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IMV SPECIALTY CLAY LINERS

IMV Nevada mines and processes three types of clays; bentonite, sepiolite and saponite. From the versatility of these clays, a number of products are made for a wide variety of uses in industrial, construction and agricultural applications. Saponite has proven qualities when used as a hydraulic barrier in lining applications.

With increased awareness of pollution control and the need to use and protect our water resources, an efficient and cost effective containment material for agriculture irrigation, pond and drainage projects is readily available using IMV clay.

Clay liners are used worldwide to control solution excursions in a variety of industries and situations. Desirable properties for clays used in liner applications include exceptionally low permeability, durability, workability and low cost. Placement methods and rates using earthen lining techniques will depend upon the specific application. Simple ditch liners can be placed with conventional farm equipment such as a manure spreader and compaction can be accomplished with standard equipment such as a front-end loader or scraper. More complex membrane applications such as landfills or heap leach liners may require more sophisticated equipment and placement methods.

IMV clays have specialized characteristics that will allow placement in nearly any liner situation ranging from fresh or salt-water applications to many other harsh chemical environments. The properties of our clay provide resistance to chemical attack that the Wyoming type sodium bentonites cannot resist, such as maintaining permeability in saline or organic environments. Saponite is available in mine-run products suitable for simple ditch or pad under-liners or finished liners, extruded "noodles" for ease of handling.

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In a recent test, the data indicates that mixing the Saponite clay to a depth of 2 inches offered the optimum balance of low permeability and the desired level of durability. An example of the low permeability along with low application rates was measured 5.11×10^{-5} centimeters per second permeability with only 1.5 pounds of mine-run unprocessed clay per square foot. In this ditch application, a common manure spreader and scraper for compaction were used. The result compared to untreated soils with permeability on the order of 2.3×10^{-3} cm/sec. was about 100 times the treated area.

Consulting services are available upon request. Other product information can be obtained at our website, www.imvnevada.com.