



STATE OF NEW JERSEY  
DEPARTMENT OF ENVIRONMENTAL PROTECTION



DIVISION OF AIR QUALITY  
AIR QUALITY, ENERGY, AND SUSTAINABILITY

CVP/SRAG MEETING  
JUNE 12, 2019

AIR PERMITTING OVERVIEW



Presented by: Kenneth Ratzman, Division of Air Quality

# WHEN IS AN AIR PERMIT NEEDED?

- See N.J.A.C. 7:27-8.2 Applicability – READ FULL TEXT
- 7:27-8.2(c)2 – any equipment that has toxic emitted a rate  $> 0.1$  pounds per hour
- 7:27-8.2(c)15 – any equipment which is used for treating groundwater, industrial waste water, or municipal wastewater with .....
- 7:27-8.2(c)16 - equipment that is used for treating waste soils or sludges, including .....
- 7:27-8.2(c)17 - equipment used for the purpose of venting a closed or operating dump or landfill

# WHEN IS AN AIR PERMIT NEEDED? (MORE)

- General Catch Alls
  - >50 lb/hr of use of material (NJAC 7:27-8.2 (c)19)
    - If digging up dirt, easily over 50 pounds if doing anything other than placing in a dump truck/roll-off for immediate removal
    - Nearly any in-situ treatment
  - >2000 gallon VOC storage (NJAC 7:27-8.2 (c)9)
- Exemption from Permitting
  - Sub-Slab Depressurization System Policy
    - **IF** the criteria is met – NO TOXICS
    - [https://www.nj.gov/dep/srp/guidance/vaporintrusion/vig\\_main.pdf?version\\_4.1](https://www.nj.gov/dep/srp/guidance/vaporintrusion/vig_main.pdf?version_4.1) APPENDIX K

# PERMITTING OPTIONS

- Online General Permits
  - GP 008 Site Remediation Activities for Gasoline Contamination at Vehicle Fueling Stations (SVE)
- Preconstruction Permits (PCP's) - Use RADIUS Software, <https://www.state.nj.us/dep/aqpp/radius.html>

# WHAT IS IN A COMPLETE AIR PERMIT APPLICATION?

- Air Permit application prepared using RADIUS software (imports into NJEMS)
  - RADIUS HELPLINE (609) 633-8250
- Include Emission calculations for all air pollutants (VOC's, HAP's etc.) above Reporting Thresholds – **CRITICAL STEP**
- Any other supporting information such as manufacturers data including air control device information, facility map, site plan needed for modeling, etc.

# POTENTIAL SOURCES

- Soil might be your source!
- Mixing Equipment
- Waste Piles
- Treatment Pits
- Landfills

# CONTROL TECHNOLOGIES

- Carbon Absorbers – should be a minimum of two in series (monitor breakthrough between two units)
- Flares - Enclosed Flares Only
- Thermal Oxidizer (might call it an incinerator)
- Other

# STACKS

- Stack Configuration
  - Exhaust Flow Rate
  - Temperature
  - Height
  - Discharge Direction
  - Distance to Property Line (nearest environmental receptor)
- Maybe no Stack?
  - Discharge at ground level
  - No or limited Dispersion

# WHAT IS IN AN AIR PERMIT APPROVAL?

- Very specific conditions – **READ THE PERMIT!**
- Monitoring and Recordkeeping
- No visible emissions (N.J.A.C. 7:27-6.2(d & e))
- No offsite odor (N.J.A.C. 7:27-5.1 and 5.2)
- Specific and enforceable limitations on emissions

# TIMEFRAMES

- Approval takes time
  - Risk evaluation takes time if more than screening worksheet
  - Odor concerns must be addressed
  - Build in public comment period for Newark/Camden and any future EJ area

# RISK ASSESSMENT (SIMPLE)

- Health Risk Screening Worksheet
  - Used for any air contaminant that is above reporting thresholds – see N.J.A.C. 7:27-17.9(b)
  - Worksheet can be found at:  
<https://www.state.nj.us/dep/aqpp/risk.html>
  - If Worksheet does not show negligible risks, a refined risk assessment must be conducted

# RISK ASSESSMENT (MORE CHALLENGING)

- More refined analysis
- Evaluate the unique characteristics of the facility
- What is Needed
  - Atmospheric dispersion modeling protocol
  - Detailed plot plan
  - Protocol must be approved before modeling study is performed.
  - Stack parameters
- Follow Technical Manuals 1002/1003 guidance  
<https://www.state.nj.us/dep/aqpp/techman.html>

# QUESTIONS?

- Preconstruction Permit Help Line 609-292-6716
- Major Facility Help 609-633-8248
- General Number 609-292-0834
- Risk Questions 609-292-6722



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