



BAY AREA
AIR QUALITY
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CEMEX and Hanson Evaluation Summaries

The Air District Engineering Division evaluated the following three permit applications for compliance with all applicable air quality regulations. Below are summaries of facility operations, expected emissions, and resulting outcomes from each analysis.

CEMEX Construction Materials Pacific, Plant #17111, Application #28001

CEMEX Construction Materials Pacific, LLC (CEMEX) is an existing concrete production facility located at 500 Amador Street in the Bayview/Hunters Point neighborhood of San Francisco. The facility receives material to make concrete (i.e. sand, aggregate, and cement) by trucks and ships. These materials are stored at the facility until they are ready to be mixed together with water to make concrete in a truck-mixing batch process or a central-mix batch process. The finished product is then taken off-site by trucks to be used at construction sites.

This evaluation is for an increase in sand and aggregate brought to the facility by ships and offloaded onto a conveyor system. The facility requested to increase sand from 60,000 tons per year (TPY) to 235,572 TPY and also applied for a permit to bring 153,803 TPY of aggregate by ship.

Emissions occur during the transfer of sand or aggregate from one location to another. Emissions are also expected from wind erosion of the sand and aggregate stockpile, vehicle traffic on facility roadways, and from the operation of tugboat and oceangoing vessel (OGV) engines. Emissions of particulate matter (PM10 and PM2.5) and respirable crystalline silica are expected from the material handling, stockpile, and vehicle travel operations. Combustion emissions such as nitrogen oxides (NOx), precursor organic compounds (POC), sulfur dioxide (SO₂), carbon monoxide (CO), PM10, and PM2.5 result from the operation of tugboat and OGV engines.

This draft evaluation requires the use of water spray at each material drop point and requires that the facility ensure the entire surface area of the stockpile remain visibly wet to reduce emissions. Through the permit conditions, CEMEX will be required to minimize fugitive dust emissions from truck traffic by implementing mitigation measures if dust is visible. To further reduce emissions, the facility will be required to limit the number of miles traveled by vehicles inside the facility. CEMEX must monitor dust leaving the facility by vehicles exiting the site (this is called trackout emissions) and will be required to cleanup if the trackout is greater than 25 linear feet. The draft permit conditions will further regulate emissions by limiting the number of ships bringing material and by placing limits on the amount of material processed by the facility.

Hanson Aggregates, Mid-Pacific, Inc., Plant #23564, Application #27982

Hanson Aggregates, Mid-Pacific, Inc. (Hanson) operates a sand and aggregate terminal at Pier 94 in the Bayview/Hunters Point neighborhood of San Francisco. Sand and aggregate are brought to the facility by tugboats. The material is offloaded from the tugboats and stored at the facility until it is ready to be loaded into trucks to be taken offsite and sold to customers.

In the original permit application for this facility, it was determined that the facility did not require a permit due to the water content in the material. The moisture content of the material was greater than 5%. The facility, at the time, qualified for an exemption under Air District Regulation 2-1-115.1.4.5. In 2016, during a site visit by an Air District Inspector, the water content was determined to be too low to qualify for the same exemption. The facility was required to submit this permit application.

Emissions occur during the transfer of sand or aggregate from one location to another. Emissions are also expected from wind erosion of the sand and aggregate stockpiles, vehicle traffic on facility roadways, and from the operation of tugboat engines. Emissions of particulate matter (PM10 and PM2.5) and respirable crystalline silica are expected from the material handling, stockpile, and vehicle travel operations. Combustion emissions such as nitrogen oxides (NOx), precursor organic compounds (POC), sulfur dioxide (SO2), carbon monoxide (CO), PM10, and PM2.5 result from the operation of tugboat engines.

Emissions of respirable crystalline silica were modeled as part of a health risk assessment since their emissions were greater than trigger levels listed in Table 2-5-1 of Air District Regulation 2, Rule 5. The model showed that the facility was in compliance with Regulation 2, Rule 5 requirements.

This draft evaluation requires that the facility follow the requirements outlined in the permit conditions. The draft permit conditions limit the number of tugboats to the facility and the amount of material that can be processed on a yearly basis. Visible dust fallout onto adjacent properties will be prohibited. If fallout occurs, the facility will be required to take corrective action. Hanson will be required to use a water spray system at each drop point of material and to ensure the entire surface area of stockpiles remains visibly wet. Hanson must minimize fugitive dust emission from truck traffic by implementing mitigation measures and must limit the vehicle miles traveled at the facility. The facility will be required to monitor dust emissions leaving the facility by vehicles leaving the site and will be required to cleanup if the trackout is greater than 25 linear feet. These limits are required to minimize emissions and ensure compliance with all regulations.

Hanson Aggregates, Mid-Pacific, Inc., Plant #13407, Application #28839

Hanson Aggregates, Mid-Pacific, Inc. (Hanson) operates a sand terminal at Pier 92 in the Bayview/Hunters Point neighborhood of San Francisco. Sand is mined from the San Francisco Bay and is brought to the facility by barge. At the facility sand is offloaded and washed. The washed material is loaded onto trucks and distributed for use offsite.

The facility was previously owned by Tidewater Sand & Gravel and in 1993 they applied for a permit with the Air District. At the time, the material processed by the facility was determined to be exempt from permitting requirements since the sand operation had a moisture content of greater than 5% (exempt per Air District Regulation 2-1-115.1.4.5). In 2016, during a site visit by an Air District Inspector, the water content was determined to be too low to qualify for the same exemption. The facility was required to submit this permit application.

Emissions occur during the transfer of sand from one location to another. Emissions are also expected from wind erosion of the sand stockpiles, vehicle traffic on facility roadways, and from the operation of tugboat and barge engines. Emissions of particulate matter (PM10 and PM2.5) and respirable crystalline silica are expected from the material handling, stockpile, and vehicle travel operations. Combustion emissions such as nitrogen oxides (NOx), precursor organic compounds (POC), sulfur dioxide (SO2), carbon monoxide (CO), PM10, and PM2.5 result from the operation of tugboat engines.

Emissions of respirable crystalline silica were modeled as part of a health risk assessment since their emissions were greater than trigger levels listed in Table 2-5-1 of Air District Regulation 2, Rule 5. The model showed that the facility was in compliance with Regulation 2, Rule 5 requirements.

This draft evaluation requires that the facility follow the requirements outlined in the permit conditions. The draft permit conditions limit the number of tugboats to the facility and the amount of sand that can be processed on a yearly basis. This facility is limited to only processing sand. Visible dust fallout onto adjacent properties will be prohibited. If any fallout occurs, the facility is required to take corrective action. Hanson will be required to use a water spray system at each drop point of material and to ensure the entire surface area of stockpiles remains visibly wet. Hanson must minimize fugitive dust emission from truck traffic by implementing mitigation measures and must limit the vehicle miles traveled at the facility. The facility will be required to monitor dust emissions leaving the facility by vehicles leaving the site and will be required to cleanup if the trackout is greater than 25 linear feet. These limits are required to minimize emissions and ensure compliance with all regulations.