

TABLE 5.4.13.1–2.—Types of Hazardous Chemicals in Use at Site 300 Under the Reduced Operation Alternative

Chemical	Chemical Abstract Number	No Action Average Maximum/Average Quantity	Reduced Operation Maximum/Average Quantity
Paints/Solvents			
Paint (variety)	NA	7,200/1,230 lb	7200/1140 lb
Thinner, lacquer	NA	310/125 gal	310/90 gal
Methyl alcohol	67-56-1	90/5 gal	90/5 gal
Acetone	67-64-1	400/35 gal	400/29 gal
Metals			
Lead bricks or ingots	NA	25,000 lb	25,000 lb
Acids/Bases/Oxidizers			
Oxygen, compressed	7782-44-7	16,000/5,150 ft ³	16,000/4,750 ft ³
Sulfuric acid	7664-93-9	845/62 lb	845/57 lb
Cyanuric acid	108-80-5	500/52 lb	500/48 lb
Industrial Gases			
Argon, compressed	7440-37-1	30,000/30,000 ft ³	25,000,000/252,000 ft ³
Helium	7440-59-7	25,000/25,800 ft ³	5,000,000/285,000 ft ³
Hydrogen, compressed	1333-74-0	700/720 ft ³	1,500,000/48,000 ft ³
Nitrogen, compressed (Liquefied, gaseous)	7727-37-9	312,000/288,000 ft ³	500,000/124,000 ft ³
Carbon dioxide	124-38-9	44,000/5,200 ft ³	176,000/118,000 ft ³
Refrigerants			
Freon 113 (1,1,2-trichloro-1,2,2-trifluoroethane)	76-13-1	150/10 gal	150/10 gal
Freon 22 (chlorodifluoromethane)	75-45-6	1,400/910 lb	1,400/827 lb
Freon 12 (dichlorodifluoromethane)	75-71-8	660/230 lb	660/209 lb
Freon 13 (chlorotrifluoromethane)	75-72-9	478/478 ft ³	478/454 ft ³
Freon 14 (tetrafluoromethane)	75-73-0	2,000/515 ft ³	2,000/475 ft ³

Sources: NNSA 2002c, TiNUS 2003.

Note: Numbers are rounded. Additional chemicals are listed in Appendix B. ft³ = cubic feet; gal = gallons; lb = pounds; NA = not available.

Cumulative Impacts

The ROI for materials management involves LLNL and its facilities as presented in Chapter 4 of this LLNL SW/SPEIS.

The ROI for cumulative impacts is larger than that presented in Chapter 4 and considers the contributions of LLNL (Livermore Site and Site 300), SNL/CA, other NNSA activities, local projects and activities, and the State of California. NNSA assessed cumulative impacts by combining the potential effects of the Proposed Action with the effects of other past, present, and reasonably foreseeable activities in the ROI. The Proposed Action was chosen to assess and present a bounding scenario of potential cumulative effects. This approach allowed a conservative analysis or a maximum estimation of cumulative impacts, further discussed in Section 5.3.13.1.