

GLOBAL STONE TENN LUTTRELL
87-0023-01/82822

PREPARED BY WEM	DATE 5/3/00
REVIEWED BY 952822P	W.P. NO.

$$\text{RAILCAR LOADOUT (DESIGN)} = 100 \text{ T/hr}$$

$$\text{TSP EMISSION FACTOR} = 0.00021 \text{ lb/TON}$$

$$\text{WET SUPPRESSION EFF} = 90.0 \%$$

$$\text{PREVIOUS ACTUAL EMISSIONS (951704P)} = 15.20 \text{ lb/hr}$$

$$\begin{aligned} \text{"NEW" ACTUAL EMISSION (RAILCAR LOADOUT)} &= (100 \text{ T/hr}) (0.00021 \text{ lb/TON}) (0.1) \\ &= 0.0021 \text{ lb/hr (CONTROLLED)} \end{aligned}$$

$$\therefore \text{PTE (UNCONTROLLED)} = \frac{0.0021}{0.1} \approx 0.02 \text{ lb/hr}$$

$$\Sigma \text{ACTUAL} = 15.22 \text{ lb/hr}$$

$$\begin{aligned} \text{ANNUAL (ACTUAL) EMISSIONS} &= (15.22 \text{ lb/hr}) (8760 \text{ hr/yr}) \left(\frac{\text{TON}}{2000 \text{ lb}} \right) \\ &= 66.66 \text{ T/yr} \end{aligned}$$

ALLOWABLE EMISSIONS:

$$E = 17.31 (1200 \text{ T/hr})^{0.16} = 53.82 \text{ lb/hr}$$

$$E(\text{ANNUAL}) = (53.82 \text{ lb/hr}) (4.38) = 235.73 \text{ T/yr}$$