

DEC STATEMENT TO WATERFRONT, Dec. 21, 2020:

DEC staff are reviewing the report.

In general, beneficial use regulations included in 6 NYCRR Part 360.12 set the criteria for the safe use of brines for dust or ice suppression on roads. Drilling fluids, flowback water, and production brine from High-Volume Hydraulic Fracturing (HVHF) wells in the Marcellus Shale are explicitly prohibited by regulation from beneficial use on roads.

Only production brine from conventional, non-HVHF wells may be used on roads and this use requires issuance of a case-specific Beneficial Use Determination (BUD). No material considered a hazardous waste under DEC or federal rules can be approved under a BUD. Also, as discussed in a 1999 Investigation of Naturally Occurring Radioactive Materials (NORM) in Oil and Gas Wells in New York State, radioactivity in production brine from conventional wells has been well characterized and does not pose harm when brine is used in appropriate quantities to treat roads. In addition, Part 360.12 regulations establish over 30 separate requirements that ensure use of fluids on roads is environmentally protective. These requirements include maximum allowable concentrations for metals, benzene and other contaminants, which must be re-assessed annually; minimum concentrations of chloride, sodium and calcium, which must be re-assessed annually, to ensure that the brine is effective in stabilizing roads or suppressing ice or dust; prohibition on application of brine within 50 feet of a stream, creek, lake, or other water body; and a road spreading plan that includes procedures to prevent brine from contacting water bodies, and that includes a map or listing of roads where brine will be applied.