

Processing Methods

Our current production capacity, including salt and other minerals purchased under contracts, is approximately 16.9 million tons of salt per year. Mining, other production activities and packaging are currently conducted at 11 of our facilities. Additionally, finished product is purchased from suppliers under contracts at four facilities. The three processing methods we use to produce salt are described below.

Underground Rock Salt Mining — We use a drill and blast mining technique at our North American underground rock salt mines. Mining machinery moves salt from the salt face to conveyor belts, which transport the salt to the mill center where it is crushed and screened. Salt is then hoisted to the surface where it is loaded onto shipping vessels, railcars or trucks. At our Winsford, U.K., facility, we also use a continuous mining process. The primary power sources for each of our rock salt mines are electricity and diesel fuel. Rock salt is primarily sold in our highway deicing product line and for numerous applications in our consumer and industrial product lines. Underground rock salt mining represents approximately 85% of our current annual salt production capacity. See Item 1A, “Risk Factors — Our operations are dependent on our rights and ability to mine our property and having renewed or received the required permits and approvals from third parties and governmental authorities.”

Mechanical Evaporation — Mechanical evaporation involves obtaining salt brine from underground salt deposits through a series of brine wells and subjecting that salt-saturated brine to vacuum pressure and heat to precipitate and crystallize salt. The primary power sources are natural gas and electricity. The resulting product has both a high purity and uniform physical shape. Mechanically evaporated salt is primarily sold through our consumer and industrial salt product lines and represents approximately 6% of our current annual salt production capacity.

Solar Evaporation — Solar evaporation is used in areas of the world where high-salinity brine is available and where weather conditions provide for a high natural evaporation rate. The brine is pumped into a series of large open ponds where sun and wind evaporate the water and crystallize the salt, which is then mechanically harvested and processed through washing, drying and screening. Solar salt is sold through our consumer and industrial salt product lines and in our highway deicing applications. Solar evaporation represents approximately 9% of our current annual salt production capacity.

We also produce magnesium chloride through the solar evaporation process. We precipitate sodium chloride and potassium-rich salts from the brine, leaving a concentrated magnesium chloride brine solution. This resulting concentrated brine becomes the raw material used to produce several magnesium chloride products, which are sold through both our consumer and industrial and highway deicing product lines.

Operations and Facilities

United States — Our Cote Blanche, Louisiana rock salt mine serves highway deicing customers through a series of depots located along the Mississippi and Ohio Rivers (and their major tributaries) and chemical customers and agricultural customers in the Southern and Midwestern U.S. Our Central and Midwestern U.S. consumer and industrial customer base is primarily served by our mechanical evaporation plant in Lyons, Kansas.

Additionally, we serve areas around the Great Lakes with evaporated salt purchased from a supplier’s facility in Michigan. Our solar evaporation facility located in Ogden, Utah, is the largest solar salt production site in North America. This facility principally serves the Midwestern and Western U.S. consumer and industrial markets, provides salt for highway deicing and chemical applications, and produces magnesium chloride, which is used in deicing, dust control and soil stabilization applications. The production capacity for solar-evaporated salt at our Ogden facility is currently only limited by demand. We also operate three salt packaging facilities in Illinois, Minnesota and Wisconsin, which principally serve consumer deicing and water conditioning customers in the Central, Midwestern and parts of the Northeastern U.S.

Canada — We produce finished products at four locations in Canada. Our Goderich, Ontario, rock salt mine serves the highway deicing markets and the consumer and industrial markets in Canada and the Great Lakes region of the U.S., principally through a series of depots located around the Great Lakes and through packaging facilities. Mechanically evaporated salt used for our consumer and industrial product lines is produced at three facilities strategically located throughout Canada: Amherst, Nova Scotia in Eastern Canada; Goderich, Ontario, in Central Canada; and Unity, Saskatchewan, in Western Canada. We also purchase salt and other products, including potassium chloride (“KCl”) for the consumer and industrial and the highway deicing markets in the U.S. and Canada, from a potash producer’s facilities located in Saskatchewan.

United Kingdom — Our U.K. highway deicing customer base is served by the Winsford rock salt mine in Northwest England, near Manchester.

The following table shows the annual production capacity and type of salt produced at each of our owned or leased production locations as of December 31, 2010:

Location	Annual Production Capacity (tons)	Product Type
North America		
Goderich, Ontario Mine ^(a)	9,000,000	Rock Salt
Cote Blanche, Louisiana Mine	3,400,000	Rock Salt
Ogden, Utah:		
Salt Plant	1,500,000	Solar Salt
Magnesium Chloride Plant ^(b)	550,000	Magnesium Chloride
Lyons, Kansas Plant	450,000	Evaporated Salt
Unity, Saskatchewan Plant	175,000	Evaporated Salt
Goderich, Ontario Plant	175,000	Evaporated Salt
Amherst, Nova Scotia Plant	120,000	Evaporated Salt
United Kingdom		
Winsford, Cheshire Mine	1,500,000	Rock Salt

(a) Our most-recent Goderich mine expansion project during 2008-2010 has increased our capacity from 7,500,000 tons.

(b) The magnesium chloride amount includes both brine and flake.