

ABSTRACT

Particulate levels and sulphur dioxide levels were monitored around a bauxite - alumina plant in Manchester. It was found that the US EPA 24 hr. standard for particulates below 45: microns was regularly exceeded at one site approximately 1.6 km downwind from the plant but not at another site further away. The bulk of particulates were found to be in the range of 2.5 to 15 microns in size.

It was determined that particulates arose from several sources. These were identified as being bauxite, alumina, limestone, caustic aerosol, fuel oil and a bit surprisingly, sea spray.

Sulphur dioxide levels were found to be below the US EPA standard except in the immediate vicinity of the plant.

Similar particulate monitoring was also done at another bauxite-alumina plant in south St. Elizabeth. However, it was not as extensive as was done in Manchester. Particulate levels were found to be below the US EPA standard.