<u>S11 - SCREENING OPERATION, FINES MATERIAL, DRY, COVERED + WATER SPRAY, AWR / MPI / DISTRICT 4/9/96 METHODOLOGY</u>

CALCULATION METHODS

(Fugitive Releases)

 $Ea = Ua \times EF \times Ci \times (1 - 0.75)$

 $Eh = Uh \times EF \times Ci \times (1 - 0.75)$

(Ducted Releases)

Ea = 0

Eh = 0

Notes:

- The AWR / MPI / District Screening Operation Emission Factors for this material are 0.07100 lbs PM10 and 0.15011 lbs TSP per ton of material processed.
- The PM10 factor is based upon the uncontrolled Screening value in Section 11.19.2, Table 11.19.2-2 of AP-42 (1/95) and the District AWR MPI agreement dated 4/9/96.
- The TSP factor is calculated using a (0.74/0.35) ratio of particle size multipliers from Section 13.2.4 of AP-42 and the above PM10 value.
- The trace metal default concentrations are based on an AWR material analysis for crushed miscellaneous base, (Profile 7), submitted to the District in July 1996. Use site specific

data if available.

- All emissions for this calculation procedure are assumed to be fugitive. No additional capture or control efficiencies should be applied.
- Screens without covers (only) should not be calculated with this procedure.
- Per the AWR / MPI / District agreement;
- "Process" Material = Aggregate Streams composed of material that is 70% or more by weight > #4 mesh.z "Fines" Material = Aggregate Streams composed of material that is 30+% by weight < #4 mesh.
- "Dry" Material = "Process" streams with an average moisture content of <1.5% and "Fines" streams with an average moisture content of <3.0%.
- "Wet" Material = "Process" streams with an average moisture content of 1.5% or more and "Fines" streams with an average moisture content of 3.0% or more.

"Zero" emissions will be assumed for water washed aggregates with visible moisture as well as any material with an average moisture content of 5% or more.

| POLLUTANT | DISTRICT EMISSION FACTORS (ppmw) | REFERENCE DOCUMENT | ARB | (UNITS) | COMMENTS |
|-----------|-------------------------------------|--|-----|---------|------------------------------|
| NOX | | | | | |
| CO | | | | | |
| SOX | | | | | |
| TOG | | | | | |
| ROG | | | | | |
| TSP | 1,000,000.00 | AP-42, Sections 11.19.2 and 13.2.4 (1/95). | | | |
| PM10 | 1,000,000.00 | AP-42, Sections 11.19.2 and 13.2.4 (1/95). | | | |
| ALUMINUM | 15,000.00 | | | | Based on local test results. |

| POLLUTANT | DISTRICT EMISSION FACTORS (ppmw) | REFERENCE DOCUMENT | ARB | (UNITS) | COMMENTS |
|---|-------------------------------------|-----------------------|-----|---------|---|
| ARSENIC | 22.00 | | | | Based on local test results. |
| BARIUM | 225.00 | | | | Based on local test results. |
| BERYLLIUM | 1.00 | | | | Based on local test results. |
| CADMIUM | 1.00 | | | | Based on local test results. |
| CHROMIUM HEXAVALENT | - | | | | Based on local test results. No Cr+6 detected in any samples analyzed. |
| CHROMIUM NONHEXAVALENT | 28.00 | | | | Based on local test results. |
| COBALT | 11.00 | | | | Based on local test results. |
| COPPER | 37.00 | | | | Based on local test results. |
| LEAD | 50.00 | | | | Based on local test results. |
| MANGANESE | 530.00 | | | | Based on local test results. |
| MERCURY | - | | | | Based on local test results. No mercury detected in any samples analyzed. |
| NICKEL | 28.00 | | | | Based on local test results. |
| SELENIUM | 1.00 | | | | Based on local test results. |
| SILICA, CRYSTALLINE | 100,000.00 | | | | Based on local test results. |
| RESPIRABLE SILICA, CRYSTALLINE CRISTOBALITE QUARTZ | 7,950.00 | | | | PM4 fraction of PM10 silica, assumed to be 7.95% |
| ZINC | 99.00 | | | | Based on local test results. |