Over the past decade, North Dakota has become the epicenter of a growing radioactive waste problem. A byproduct of oil and gas drilling, this waste product has been accumulating throughout the state at an alarming rate. In 2001, North Dakota oil and gas fields generated 10,000 tons of solid waste; by 2013, that number had skyrocketed to 1.8 million tons, a one hundred and eighty-fold increase over the previous number.

At the start of the Bakken oil boom, North Dakota law prohibited disposal of radioactive waste with a radioactivity concentration exceeding 5 picocuries per gram of combined radium. Oil companies began their intensive drilling fully aware that the waste they generated would need to be transported to facilities appropriately equipped for radioactive materials in Colorado or Idaho. Unfortunately, many waste generators and transporters developed illicit ways to get around the law, such as illegally dumping it in fields, ditches, alleys, and abandoned buildings and vehicles; sneaking it past landfill operators, or burying it at the drilling site. When these violations came to light, North Dakota regulators frequently did little to find or penalize such actors—often allowing substantial reductions in penalty fees for those caught, or failing to assign any penalty fees in the first place.

Recently the State Health Department, upon the request of the oil industry, began considering ways to make it easier to dispose of the radioactive waste in North Dakota. In addition, citizens, landowners, and the local community organizing group, Dakota Resource Council, increased public pressure on North Dakota Gov. Dalrymple’s Administration to safeguard the public from radioactive waste. As a result, new rules are expected to be approved to take effect in January 2016. The oil industry will get an increase in the allowable radioactivity level to 50 picocuries and residents will see some requirements for any parties that handle, store, transport, or dispose of radioactive oil and gas field waste.

While several of these requirements are more protective than the previous rules, they still fall short. First, by raising the radioactivity limit to 50 picocuries per gram, they make North Dakota facilities, transporters, adjacent landowners and other affected communities vulnerable to a much higher dose. Second, they fail to improve upon existing inspection and enforcement protocols, which are notably lax.
What, specifically, do North Dakota’s new rules do?

» They raise the disposal limit from 5 to 50 picocuries per gram of combined radium.

» They assign oversight and management of radioactive materials to two divisions of Environmental Health, the Solid Waste Program and the Radiation Control Program.

» They institute new design requirements and operating protocols for radioactive waste disposal, such as the requirement to cover radioactive waste with at least one foot of fill at the end of each operating day. However, this fill will usually be drill cuttings that have a higher than background level reading of radiation.

» They create a “cradle-to-grave” tracking & reporting system for all radioactive waste loads.

Where do the new rules fall short?

» They fail to protect North Dakota citizens’ mechanism for local control, in which new facilities have to be approved by the local board of county commissioners. This provision only applies to new facilities, and will not apply to North Dakota’s 13 existing special waste facilities when they seek permit modifications to accept radioactive waste.

» They fail to establish inspection protocols, a necessary accountability measure if the new rules are to be implemented successfully.

» They fail to adequately address steps to protect workers and the public from exposure.

How can the rules be improved?

» The Department of Health should require all facilities seeking permit modifications for radioactive waste acceptance to be approved by the local board of county commissioners, even if these facilities have existing waste disposal permits.

» The Department of Health should establish rigorous inspection protocols for disposal facilities, waste transporters, and oil and gas waste generators. This includes quarterly unannounced inspections of facilities by the State Health Department.

» Landfill operators must be required to have all exposed personnel including transporters use adequate personal protection equipment as oilfield toxic waste has been shown to cause endocrine disruption.

» Protocols for reporting any spills, leachate, discharges, or illicit practices must be provided to all emergency responders and general public for each facility.

» The Department of Health should take violations seriously and stop negotiating down penalties for companies that violate the new rules and notice of violations should be publicized in counties where they occur.