Waste Disposal Regulations for Drilling Mud & Cuttings Technology, Cost Trends, Environmental Impact and Regional Regulatory Bodies by Mud Type (Water-Based, Oil-Based, Synthetic Based), by Region and Markets Analysis with Forecast

Description: Growing environmental concerns and the increasing global energy demand lead to stricter government regulations. Initially, drilling activity in exploration and production (E&P) involved simple processes. Drilling waste management was not a prime concern, as the only additives in drilling mud were barite and bentonite. Shale shakers, desanders, and centrifuges were used to help reduce the solid loading in the drilling fluid system. These two additives have a low environmental impact. Most waste management practices involved onsite waste management through simple techniques such as storage in pits and burial. Environmental protection has always played a role in E&P operations. During the 1970s, intense efforts were made across all industries to examine discharges for possible environmental hazards. These activities led to the formulation of environmental regulations. To ensure compliance with these regulations, a number of companies provide drilling waste management services. These services can be categorized on the basis of phase into solid control, containment & handling, and treatment & disposal.

Water-based mud is the least regulated and most widely adopted mud in the world. Water-based mud consists of water, salts, barite, bentonite, and other minor additives, with water being the primary fluid. The composition of the water-based mud is dependent on the density of the mud, and has an approximate make-up of 76% (weight) water, 15% barite, 7% bentonite, and 2% salts and other additives. Owing to this, this type of mud has the least amount of regulations associated with it. The use of other non-aqueous fluids, such as synthetic- and oil-based muds, entails compliance with strict disposal regulations; for instance, maximum discharge limit of 1% of oil on cutting (dry weight).

North America and Europe impose the most stringent discharge regulations in the world. With regard to regions, North America and Europe are frontrunners in terms of environmental protection; these regions enforce strict regimes to preserve human health and the environment. The main regulatory regimes in these regions are the Environmental Protection Agency (EPA) and the OSPAR Convention, which formulate regulation policies for discharge in the region. Stringent environmental laws such as zero discharge policy in the offshore region and heavy penalties for violation of regulations have come into play in countries like China. Waste disposal regulations in other regions, such as Africa and the Middle East, are comparatively lenient.

Countries such as Norway and the U.K. enforce strict regulations for the discharge of oil-based cuttings into the sea. These follow the regulations of the OSPAR convention. According to the OSPAR 2000/3 decision, discharge is subject to a limit of 1% oil on cuttings.

Organizations Profiled:
- Environment Canada (Canada), Fisheries and Ocean Canada (Canada), National Energy Board (Canada), Environmental Protection Agency (U.S.), United Kingdom Onshore Operators Group (UKOOG), National Offshore Petroleum Safety and Environmental Management Authority (Australia), Department of Mineral Fuels (Thailand), and others.

Reasons to buy the report: This research report has focused on various levels of legislation levied across various countries, major technology used for waste minimization, recycling & reuse, and treatment & disposal, and key equipment and service provider and agency profiles, which together comprise and discuss the basic views on the competitive landscape, price comparison, and other factors. The report will enable both, established firms as well as new entrants/smaller firms to gauge the pulse of the country, which in turn, will help the firms garner a better understanding of the regulatory framework.

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