

BRIEFING PAPER
OIL & GAS AIR QUALITY PERMITTING

Background

- The State of Montana is evaluating the potential air emissions from oil and gas production facilities within the state. Montana's primary concern is with the potential air emissions from the actual drilling site and initial gathering stations and how these facilities would comply with the existing air quality requirements. There is a strong likelihood that sources without air pollution control and without a federally enforceable limit are above Montana's current air quality permitting threshold. The Department is not proposing to establish a new program or additional requirements for these facilities, but rather, we are attempting to address the unique needs of this portion of the oil and gas industry.
- There may be large amounts of volatile organic compound and hazardous air pollutant emissions currently being emitted from the oil and natural gas facilities. The emissions may be occurring from flashing emissions, well dehydration units, hazardous air pollutant emissions from well site engines and other well site emission sources.
- The increase in oil and gas production in the western states has generated the concerns about pollutant levels. Previously, none of the states' Air Quality regulatory programs, nor the Environmental Protection Agency believed that this portion of the oil and gas industry (well site/well fields) had the potential to exceed the permitting threshold. When states realized the potential problems, they began seeking more information and sharing data. Montana has been regulating the downstream operations (compressor stations and gas plants) through the issuance of air quality permits for many years.
- Oil and gas wells present a unique challenge in determining whether an air quality permit is required. Oil and gas well facilities generally consist of wells and other equipment used for producing, treating, separating, or storing oil or gas. Under current law, but not previously recognized as applicable to this industry, an owner or operator of a facility must calculate the facility's potential to emit air pollutants (PTE) to determine if they are required to file an application for an air quality permit prior to the well being drilled. Potential air pollutant emissions from oil and gas wells are influenced by the pressure, volume, and temperature of the reservoir, and these conditions cannot be accurately characterized until after a well has been drilled. Therefore, it is difficult to accurately estimate a well's PTE and determine if a permit is required prior to well completion.
- Because of the uncertainty in accurately predicting the emissions, it is difficult for the Department and industry to first determine if an air quality permit is necessary, and then to prepare the appropriate air quality permit without the specific emissions data. This means the Department may have to reopen these permits that have been issued and which were based upon projected emissions to ensure the proper conditions, testing, and recordkeeping and reporting requirements have been included.

Current Legislation

- SB95 would allow drilling and operation of oil and gas wells prior to obtaining an air quality permit by amending the provisions of the Montana Clean Air Act. The bill would allow owners or operators to drill and operate oil and gas wells up to 60 days prior to filing an application for an air quality permit with the Department.
- These provisions would also apply to existing oil and gas well facilities that have not applied for a permit if they make application prior to January 3, 2006. Even though these facilities may not be in full compliance for the intervening period, the Department is exercising its enforcement discretion because of current and previous unknown applicability.
- By allowing the wells to be developed prior to the applicant submitting an air quality permit application, the facility will be able to more accurately characterize their potential emissions and the Department would then be able to issue more accurate and appropriate air quality permits.
- SB95 would require the Board of Environmental Review to adopt appropriate air pollution control rules applicable to oil and gas well facilities that would apply until the Department has made its final decision on an air quality permit application. These rules will ensure that an appropriate level of environmental protection is maintained while the application is being processed.

Resource Impacts

- The Department has not yet determined the exact number of these existing sources needing an air quality permit, but preliminary estimates indicate that at least several hundred existing wells need an air quality permit. Also, the oil and gas industry is continuing to see a general increase in production, which will increase the number of new sources that will require air quality permits.
- To begin dealing with this increased workload, the Department is requesting 3 new full time employees. These employees will primarily work to issue permits to the existing and new sources in the industry for the first several years and then transition into compliance and inspection activities. The Department needs to ensure that these sources obtain the proper permits and that the industry is in compliance with all regulatory requirements.