

# DEC proposes new drilling mud regulations

In a move to strengthen regulation of solid waste disposal and clarify the regulation of solid waste associated with oil and gas drilling in Alaska, the Department of Environmental Conservation is proposing changes to the state's solid waste regulations. Commissioner Bill Ross stated that public comments are invited until November 22 and that public hearings would be held on November 12 in Soldotna, November 13 in Anchorage, and November 14 in Fairbanks.

"These regulatory additions will formalize policies that DEC has been developing and refining this year in our effort to properly control the storage and disposal of muds and wastes from drilling operations," said Commissioner Ross. "For an extended period, we have been in consultation with the oil and gas industry as well as other interested organizations and individuals. We have arrived at an approach that will protect public health and the environment and that is 'doable' by the industry. This is consistent with the Sheffield administration policy to provide the public and industry with a regulatory structure that is consistent, fair and predictable and that safeguards the environment."

The Commissioner explained that additives used in drill muds and mixed with cuttings when brought to the surface are of the most concern environmentally. Drill muds are basically clay, water, and barite with a variety of special additives. The mixture is used during the course of oil and gas drilling to maintain bore pressures and solve a variety of 'down hole' problems such as removal of cuttings, cooling, lubrication and controlling subsurface pressures. After being used, the muds are normally stored in 'reserve pits' on or near the drilling site. The additives range from non-toxic to very toxic, with most falling

into the moderately toxic range. Some of the additives in drill muds — or the cuttings if they contain heavy metals — could contaminate surface or ground waters if not disposed of properly.

The mixture of mud, water, additives and cuttings often varies from day to day as drilling conditions require. The contents of any given reserve pit therefore varies over time. To be environmentally sound, pits need to be designed to adequately contain all material which could be deposited during the course of the particular drilling operation. Commissioner Ross said that the new DEC regulations will require that muds intended for final disposal be dewatered to decrease their volume. They must then be contained in pits lined to impede any contaminant migration or leaching. Monitoring wells may be required around the site so that samples of groundwater can be analyzed for the presence of mud constituents.

Finally, the new regulations may require placement of a cap of impermeable material over the muds when a pit's useful life is over. Revegetation and soil contouring may also be required to further seal muds inside. Waste liquids from dewatering may be reinjected down an approved injection well for final disposal.

The Commissioner said that a safe disposal site is one that is uniquely designed for its location, with due consideration for the site's particular geologic and hydraulic features. Proximity to populated areas is also an important factor. The Commissioner said, "Requirements may vary from site to site, but the basic ground rules will now be clear to industry."

Commissioner Ross urged those interested to obtain copies of the proposed regulations and submit written comments to the department or attend any of the three public hearings.