

**WASTING AWAY: Four states' failure to manage gas and oil field waste from the Marcellus and Utica Shale** Full report at: <http://wastingaway.earthworksaction.org>

## **WEST VIRGINIA: Key findings**

By 2011, production from the Marcellus Shale began to outpace all other types of gas production in West Virginia and companies are now beginning to pursue gas production in the even deeper Utica and Point Pleasant shale formations. Despite the adoption of some new regulations related to waste, **operators and disposal facilities still have wide discretion to decide whether waste is contaminated and how to dispose of it.**

The West Virginia Department of Environmental Protection (WVDEP) is not addressing looming constraints in disposal capacity as drilling expands. Even though volumes of brine and drilling fluids are on the rise, **WVDEP and legislators are not working to revise rules or practices related to the storage or disposal of these wastes.**

**The only type of oil and gas field waste consistently tracked by regulators in West Virginia is flowback.** Operators are required to maintain records on produced water generation and disposal, but this information is only made available to WVDEP if the agency requests it.

**None of the data, waste transport manifests, forms completed by operators, or reports from drillers, waste facility operators, or WVDEP are available online or otherwise publicly accessible.** As a result, it is nearly impossible to assess the volumes and types of waste generated in West Virginia or where and how it is disposed of.

A 2013 study by Downstream Strategies found that **nearly half of the liquid waste generated at West Virginia well sites is shipped out of state and much of the remainder is injected underground.**

**WVDEP does not require oil and gas operators to dispose of solid waste at specialized facilities,** allowing them to instead take drilling waste to municipal landfills. Yet **West Virginia does not have regulations related to the radioactive content of oil and gas waste.** According to WVDEP, rules on Naturally Occurring Radioactive Material (NORM) and Technologically Enhanced Naturally Occurring Radioactive Material (TENORM) are not being applied to the oil and gas waste stream.

**Proposed changes to regulations on solid waste require oil and gas operators to provide landfills with a comprehensive chemical analysis—but not radioactivity.** Nor do current regulations require the treatment of leachate from landfills at a specialized facility before discharge into rivers and streams—even though municipal wastewater treatment plants lack standards and technologies to handle contaminants and radioactivity in drilling waste.

**West Virginia lacks any regulations to guide the blending of oil and gas waste with other materials** and has never studied the safety of resulting products. Yet mixing with materials that also contain toxic and radioactive substances, in particular coal ash, is already occurring.