

Table 4.18. Chemicals and Reagents (Hazardous Materials) on Site

Reagents	Estimated Use (tons per year)	Maximum Amount Stored (tons) ¹
Limestone	169,036	7,165
Quicklime	126,204	1,127
Soda Ash	86,343	1,070
Molten Sulfur	340,247 (Phase 1 production capacity)	13,454
	680,494 (Phase 1-2 production capacity)	13,454
SNF Hyperfloc AF-307	144	22
SNF Hyperfloc CP-624	72	22
Sulfuric Acid	2,900 tons per day (Phase 1 production capacity)	14,550
	5,800 tons per day (Phase 1-2 Production Capacity)	14,550
Caustic Soda	145,668	1,409
Potassium Chloride	4,712	562
Aluminum Powder	0.9	0.9
Lithium Chloride	4,712	562
Sodium Hypochlorite	21,000	254

¹ Hazardous materials identified in Table 4.17 would be included in a hazardous materials storage permit issued by the Nevada Department of Motor Vehicles and Public Safety, Fire Marshall Division; Fire Protection Licensing Bureau, HAZMAT Office.

Sulfur would be transported to the site in molten form in closed tank cars, not as a powder (solid). Sulfuric acid solution produced in the sulfuric acid plant would be shipped from the site in liquid form in road tankers during periods of excess acid production. Sodium hypochlorite solution (chlorine bleach) would also be shipped from the site in liquid road tankers.

Lithium processing would produce tailings comprised of acid leach filter cake (clay material), neutralization filter cake, magnesium sulfate salt and sodium/potassium sulfate salts, collectively referred to as clay tailings. Limestone would be added on an as-needed basis for structural stability. Limestone and/or quicklime would also be used for neutralization for the acid leaching process. Neutralization solids and magnesium sulfate salt and sodium/potassium sulfate salts, components of the clay tailings, would be disposed of on site. Approximately 353.6 million CY of clay tailings would be placed on the facility over the proposed 41-year mine life under Alternative A.

Explosive agents may be required on occasion during mining operations for removing basalt waste rock material from the pit. Explosives would not be required for operations on a regular basis. Where areas of basalt are encountered, LNC would rely on a licensed contractor to conduct any needed blasting operations. The contractor would ensure explosives are handled in accordance with the Bureau of Alcohol, Tobacco, Firearms and Explosives (ATF) and Department of Homeland Security (DHS) provisions, and MSHA regulations. The proposed explosives storage areas would