

3.2.8 Emergency Engines

Emissions from the emergency generator engines were calculated using emission factors from the vendor and Section 3.4 of AP-42 for SO₂ and total HAP, provided in Appendix C. With the emission factors, the following was used to calculate the potential emissions.

- The potential operating schedule for emergency engines used was 500 hours of operation per year for each generator in accordance with USEPA guidance;³
- The emission factor for SO₂ required a sulfur (S) content. A maximum S content of 15 ppm was used in accordance with 40 CFR §60.4207 and 40 CFR §1090.305(b).

3.2.9 Process Water Cooling and Water Cooling Towers

The emissions associated with the set of two process water-cooling towers and the set of four water-cooling towers are calculated in the same manner. Emissions from the standby unit are zero because they will not operate unless a normal operating one is taken offline. The water-cooling towers are a potential source of PM resulting primarily from natural dissolved solids in the make-up water. Trace VOC emissions potentially occur from water treatment chemicals (if any). Emissions from the cooling towers were calculated using the following:

- Circulating Water Flow Rate provided in Appendix C;
- The drift rate was calculated in accordance with AP-42 Table 13.4-1; and
- Average estimated solid/VOC concentration in water (Assumed 3000 ppm/100 ppm).

³ John S. Seitz, "Calculating Potential to Emit (PTE) for Emergency Generators," USEPA Office of Air Quality Planning and Standards (MD-10) Memorandum, September 6, 1995.