

The Colony area mines are supported by 2 main processing plants located in Colony, WY. These plants produce both powder and granular products. A wet-processing facility is located near Belle Fourche, SD. All three facilities have direct access to rail.

Lovell, Wyoming Mines

The Company's Lovell, WY mining operations are located in the Bighorn Basin near Lovell, WY with processing facilities located 3 miles west of the town of Lovell.

The Lovell processing facility is supported by bentonite clay supplied from 35 million tons of proven and probable reserves, comprised of leases (12%), unpatented claims (40%), and owned properties (48%). The area operates under 2 mining permits covering ~30,000 acres, with active mining and future mineral reserves located within 30 miles of the Lovell processing facilities.

The Bighorn Basin is a large sedimentary basin in northwestern Wyoming. It is Laramide in age and style and trends northwest-southeast. The bentonite clay in the Bighorn Basin is predominantly of the sodium type. Mining occurs from 19 different bentonite beds occurring in 3 geologic formations – the Thermopolis shale, the Mowry shale, and the Frontier shale which were deposited during the Upper Cretaceous Period between 70 to 100 million years ago. A back-cast method of mining is used whereby small pits are progressively opened and then quickly backfilled in succession as mining progresses along outcrops. Most pits are reclaimed in the same year that they were first disturbed.

Annual exploration and permitting activities target the replacement of the number of tons mined to support the long-term sustainability of local operations.

The Lovell area mines are supported by 2 processing facilities located 3 miles East of Lovell, WY. One facility produces powder and granular bentonite products; the other facility produces geosynthetic clay liners and other environmental products. Both facilities have direct access to rail.

Ünye, Turkey Mines

The Company's Ünye-area mines, Nadirli and Konan, are located southwest of the town of Ünye, Turkey on the southern coast of the Black Sea. These mines are operated by the Company via contract mining and hauling. Both mines use conventional open-pit truck and shovel mining methods. The properties are comprised of both government-issued mining claims and privately-owned lands. The orebodies were produced by hydrothermal alteration and generally occur as massive deposits greater than 10 meters in thickness. The bentonite ore is notable for its high brightness. Current mine life is 18 years based on 6 million tons of proven and probable reserves, with additional potential of 18 million tons of identified reserves.

Ore from the mines is transported by truck to a processing facility in the town of Ünye where it is stockpiled, dried, and converted to granular products.

Dongming, China Mines

The Company's Dongming mines and processing facilities are located in Jianping county, Liaoning province, China. The regional bentonite occurs within the Jurassic Jingangshan and Tuhulu formations which were deposited during the Upper Jurassic Period between 135 to 144 million years ago. The thickness of the bentonite layers varies from 0.5 to 40m. The bentonite clay in the region is predominantly of the calcium type and is converted to sodium bentonite to produce the majority of products.

The Dongming mines consist of 16 small mining areas under 4 mining permits covering approximately 1,200 acres controlled by the Company. Rights to the bentonite are leased from the Chinese government and separate agreements are made with land owners for surface access and mining. Much of the bentonite supplied to the Dongming processing facility is from 3rd-party mines, with Company-controlled mines used to supplement supply and as strategic backup reserves. In most cases, supply from 3rd-party mines is directly supervised by local Company staff which assists with grading and quality control.

All mines are operated by contractors with conventional open-pit truck and shovel mining methods. Clay from the mines is hauled by trucks to the Company's processing facility. The primary processing facility is located approximately 50 miles west of Chaoyang, Liaoning Province near the Dongming mines.