3 years not substantially related

NSR Reform Actions: Common Control

- April 2018 letter detailing analysis of whether emissions from Meadowbrook Energy biogas processing facility should be aggregated with Keystone Sanitary Landfill for permitting purposes
- For source determinations, consideration of control over decisions of other entities rather than support or dependency relationships

NSR Reform Actions: Ambient Air Policy

- November 2018 draft guidance memorandum
- Ambient air definition: portion of the atmosphere, external to buildings, to which the general public has access
- Exclusions from ambient air – because of advances in technology, measures other than physical barriers may now be used to preclude public access
- EPA intends to finalize guidance after considering comments received

NSR Reform Actions: Closing Thoughts

- State permitting agencies with delegated programs are taking the lead on implementation
- Questions and uncertainty remain
- If applying any of these NSR reform actions, communicate with state permitting agency early in the process

Common Air Construction Permitting Mistakes: Approach



- Asked each state air permitting agency in EPA Region 7:
 - What are the most common mistakes and sources of confusion about construction permits?
 - What resources are available to assist permit applicants?

Acknowledgements

- Ashley Eichman
 - Environmental Program Supervisor, Air Permitting Section, Kansas Dept. of Health & Environment
- Kendall Hale
 - Air Permit Section Chief, Missouri Dept. of Natural Resources
- Sarah Piziali
 - Construction Permit Section Supervisor, Iowa Dept. of Natural Resources
- Sarah Starostka
 - Air Construction Permitting Unit Supervisor, Nebraska Dept. of Environmental Quality



Minor Source Construction Permit Applicability

- Considerable variation from state to state – *important to read state's regulations and guidance!*
 - Minor source PTE thresholds
 - Exemptions
 - Permit-by-rule/general permit options



Defining the Project

- Provide sufficient detail about project
- Talk to your state permit agency about project aggregation



Bottlenecks

- Unclear description of, or failure to account for, bottlenecks
- Can lead to future permit complications as well



Application Issues – Administrative



- Incomplete application package/forms
- Confidential or propriety information – adds permit review & processing time!
- Responsible official signature

Insufficient Supporting Information

- Emission factors
- Capture efficiency
- Safety Data Sheets
- Manufacturers specifications, including maximum capacity
- Engine certificates of conformity
- Process flow diagrams: track emissions *and* process



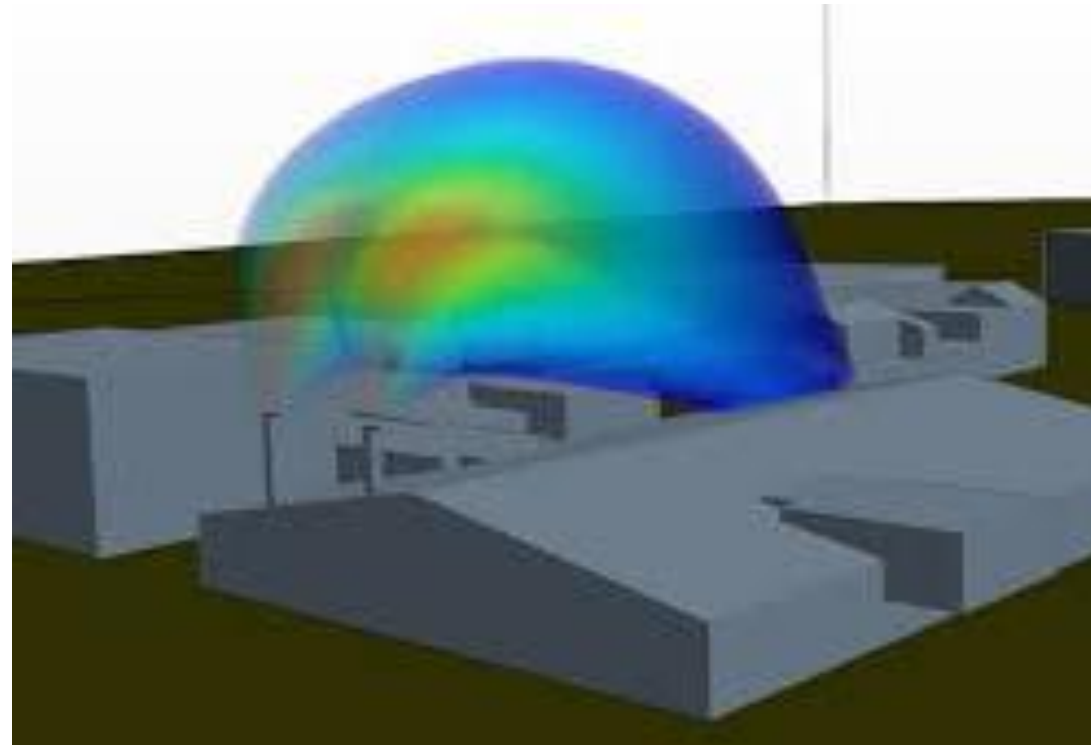
PTE Calculations



- Insufficient documentation (see previous slide) – *providing Excel file is helpful*
- Controlled vs. uncontrolled emissions
 - Ensure controlled emissions are realistic
- Short-term (e.g., 1-hour) vs. annual emissions
- Incorrect calculations

Air Modeling

- Submit modeling protocol for approval ahead of time
- Haul roads can be an issue
- Use stack parameters (temperature & flow) consistent with emissions scenario



Wrap-Up and Post-Permit Activities

- Thoroughly review draft permit and provide feedback to agency – *make this step a priority!*
- Be familiar with all your construction permits
- Talk to your permitting agency about permit “true ups” (e.g., design vs. as built discrepancies)



Other Issues – No Permit Required?

- Document rationale for no permit required – categorical exemptions, PTE calculations below permitting thresholds
- At a minimum, write a “memo to file”

Tips and Resources



- Do your homework – *review regulations, guidance, instructions, forms*
- Talk to permitting agency or meet with them in person – *clearly define project and goals*
- Follow state application checklists

Kansas: <http://www.kdheks.gov/air-permit/indexPrmt.html>

A screenshot of the Kansas Department of Health and Environment's Air Permit website. The header features a banner with a landscape image, the "Kansas" logo, and the names of the Governor and Secretary. Below the banner is a green navigation bar with links to Home, Public Health, Environment, Health Care Finance, Laboratories, and News. The main content area is titled "Air Permit" in green. On the left is a sidebar with a search bar and a list of links including Bureau of Air Home, Contact Us, Programs, Air Public Notices, District Offices, Kids' Zone, and Air Quality Statutes and Regulations. The main content area contains two notes about permit application updates and a list of links for various permit types and technical guidance.

Kansas
Department of Health
and Environment

Laura Kelly, Governor
Lee A. Norman, M.D., Secretary

Home Public Health Environment Health Care Finance Laboratories News

B of A - Permitting

A to Z Topic Listing

Air Permit

Note: Because of regulation changes, most of the construction permit application forms have been updated on November 18, 2016. If you have bookmarked any of these forms please refresh the link.

Note 2: We have fillable forms below that will sometimes have trouble opening in web browsers. If you see a Please Wait message page, go to the download icon and save the form to your desktop or open with Adobe Acrobat or Reader DC.

- Construction Permit Forms and Applications
- Operating Permit Forms and Applications
- Rock Crushers Expedited Forms and Applications
- Permit Technical Guidance and Information
- Air Permit Frequently Asked Questions
- Final PSD Permits
- Air Permit Modeling
- Helpful Links Outside KDHE


Kansas Small Business Environmental Assistance Program:

<https://www.sbeap.org/>

KANSAS STATE
UNIVERSITY

Search web, people, directories
Browse A-Z Sign in ▼

K-State > Engineering > SBEAP



Pollution Prevention Institute




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Upcoming Events

Apply Now for No-cost
Pollution Prevention
Assistance
April 2, 2019 - 11:00am
*The summer 2019 P2
intern program is offering
an opportunity for
Kansas...*

Free, Confidential Assistance




Does your business need environmental technical assistance?
Would you like help reducing emissions and waste?

[Ask a question](#)
[Request a site visit](#)

News feed

Tweets by @sbeap

K-State PPI Retweeted

 **U.S. EPA** @EPA
It's Winning on Reducing Food

Nebraska: <http://deq.ne.gov/NDEQProg.nsf/OnWeb/APP>

- Air Quality Permit Hotline (877) 834-0474
- Permit Matrix



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Welcome! This tool was developed as a resource to examine potential permits issued by the Nebraska Department of Environmental Quality (NDEQ) that apply to your operations. If you have specific questions about how the permits discussed within affect your particular circumstances, please contact the NDEQ's Small Business and Public Assistance Coordinators at (402) 471-8697 or (402) 471-4251. You may contact the NDEQ Main Office at (402) 471-2186.		
Initial Questions to Ask Yourself...		
Am I building a new facility?	if you answered yes...	Examine potential air permitting, stormwater, and wastewater disposal issues.
Does my project or facility have any potential air emissions?	if you answered yes...	Examine which air permits will pertain to your project.
Does my project involve animal feeding operations?	if you answered yes...	Examine permitting requirements for livestock and concentrated feeding operations.
Does my project or facility have the potential for wastewater discharges?	if you answered yes...	Pay close attention to the various NPDES permits.
Is stormwater contamination a concern for my operations?	if you answered yes...	NPDES construction and industrial stormwater permits may pertain to your operations.
Will my facility be treating any kind of solid waste - for composting, permanent disposal, etc.?	if you answered yes...	Examine the various solid and hazardous waste permits.
How to Use the Tool		
Industry Sector	Permits/Authorizations/Registrations	
	Title 129	
	Air General Operating Permit	
Program Overviews	AOGP - Overview	This is a link to the Nebraska Title relevant to this permit. All links in the spreadsheet will display in a blue font. When placing your mouse over the word, the url will be shown.
Program Guidance Documents	AOGP - Documents	Links to a page summarizing NDEQ websites applicable to the permit, as well as a discussion on permit fees.
Supporting Regulations	Title 129, Chapter 9	NDEQ guidance documents and applications applicable to the permit can be found here.
Aggregate Processing (see also concrete batch plants)	X	A link to the Title, and specific Chapters if applicable, that pertain to the permit.
Agricultural Chemical Distribution (see also Co-ops)	X	
FAQS Matrix Introductions Master ACP - Overview ACP - Documents ACPG - Overview ACPG - Documents AOP - Overview AOP - Documents		

Missouri: <https://dnr.mo.gov/env/apcp/permits.htm>



The screenshot shows the website's header with the Missouri Department of Natural Resources logo and navigation links: MO.gov, Governor Parson, Find an Agency, Online Services, and a search bar. Below the header is a blue navigation bar with links: Programs, Forms and Permits, Publications, Laws and Regulations, Online Services, and Calendar of Events. The main content area is titled "Permits" and contains several links and information:

- Fee Adjustments for Operating Permits** — Click to review the new fees, effective Jan. 1, 2017.
- Fee Adjustments for Construction Permits** — Review the new fees, effective Jan. 1, 2017.
- Permits on Public Notice** — Click on this link to access drafts of permits. All of them are on public notice for at least 30 days. The department accepts comments during these periods of public notice.
- Issued Permits** — Access electronic copies of the permits issued by the department's Air Pollution Control Program.
- Pending Projects** — Go here to search pending projects currently under review. Search fields include county, city and date received.
- Completed Projects** — Search completed projects by county, city or company name.

Below the links is a section titled "Guidance" with the following links:

- Guidance for Air Construction Permits
- Guidance for Air Operating Permits
- Guidance for Permit Modeling

On the right side of the page, there is a sidebar with a list of links:

- Program Home Page
- Air Conservation Commission
- Air Pollutants
- Air Program Advisory Forum
- Air Quality
- Asbestos
- Forms and Applications
- Gateway Vehicle Inspection Program
- Laws and Regulations
- Ozone
- Permits
- Publications and Reports
- Public Notices-Comment Periods
- QAPP Template
- Air Pollution Compliance/Regulatory Assistance
- State Plans and Boundary Designations
- Vapor Recovery Information and Compliance Requirements
- Volkswagen Trust

Iowa: <https://www.iowadnr.gov/Environmental-Protection/Air-Quality/Construction-Permits/Construction-Permitting-Materials>



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Air Quality

- > [Air Pollutants](#)
- > [Air Quality Fees](#)
- > [Air Quality Index \(AQI\)](#)
- > [Air Toxics - NESHP](#)
- > [Animal Feeding Operations](#)
- > [Asbestos/Training Fires](#)
- > [Availability Of Air Resources](#)
- > [Compliance](#)
- > [Construction Permits](#)
 - > [Construction Permitting Materials](#)
 - > [Exemptions](#)
 - > [Permit Search](#)
 - > [DERA Grants](#)

Construction Permitting Materials

This page contains the forms and other information for submitting construction permit applications. These applications are required by the Iowa DNR before constructing or modifying equipment or control equipment.

(There are a few types of very small sources that can be constructed without obtaining a permit. These are discussed on the EXEMPTIONS page).

If you have trouble downloading any of this material, you can receive copies of the application forms and other information by sending your name and address to Air Quality Bureau, Dept. of Natural Resources, 502 E. 9th St., Des Moines, IA 50319. You can also call the Construction Permitting helpline toll free at 1-877-AIR-IOWA (1-877-247-4692).



877-AIR-IOWA

Questions about air quality construction permits?

877-AIR-IOWA
(877-247-4692)

Basic Application Forms and Guidance

[Application Forms](#)

[General Guidance](#)

[Notification](#)

[PSD/Complex Permits](#)

[Rules](#)

[eAirServices](#)

- [Application Forms Frequently Asked Questions \(FAQ\)](#) PDF
- [Construction Permit Application Instructions](#) PDF (updated 1/2018)



IOWA DEPARTMENT OF
NATURAL RESOURCES

GEOENGINEERS

EPA New Source Review Resources

- New Source Review Policy and Guidance Document Index
 - <https://www.epa.gov/nsr/new-source-review-policy-and-guidance-document-index>
- RACT/BACT/LAER Clearinghouse



Closing Thoughts

- Submit complete, accurate permit application packages with sufficient supporting documentation
- Communicating with state permitting agencies is key

Contact

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