

Net-Zero Now.



MM Miramar Energy LLC 5240 Convoy Street San Diego, CA 92111



#### **Brief Introduction to the Renewable Energy Facility**

- Miramar Energy Facility accepts landfill gas from the Miramar landfill and combusts it in engines to produce renewable power
- The facility has been in existence since 1998 and provides a total of 9.6 MW of renewable power to the air basin
- Of this:
  - o Approximately 3.5 MW is provided to the City of San Diego for their MBC waste water treatment plant
  - o Approximately 2.9 MW is provided to SDG&E to offset the area's power needs
  - o 3.2 MW is provided to MCAS Miramar for their operations
- The engines are operated by trained staff with 60 combined years of experience and are tested routinely to ensure compliance with permits issued by the San Diego APCD
- In addition to operations staff, the site is overseen by an environmental team and a health and safety team, each conducting routine audits to ensure compliance with federal, state and local regulations
- The site is routinely inspected by the San Diego Air Pollution Control District and the County Health Department.



San Diego County Air Pollution Control District

Minnesota Methane San Diego LLC (Miramar Energy)

Public Meeting

July 28, 2022



#### **Meeting Agenda**

#### **SDAPCD**

Purpose of this meeting

Air Toxics and the "Hot Spots" Program

Facility operation, emissions, and health risk for 2018 emissions

Next Steps (Risk Reduction Plan)

## Public Comment

Receive public comments

Answer questions

SDAPCD staff and Miramar Energy staff



## Air Toxics "Hot Spots" Program (Assembly Bill 2588)

Goal

Requirements

"Hot Spots"
Program

Identify Stationary
Sources that can
Create Elevated
Health Risks

**Public Notification** 

**Risk Reduction** 



## Air Toxics "Hot Spots" Program Public Notifications

Potential
 Health Risks
 from a Single
 Source of Air
 Pollution

Yes



Potential
 Health Risks
 from <u>ALL</u>
 Sources of Air
 Pollution

No





#### 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 negative health effects

Index  $\geq 1$   $\longrightarrow$  potential for negative 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	1.0	1.0
Index		
Cancer Burden San Diego County Air Pollution Control District	1.0	1.0

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# Elevated Health Risk Miramar Energy 2018 Emissions

Health Risk	HRA Results	Risk Notification Thresholds	Risk Reduction Thresholds
Maximum Worker Chronic Health Hazard Index	1.82	1.0	1.0
Maximum Worker Acute Health Hazard Index	20.86	1.0	1.0



#### Miramar Energy

- Landfill Gas to Energy Plant
- 5244 Convoy Street, San Diego



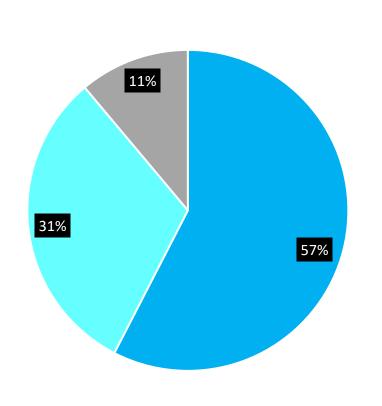


#### MM San Diego Equipment





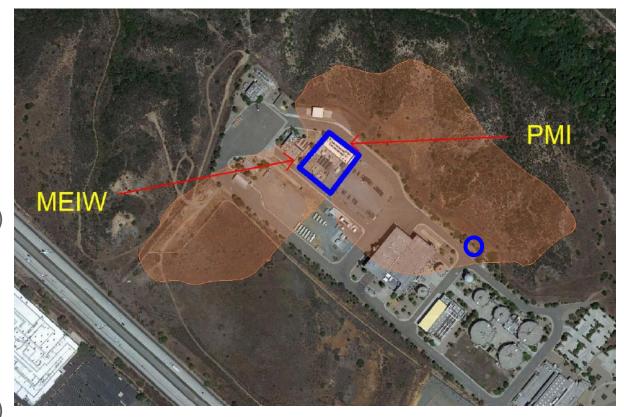
### Emission Contributions Worker Chronic non-Cancer Health Hazard Index of 1.82



Formaldehyde (Landfill gas fired engines)

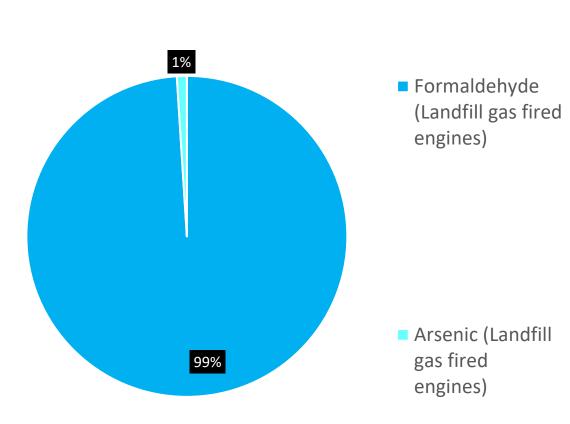
Arsenic (Landfill gas fired engines)

Hydrogen Chloride (Landfill gas fired engines)





## Emission Contributions Worker Acute non-Cancer Health Hazard Index of 20.86





#### 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**

Miramar Energy to submit a risk reduction plan (due September 18, 2022)

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

Miramar Energy will conduct annual notifications

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

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

