Utah Agency Update

Four Corners Air Quality Group Update Meeting

October 24, 2018
Ozone Nonattainment Area
Oil and Gas Inventory

VOC, Uintah and Duchesne Counties

2014 tons/year

Area (no O/G)  Oil/Gas  Point  Nonroad  Onroad

0  20,000  40,000  60,000  80,000  100,000  120,000  140,000  160,000
Oil and Gas Inventory

**NOx, Uintah and Duchesne Counties**

- **Area (no O/G)**: 0 tons/year
- **Oil/Gas**: 14,000 tons/year
- **Point**: 1,000 tons/year
- **Nonroad**: 300 tons/year
- **Onroad**: 500 tons/year

2014 tons/year
2014 OGEI: Total VOC in Uintah and Duchesne - 90,383 TPY

- Wastewater Ponds: 34%
- Fugitives: 18%
- Tanks: 14%
- Pneumatic Pumps: 12%
- Pneumatic Controllers: 6%
- Dehydrators: 4%
- Oil Explor: Mud Degassing: 3%
- RICE&Engines: 2%
- Truck Loading: 2%
- Well Completions (Drilling): 1%
- Venting - Compressor Shutdown: 1%
- Venting - Compressor Startup: 1%

*Other: Solid Waste Disposal, Venting - blowdowns, Separators&Heaters, Mud Degassing, Venting - initial completions, Venting recompletions, Gas Plant truck Loading
2014 OGEI: Total NOx in Uintah and Duchesne - 13,527 TPY

- RICE&Engines: 68%
- Separators&Heaters: 22%
- Well Completions (Drilling): 10%
- Tanks: 0%
- *Other: 0%

*Other: Dehydratprs, Condensate tank flaring, Initial completion flaring, Dehydrator Flaring
New Oil and Gas Rules

• The new series of oil and gas rules (R307-505 to 509) for the State of Utah were in effect as of March 2018
• Rules were based on current BACT that has been required for minor sources in Utah
• Utah rules require all sources to be permitted, with a *de minimis* value of 5 tpy of VOCs
• Large majority of minor source permits were being issued for oil and gas well sites
• Many oil and gas sites voluntarily controlled emissions to be below the 5 tpy limit, however we were not aware of how many or where these sources were
New Oil and Gas Rules

• First step of new rules are all oil and gas sources, regardless of size of emissions, will register with the UDAQ

• Required existing oil and gas sources on State land to register with UDAQ by July 1, 2018 and certify that they are in compliance with all rules

• To date 2,223 sources registered, DOGM data shows 2,859 producing oil and gas wells so about 78% of sources are registered
New Oil and Gas Rules

• Rules for oil and gas wells apply to sites with tanks with throughput greater than 8,000 barrels of crude oil or 2,000 barrels of condensate per year on rolling 12-month average
• This equated to our BACT for tank controls, 4 tpy VOCs per tank battery
• If required to control tanks, then required to perform LDAR equivalent to OOOOa and also control tank loading operations
• Well sites established after January 1, 2016 required to have compliance natural gas engines
New Oil and Gas Rules

• Currently have Associated Gas Flaring Rule out for public comment – R307-511 (Oct 1-30)
• Rule supplements ability for sources to utilize the Permit-by-Rule option rather than applying for a permit
• Rule requires well sites to control or flare associated gas with production rather than venting
Uinta Basin Ozone Work Group

• Stakeholder group with representation from industry, local government, environmental advocates, academics, state and federal agencies

• Goal of group is through collaboration and shared knowledge to identify
  – Effective, economically viable measures to reduce ozone levels in the Uinta Basin
  – Policies, public information, educational resources, and beneficial actions to support ozone level reductions
Uinta Basin Ozone Work Group

• Working group has created seven subgroups
  – Immediate Proactive Reductions
  – Crediting Voluntary Reductions
  – Helpful Comparisons
  – Most Effective Reduction Targets
  – Accounting for Outside Factors
  – Jurisdictional Alignment
  – Public Relations and Education
The Path Forward

- Completing the 2017 Oil and Gas Inventory as this will most likely be the baseline for future milestones as a nonattainment area
- Support the Uinta Basin Ozone Working Group in understanding the issues and possible volunteer actions to lower the design value over the next 3 years
- Continue to evaluate new oil and gas rules and communicate requirements to industry and stakeholder to ensure compliance
- Composition study to better understand emissions and modeling
- Work with EPA and Tribe to coordinate and support consistent oil and gas regulatory requirements
Questions?/Discussion

Ozone information and Air Quality Information

http://www.deq.utah.gov/

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