



Encina Water Pollution Control Facility

- Regional provider of wastewater and recycled water
 - Cities of Carlsbad, Vista, Encinitas; Buena Sanitation, Vallecitos Water, and Leucadia Water Districts
 - 123 square mile service area; population 377k
- Average ~20 Million Gallons / Day
- Environmental Steward
 - Water Quality Protection
 - Biosolids => Fertilizer
 - Cogeneration Energy





San Diego County Air Pollution Control District

Encina Wastewater Authority

Public Meeting

July 6, 2022



Meeting Agenda

SDAPCD

Purpose of this meeting
Air Toxics and the “Hot Spots” Program
Facility operation, emissions, and health risk for 2017 emissions
Next Steps (Risk Reduction Plan)

Public Comment

Receive public comments
Answer questions
SDAPCD staff and Encina staff



California Air Toxics “Hot Spots” Program (Assembly Bill 2588)

Program Goal

- Protects the public’s right to know about toxic air contaminant emissions and how these emissions can potentially impact public health; and,
- Requires health risk reductions for facilities with elevated health risks

Toxic Air Contaminants

- Chemicals emitted into the atmosphere that may cause adverse health effects

Adverse Health Effect

- Range from minor eye or throat irritation, shortness of breath, or headaches, to cancer, birth defects, or damage to organs



California Air Toxics “Hot Spots” Program

**Quantify Toxic
Air Contaminant
Emissions**

**Identify Facilities
that may Present
Public Health
Concerns**

**Request Health
Risk
Assessments –
Review and
Approve**

**Implement
Public
Notification and
Risk Reduction
Requirements**



Air Toxics “Hot Spots” Program Health Risks

Cancer Risk

Calculates the probability that a person would contract cancer if exposed to emissions for 30 years

Health Hazard Index

Calculated for acute exposure (or short-term health impacts) and chronic exposure (or long-term health impacts)

Index < 1 → no adverse health effects

Index ≥ 1 → potential for adverse health effects

Cancer Burden

Estimates of the number of people that can contract cancer within a community that is exposed to the emission levels



Rule 1210 Public Notification and Risk Reduction Thresholds

Health Risk	Public Notification Threshold	Risk Reduction Threshold
Cancer Risk	10 in one million	10 in one million (100 in one million for emissions prior to CY 2018)
Acute Noncancer Health Hazard Index	1.0	1.0
Chronic Noncancer Health Hazard Index	1.0	1.0
Cancer Burden	1.0	1.0



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Air Toxics “Hot Spots” Program

Public Notifications

- Potential Health Risks from a Single Source of Air Pollution

Yes



- Potential Health Risks from ALL Sources of Air Pollution

No



Encina Wastewater Authority

- Wastewater Treatment Plant
- 6200 Avenida Encinas, Carlsbad



Encina Equipment



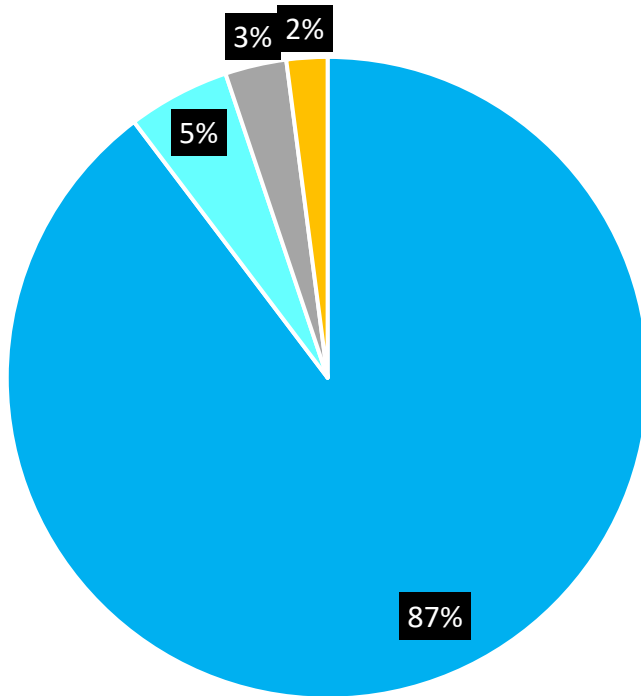
Elevated Health Risk Encina 2017 Emissions

Health Risk	HRA Results	Risk Notification Thresholds	Risk Reduction Thresholds
Maximum Residential Cancer Risk	13.42 in one million	10 in one million	100 in one million (10 in one million for emissions in CY2018 and later)
Maximum Worker Acute Health Hazard Index	1.06	1.0	1.0



Emission Contributions

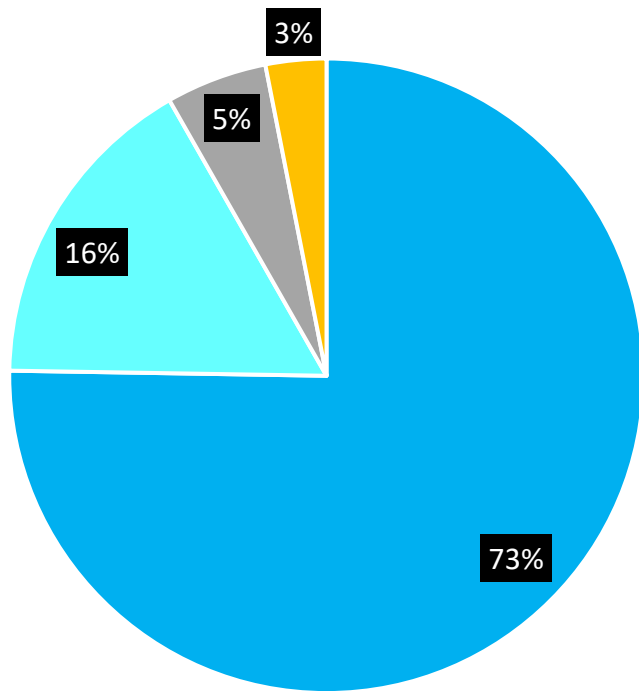
Residential Cancer Risk of 13.42 in one million



- Formaldehyde (Cogen Engines)
- Ethylene DiChloride (Odor Reduction Facility 1 and 3)
- Aresnic (Cogen Engines)
- Benzene (Cogen Engines, Odor Reduction Facility 1 and 3)



Emission Contributions Worker Acute Non-Cancer Health Hazard Index of 1.06



- Formaldehyde (Cogen engines, emergency diesel engine)
- Sodium Hydroxide (Odor Reduction Facility 3)
- Chlorine (Odor Reduction Facility 3)
- Acrolein (Cogen engines, emergency diesel engine)



Calculated Health Risks

Health Risks are Determined Based on where a Person may be exposed

- Residence
- Workplace
- School, Public Park, Library, etc.

Health Risks are also Calculated at the Point of Maximum Impact (PMI)

- Location with the highest risk, that is not a residence, workplace, school, public park, library, etc. For example, in the middle of the ocean or river
- Not used to determine public notification or risk reduction requirements



Next Steps



Encina Wastewater Authority to submit a risk reduction plan (due August 30, 2022)

Considering public comments, District to review and approve risk reduction plan

Encina will conduct annual notifications

District to review and approve Encina's 2021 emission inventory and determine if a HRA is required

Sign up for District Updates to receive notices at <https://bit.ly/3JTGsre>





ENCINA

WASTEWATER AUTHORITY

- Caustic Scrubber at Odor Reduction Facility III
 - Offline Since 2016
 - Removed from Permit 2019
 - ↓ Sodium Hydroxide + Chlorine
- Capital Improvement Program assesses + funds needs across the facility

