AIR POLLUTION

Lone Star emissions won't affect issuance of operating permit

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DAVENPORT — While Lone Star Industries' Davenport cement plant may be churning out higher-than-expected emissions of sulfur dioxide and oxides of nitrogen, that should prove no obstacle to issuance of an operating permit by the Monterey Bay Unified Air Pollution Control District.

Sulfur dioxide emissions from the new plant are much higher than was anticipated when the district first authorized the facility's construction in 1978. But even under the worst conditions, pollution levels around the cement plant are still less than the maximum allowed under state and federal air quality standards, according to a recently issued environmental report.

And, under normal conditions, figures supplied by the Air Pollution District indicate, pollution resulting from cement plant emissions is likely to be well below the maximum level allowable under state and federal standards.

An environmental report conducted when the district first issued a construction permit for the plant eight years ago indicated that sulfur dioxide emissions from the facility would not exceed 53 pounds an hour, and that emissions of oxides of nitrogen would not exceed 371 pounds hourly.

But, after the plant was built, it was discovered that emissions of both pollutants were greater than expected.

Lone Star was subsequently ordered to correct the problem. That order was lifted by the Pollution District's quasi-judicial hearing board this spring, after district officials said that the company had done all it could, in the way of installing pollution-control equipment, to reduce emissions at the cement plant.

The latest environmental report was done in connection with a proposal by the district to raise emission limits imposed under the plant's original construction permit. That action will pave the way for issuance of an operating permit for the facility.

Pollution control measures employed by Lone Star have succeeded in reducing maximum emissions of oxides of nitrogen below the level anticipated in the original environmental study, according to the latest report.

But maximum sulfur dioxide emissions — as high as 300 pounds an hour — remain well above the top level anticipated in 1978.

Nevertheless, according to the report, state and federal air quality standards will not be violated in Davenport even if the cement plant's smokestack pours the maximum amount of pollutants into the air, all the time, under the worst possible atmospheric conditions.

State air quality standards, which are generally more restrictive than federal standards, allow sulfur dioxide concentrations of up to 655 "micrograms" (millionths of a gram) per cubic meter of air. Nitrogen dioxide concentrations of as much as 470 micrograms per cubic meter are also acceptable under state standards.

A cubic meter is the equivalent of a box three feet on a side. A gram is roughly equal to between a fourth and a third of the weight of a thimbleful of water — minus the thimble.

According to the latest environmental report, even if the cement plant pumped out sulfur dioxide and nitrogen dioxide at the highest recorded levels, all the time, under weather conditions which allowed virtually no dispersal of the smokestack's gas plume, sulfur dioxide concentrations in Davenport would not exceed 474 micrograms, and nitrogen dioxide conentrations would be no higher than 199 micrograms.

Most of the time, however, sulfur dioxide and nitrogen dioxide concentrations around the plant are apt to be much lower, according to Air Pollution District officials, if only because the facility'semissions are generally much less than the top levels registered by measuring devices in the facility's smokestack.

In May and June, for example, sulfur dioxide emissions ranged from a low of 32 pounds to a high of 254 pounds an hour, with an average emission level throughout the two-month period of 60.5 pounds an hour.

During the same period, officials say, emissions of oxides of nitrogen ranged from 156 pounds to 295 pounds an hour, and averaged 172 pounds an hour.