

**Table 19-1: Project Area Soils Summary  
Minnesota Steel Industries**

Soil Symbol	Soil Type	Soil Texture	Hydrologic Group	Mine	Plant Site	Stockpile	Existing Stage I Tailings Basin	Expanded Stage I TB	Alternative Tailings Basin	Tailings Pipeline	Total	
											acres	
544	Cathro muck*	Muck	A/D	0	10	0	6	68	27	0	111	
549	Greenwood peat*	Peat	A/D	0	0	0	0	0	0	0	-	
614	Blackhoof muck*	Muck	D	1	18	0	0	0	62	0	81	
619	Keeewatin silt loam*	SiL	C	86	87	1	0	115	322	1	612	
620B	Cutaway loamy sand, 0 to 8 percent slopes	LS	B	4	0	0	0	0	0	0	4	
622B	Nashwauk fine sandy loam, 1 to 10 percent slopes	SL	C	234	177	22	29	115	617	2	1,196	
622E	Nashwauk fine sandy loam, 12 to 35 percent slopes	SL	C	0	28	0	0	7	0	0	35	
625	Sandwick loamy fine sand*	LS	B	0	0	0	0	0	0	0	-	
626B	Suomi silt loam, 1 to 8 percent slopes	SiL	C	0	0	0	0	0	0	0	-	
797	Mooselake and Lupton mucky peats*	Muck	A/D	0	0	0	0	0	82	0	82	
798	Sago and Roscommon soils*	Muck-LS	D	0	0	0	0	0	0	0	-	
799	Seelyeville-Bowstring association*	Muck	A/D	0	0	0	0	3	0	0	3	
872	Pengilly-Winterfield association*	SL-LS	B/D-A/D	0	0	0	0	0	0	0	-	
995	Borosapristis, depressional*	Muck	A/D	0	0	0	0	6	0	0	6	
1041	Pits, mine	Variable		254	0	0	0	0	0	0	254	
1042	Dumps, mine	Variable		9	0	0	128	22	0	1	161	
1043C	Udorthents, nearly level to rolling	Variable	B	49	6	34	59	179	0	5	332	
1043F	Udorthents, very steep	Variable	B	34	1	0	0	0	0	2	37	
1044	Slickens, Tailings Basin	Variable		11	10	280	1,604	27	0	2	1,934	
1826B	Nashwauk-Menahga complex, 1 to 10 percent slopes	SL-LS	C-A	0	0	0	100	97	0	0	197	
1826D	Nashwauk-Menahga complex, 10 to 25 percent slopes	SL-LS	C-A	0	0	0	0	18	0	0	18	
1883D	Nashwauk-Rock Outcrop complex, 6 to 25 percent slopes	SL	C	0	37	0	0	0	0	0	37	
WATER	Census Water*			34	6	34	3	0	8	1	87	
<b>TOTAL</b>				<b>716</b>	<b>380</b>	<b>371</b>	<b>1,929</b>	<b>658</b>	<b>1,119</b>	<b>14</b>	<b>5,187</b>	

Values may not add exactly due to rounding. Totals are slightly different from cover types totals (Question 10) due to rounding in calculations.

\* Hydric soils

\*\* Several of the soil types are disturbed areas. These include mine dumps ("dumps, mine"), mine pits ("pits, mine") and "slickens". Slickens are defined by the U.S. Department of Agriculture as "accumulations of fine-textured material, such as that separated in placer-mine and ore-mill operations. Slickens from ore mills consist largely of freshly ground rock that commonly has undergone chemical treatment during the milling process. Slickens are usually confined in specially constructed basins." In this area, slickens are associated with tailings deposits from previous natural ore and taconite.