



# ENCINA WASTEWATER AUTHORITY

---

A Public Agency

6200 Avenida Encinas  
Carlsbad, CA 92011-1095  
Telephone (760) 438-3941  
FAX (760) 438-3861 (Plant)  
(760) 431-7493 (Admin)

May 16, 2022

Dear Business Owner:

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 your business is within an area predicted to have an acute health risk slightly above the public notification threshold as a result of the 2017 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 a health protective estimate of the chance that a person may experience a health effect from exposure to chemicals based on computer modeling.

While any emission of toxic air pollutants is a concern to Encina, the estimated risk discussed in this notice is based on a worst-case scenario of 1-hour exposure to emissions from all sources at the facility operating simultaneously, even though all sources do 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.

While risk assessments can be used to estimate whether current or future chemical exposures can pose health risks to a broad population, they cannot predict actual health risks or be used to tell us if a particular health issue was caused by a chemical.

## **Results of Health Risk Assessment**

The risk assessment conducted by the SDAPCD indicated that two businesses may experience short-term, non-cancer health impacts due to Encina 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 occupational acute risk to be 1.06.

The SDAPCD used maximum hourly emission rates from all sources in the analysis, even though all sources do not operate simultaneously or continuously. Importantly, only three of the four cogeneration engines ever operate simultaneously.

The SDAPCD model also included emissions of sodium hydroxide and chlorine from the Odor Reduction System #3 associated with the aerated sludge system since Encina's permit in 2017 still allowed their use and their emissions. These substances were no longer used in the pollution control scrubber in 2017.

The primary health protective assumptions SDAPCD incorporated in the assessment were the inclusion of all sources operating in the same hour and the inclusion of sodium hydroxide and chlorine emissions from Odor Reduction System #3.

### **Emission Reduction Measures**

As part of this Health Risk Assessment, Encina is required to submit a risk reduction plan to the SDAPCD in August 2022. Encina has already eliminated one source of emissions accounted for in the HRA models: at Odor Reduction System #3, Encina discontinued use of sodium hydroxide and chlorine in 2016, and in 2019 modified the SDAPCD permit to prohibit the use of those chemicals. Encina's air quality consultants have calculated that without the inclusion of these chemicals from this source, the acute risk drops below the SDAPCD threshold. The SDAPCD will evaluate the impact of this change on the health risk when Encina submits its risk reduction plan to SDAPCD.

In addition, Encina implements a Capital Improvement Program and ongoing maintenance programs that replace and evaluate equipment to protect air quality and treat odors from the Water Pollution Control Facility.

### **About Encina Wastewater Authority**

Encina provides essential public services treating up to 43 million gallons per day of wastewater 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 (760) 268-8861 or [AAppel@encinajpa.com](mailto:AAppel@encinajpa.com).

Sincerely,



Alicia Appel  
Director of Environmental Compliance  
Encina Wastewater Authority