evaporation ponds or dissolved and returned to the lake or injection wells.

d. Underground Mining. Underground mining techniques are used to access mineral deposits located too far underground to access economically from the surface. Though typically a more expensive form of extraction, advantages to underground mining operations include year-round operation, less noise (applicable to facilities located near residential areas), and less surface land disturbance. While most nonmetallic minerals are extracted from surface operations, some minerals existing in bedded or other sedimentary deposits may be accessed by underground extraction techniques. Potash, salt, soda, and borate minerals, as well as chemical and fertilizer minerals, are some of the minerals extracted using this mining method.

(1) Industrial Activities/Significant Materials. Industrial activities that may be associated with storm water discharges include: loading/unloading activities; haul roads; products and materials storage; waste piles; and processing activities. Exposed materials associated with surface beneficiation and processing facilities at underground mines are similar to those associated with open pit, open face, and quarrying facilities.

(2) Materials Management Practices. Materials management practices for significant materials at the surface of underground mining facilities are similar to those materials management practices used at open pit, open face, and quarrying operations.

e. Înactive Mine Sites. Inactive mineral mining and processing operations are those where industrial activities are no longer occurring. When

active, mineral extraction could have occurred from open pits or open face mines, solution mines, dredging operations, or underground mines. These sites are included in this section because significant materials may remain onsite. These materials, if exposed, are potential sources of storm water pollutants. Until an inactive mineral mining and processing facility has been reclaimed under applicable State or Federal laws, the site is considered associated with an "industrial activity" and is subject to this section. Due to the seasonal nature of this industry, many mine sites can become temporarily inactive for extended periods.

2. Pollutants in Storm Water Discharges Associated With Mineral Mining and Processing Facilities

Impacts caused by storm water discharges from active and inactive mineral mining and processing operations will vary. Several factors influence to what extent significant materials from mineral mining and processing operations may affect water quality. Such factors include: geographic location; hydrogeology; the type of mineral extracted; the mineralogy of the extracted resource and the surrounding rock; how the mineral was extracted (e.g., quarrying/ open face, dredging, solution, or underground mining operations); the type of industrial activities occurring onsite (e.g., extraction, crushing, washing, processing, reclamation etc.); the size of the operation; and type, duration, and intensity of precipitation events. Each of these and other factors will interact to influence the quantity and quality of storm water runoff. For

example, air emissions (i.e., settled dust) may be a significant source of pollutants at some facilities while materials storage is a primary source at others. In addition, sources of pollutants other than storm water, such as illicit connections,⁷¹ spills, and other improperly dumped materials, may increase the pollutant loadings discharged into waters of the United States.

The part 2 group application data requirements did not identify individual site characteristics which may be responsible for elevated or insignificant conventional pollutant loadings.

Based on the wide variety of industrial activities and significant materials at the facilities included in this sector, EPA believes it is appropriate to divide the mineral mining and processing industry into subsectors to properly analyze sampling data and determine monitoring requirements. As a result, this sector has been divided into the following subsectors: dimension stone, crushed stone mining and nonmetallic minerals mining (except fuels); sand and gravel mining; clay, ceramic, and refractory materials mining; chemical and fertilizer mineral mining. The tables below include data for the eight pollutants that all facilities were required to monitor for under Form 2F. The tables also list those parameters that EPA has determined merit further monitoring. A table has not been included for the following facilities because less than 3 facilities submitted data in these subsectors: clay, ceramic, and refractory materials mining; and chemical and fertilizer mineral mining facilities.

TABLE J–2.—STATISTICS FOR SELECTED POLLUTANTS REPORTED BY DIMENSION STONE AND CRUSHED PRODUCTS FACILITIES SUBMITTING PART II SAMPLING DATA¹ (mg/L)

Pollutant	No. of facilities		No. of samples		Mean		Minimum		Maximum		Median		95th percentile		99th percentile	
Sample type	Grab	Comp ⁱⁱ	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp	Grab	Comp
BOD ₅	12	8	15	11	6.3	7.0	0.0	0.0	22.3	16.0	4.0	6.0	19.4	16.9	36.1	25.4
COD	12	8	16	10	37.9	46.4	0.0	0.0	140.0	140.0	33.0	44.0	136.1	159.8	243.3	284.8
Nitrate + Nitrite Ni-														1		
trogen	6	2	10	4	0.59	0.08	0.00	0.00	3.00	0.30	0.10	0.00	2.89	. '	7.96	
Total Kjeldahl Nitro-														1		
gen	12	8	15	10	1.56	1.91	0.10	0.34	5.71	6.89	0.67	1.15	6.12	6.47	13.70	13.09
Oil & Grease	11	N/A	15	N/A	1.7	N/A	0.0	N/A	10.0	N/A	0.0	N/A	9.8	N/A	27.4	N/A
рН	11	N/A	15	N/A	N/A	N/A	6.2	N/A	8.5	N/A	7.2	N/A	8.4	N/A	8.9	N/A
Total Phosphorus	12	8	15	10	0.70	0.24	0.00	0.00	7.06	0.71	0.20	0.17	3.12	1.18	10.36	2.89
Total Suspended														ĺ		
Solids	12	8	15	10	2522	1920	0	0	27100	13300	124	636	27188	10641	217687	38624

¹Applications that did not report the units of measurement for the reported values of pollutants were not included in these statistics. Values reported as non-detect or below detection limit were assumed to be 0.

ii Composite samples.

⁷¹ Illicit connections are contributions of unpermitted non-storm water discharges to storm sewers from any of a number of sources including

sanitary sewers, industrial facilities, commercial establishments, or residential dwellings. The probability of illicit connections at mineral mining

and processing facilities is low yet it still may be applicable at some operations.