

**O01 - OPEN MATERIAL STORAGE AREAS, GENERAL, DISTRICT ENGINEERING ESTIMATE, INCLUDES  
'NATURAL MOISTURE CONTENT OF SOILS'.**

**CALCULATION METHODS**

**Annual Emissions:**  $E_a = A \times [(EF_a \times D_a) + (EF_i \times D_i)] \times C_i \times (1 - e)$

**Hourly Emissions:**  $E_h = A \times [(EF_a \times D_a) / H] \times C_i \times (1 - e)$

**Notes:**

- Open material storage fugitive emission control methods and efficiencies must be identified in the database if applicable. Emission factors assume "uncontrolled" releases.
- TSP and PM10 factors are based on Section 8.19 (9/85) of AP-42. The newer estimation procedures in the fifth edition of AP-42 are not currently used due to excessive data requirements.
- Trace metal default concentrations are based on local test results 1991 - 1996. Use site specific data if available.
- TSP emission factors are 13.2 lbs/acre/day and 3.5 lbs/acre/inactive day.
- PM10 emission factors are 6.3 lbs/acre/day and 1.7 lbs/acre/inactive day.

POLLUTANT	DISTRICT EMISSION FACTORS (ppmw)	REFERENCE DOCUMENT	AP 42-FACTOR	(UNITS)	COMMENTS
NOX					
CO					
SOX					
TOG					
ROG					
TSP	NA	AP-42, Section 8.19 (9/85) factors used.			TSP factors = 13.2 lbs/acre/active day & 3.5 lbs/acre/inactive day
PM10	1000000	AP-42, Section 8.19 (9/85) factors used.			PM10 factors = 6.3 lbs/acre/active day & 1.7 lbs/acre/inactive day
ALUMINUM					
ARSENIC	20				Based on local test results.
BARIUM					
BENZENE					
BERYLLIUM	1.0				Based on local test results.
CADMIUM	1.0				Based on local test results.
CHROMIUM HEXAVALENT	0.0				Based on local test results. No Cr+6 detected in any samples analyzed.

POLLUTANT	DISTRICT EMISSION FACTORS (ppmw)	REFERENCE DOCUMENT	AP42-FACTOR	(UNITS)	COMMENTS
CHROMIUM NONHEXAVALENT	50				Based on local test results.
COBALT					
COPPER	100.0				Based on local test results.
LEAD	50				Based on local test results.
MANGANESE	500				Based on local test results.
MERCURY	0.0				Based on local test results. No mercury detected in any samples analyzed.
NAPHTHALENE					
NICKEL	20				Based on local test results.
SELENIUM	5.0				Based on local test results.
SILICA, CRYSTALLINE	100000				Based on local test results.
RESPIRABLE SILICA, CRYSTALLINE	7950				PM4 fraction of PM10 silica, assumed to be 7.95%
ZINC	200				Based on local test results.

*Last Updated on November 2023, J. Lofgren*