

Significant EPA Comments

Water

- Operators should be required to provide information on any newly proposed groundwater source in addition to providing information on surface water sources.
- EPA notes a major discrepancy related to the NYS DOH Source Water Assessment Program Plan and the SGEIS proposal for drinking water protection. The DOH plan uses a one-mile radius (5280 feet) around community wells to protect them from pollution threats. Oil and gas wells were also identified as pollution threats. EPA asks for an explanation of the difference. The SGEIS proposes far less protection for community wells.
- Private drinking water wells should be tested at a distance from the drilling site that correlates to the proposed longest horizontal well. Homeowners should be able to choose the water testing firm, but the drilling company should pay the costs.
- EPA suggests a more protective water testing regime-1) an initial test prior to any site disturbance; 2) testing at 3 month intervals until 6 months after the last hydraulic fracturing; and a final round one year after the last well is hydraulically fractured.
- Regarding water withdrawals, EPA stresses the importance of maintaining water levels, and the relationship to existing SPDES permits. If critical conditions are not maintained, SPDES permitting would have to be revisited.

Air Emissions

EPA clarifies that applicability of regulation applies to the totality of wells connected to a pipeline owned by a company and under common control. This could include wells in more than one state. EPA suggests coordination with other states. This will bring many separate drill sites together so that they are treated as a major air emissions source.

Publicly Owned Treatment Works (POTWs)

EPA clarifies that it has the Approval authority for pretreatment programs, including approving new discharge limits for additional pollutants. DEC only manages mini-pretreatment programs for any changes in the pollutants discharged to POTWs, both DEC and EPA Region 2 would have to be notified. EPA also notes that most permits for NY POTWs have yet to clarify this condition.

Radiation

DEC downplays the significance of naturally occurring radioactive materials, even referencing levels of external radiation, when internal radiation doses from breathing and ingestion are important. EPA cites data from PA showing high levels of NORM, that pose a concern for the workers on site and for the public. In NJ radon concentrations as high as 0.5 million pCi/L were found posing human health risks for on-site workers. DEC should have evaluated these risks and appropriate treatment technologies. EPA

also points to the National Emissions Standard for Hazardous Air Pollutants as applicable to radon emissions.

EPA supports radiation limits for wastewater sent publicly owned treatment works.

EPA is also critical of the plan for landfill disposal of cuttings from mud drilling, under the DEC assumption of low levels of radioactivity. EPA asks how landfills receiving high concentrations will then be managed.

EPA also notes that increasing volumes of material raises the exposure to radiation. Radiation licenses should be based on concentrations of radioactivity in the material and the volumes of that material.

POTWs must notify DEC and EPA of their analysis of wastewater from natural gas operations before acceptance. They must analyze impacts on the facility's operation, sludge and receiving water.

EPA recommends that handling of radioactive pipes and other materials as well as disposal be under a required radiation plan, prior to receiving a drilling permit.

Pits

DEC is inconsistent on the issue of whether it is prohibiting reserve pits or impoundments or possibly allowing them if a site-specific EIS is done. EPA supports the prohibition.

Toxic Water Contamination from Flowback

EPA found that for a number of contaminants the levels are higher than EPA screening levels and could pose potential health problems over long term exposure. For other contaminants the maximum concentrations are at Removal Action levels, which means the contaminants are a health concern for even short term exposure.

Comparison of toxic contaminants associated with additives should be to primary and secondary drinking water standards.

Drill cuttings should be tested for constituents harmful to health and disposed of at a permitted facility if appropriate.

Methane

EPA disagrees strongly with DEC that fugitive methane emissions are insignificant in relation to combustion and process emissions.

EPA recommends regulations that establish definite enforceable requirements related to limiting methane emissions including leak detection and repair. EPA recommends the use of an optical imaging camera as a requirement for the leak detection and repair program. A specific timeframe for fixing leaks should be stipulated in requirements.

EPA says DEC should address venting emissions in addition to flaring and combustion emissions.

EPA says companies should be required to file a GHG mitigation plan prior to drilling.

Seismic

EPA refers EPA to a study which links hydraulic fracturing to induced seismic activity.

Road Spreading

EPA questions the plan to allow road spreading for brine or produced water. EPA notes that the distinction between flowback water and produced water is not apparent and road spreading could lead to violations of the Clean Water Act's no direct discharge prohibition. EPA supports a prohibition on road spreading.

Emergencies

DEC practically ignored this topic altogether in the SGEIS, preferring to talk instead about non-routine incidents, and as a result eviscerated meaningful emergency planning. EPA in contrast makes the requirements for prevention and emergency planning absolutely clear. EPA covered in its comments: the general duty clause of the Clean Air Act, Spill Prevention and Control, under the Clean Water Act, the release of a hazardous substance under CERCLA and The Emergency Planning and Community Right to Know Act requirements related to extremely hazardous substances. Methane is an extremely hazardous substance, for example. (See 40 CFR 68) .

Shut Down Authority

EPA asks DEC to clarify whether it has the administrative authority to shut down drilling or production operations when they do not comply with a permit condition.

Public Disclosure

EPA recommends a geographic information system that is updated on a monthly basis and made available to the public. Information should include location of permitted wells, the stage of hydraulic fracturing for each well on the pad, the percentage of water required for fracking that is stored on site, whether gas is being collected. The GIS should display public water supply wells and intakes.

(CEC would recommend that additional information be made available to the public such as number of times each well has been fracked, well testing information, agency inspections and compliance activities, violations and fines or other types of enforcement actions.)