



ENCINA WASTEWATER AUTHORITY

A Public Agency

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Dear Resident:

Encina Wastewater Authority (Encina) is required by the San Diego County Air Pollution Control District (SDAPCD) to conduct periodic health risk assessments that evaluate air pollutants released from the Encina Water Pollution Control Facility located at 6200 Avenida Encinas.

You are receiving this letter because you live within an area predicted to have an acute health risk and a chance of excess cancer risk above the public notification threshold as a result of the 2021 facility operations.

This letter describes the nature and context of the potential impacts to help you evaluate the information in this required public notification.

Health Risk Assessment

Health risk assessments provide an estimate of the chance that a person may experience a health effect from exposure to chemicals based on predictive computer modeling.

While any emission of toxic air pollutants is a concern to Encina, the estimated cancer risk discussed in this notice is based on a person who resides in one location 24 hours a day, for 30 years, and is exposed to 2021 facility emission levels. The acute risk is based on a worst-case scenario of 1-hour exposure to emissions. Since all sources could operate simultaneously, this scenario includes the maximum emissions from each source category even though they may not operate simultaneously.

The health risk assessment used regulatory models that are designed to ensure impacts are not underestimated, for example the toxicity factors include safety and uncertainty factors to adjust the data from animal studies to humans.

Risk assessments cannot predict actual health risks or be used to determine if a particular health issue was caused by a chemical. Instead, they are used to support regulatory activities by comparing results to various threshold levels considered protective of human health. The public notification thresholds are set at a level designed to protect the most sensitive individuals in the population.

Results of Health Risk Assessment

The risk assessment approved by the SDAPCD indicated that a few residences may experience an excess cancer risk greater than 10 in one million, up to 16 in a million due to Encina's operations. Cancer risk is the probability that a person might contract cancer if exposed to toxic chemical emissions from remaining at their property continuously for 30 years. A cancer risk of 1 in one million means that in a population of one million people, not more than one additional person would have the chance of developing cancer as the result of the exposure to the toxic air pollutant¹.

¹ <https://ww2.arb.ca.gov/resources/documents/health-risk-assessment>

To put this in perspective, CARB estimates that residents near Encina have a 356 in one million chance² of getting cancer due to the toxics in the ambient air, with the majority from on-road diesel particulate matter emissions.

The risk assessment approved by the SDAPCD indicated that a one resident may experience short-term, non-cancer health impacts due to Encina's operations. The public notification thresholds are set at a level designed to protect the most sensitive individuals in the population. If an acute risk is predicted to be equal to or greater than 1, this means there is a potential for a short-term (1-hour) health impact. The modeling predicted the maximum residential acute risk to be 1.01. The analysis used maximum simultaneous hourly emission rates from all sources in the analysis, even though all sources do not operate simultaneously or continuously.

Emission Reduction Measures

As part of this Health Risk Assessment, Encina prepared a risk reduction plan that SDAPCD approved on April 22, 2025. Since approval of the Risk Reduction Plan, Encina has actively implemented measures to reduce potential health risks, including conducting source testing to the Odor Reduction Facilities (ORFs) to better characterize emissions from these systems demonstrating there are no ethylene dichloride (EDC) emissions and the overall TAC emissions are lower than the previous tests from the 1990s.

Encina has permitted the installation of a digester gas conditioning system and oxidation catalysts on all four existing cogeneration engines to reduce toxic emissions by more than 90%.

Additionally, Encina controls emissions by implementing a Capital Improvement Program and ongoing maintenance programs that evaluate, upgrade, and replace equipment to protect air quality and treat odors from the Facility.

About Encina Wastewater Authority

Encina provides essential public services treating up to 36 million gallons per day of wastewater (average dry weather flow) from over 379,000 residents and businesses throughout a 125-square-mile service area. Encina is owned by six public agencies and governed by a Joint Powers Authority that includes the Cities of Carlsbad, Vista, and Encinitas as well as Buena Sanitation, Vallecitos Water, and Leucadia Wastewater Districts. The Facility houses complex processes and equipment that protects the local ocean environment, preserves public health, and provides valuable water resources for the region. It also has extensive systems for process odor control, electricity generation from treatment process gas (cogeneration), and biosolids processing that produces a high-quality fertilizer product that is beneficially used.

More Information

If you would like further information about Encina's facility, please contact Ms. Alicia Appel at (442) 320-7018 or AAppel@encinajpa.com.

Sincerely,



Alicia Appel
Director of Environmental Compliance, Encina Wastewater Authority

² <https://california-air-toxics-assessment-californiaarb.hub.arcgis.com/>