

SOCIOECONOMIC IMPACT ASSESSMENT

**PROPOSED NEW RULE 69.7 -
LANDFILL GAS FLARES**

February 2023

Prepared by

**San Diego County Air Pollution Control District
10124 Old Grove Road
San Diego, CA 92131**

**SOCIOECONOMIC IMPACT ASSESSMENT
PROPOSED NEW RULE 69.7 –
LANDFILL GAS FLARES**

TABLE OF CONTENTS

EXECUTIVE SUMMARY	3
I. INTRODUCTION	4
II. NECESSITY OF PROPOSED NEW RULE 69.7	4
III. SUMMARY OF PROPOSED NEW RULE 69.7	5
IV. TYPE OF INDUSTRIES AFFECTED BY THE PROPOSED NEW RULE	5
V. RANGE OF PROBABLE COSTS TO INDUSTRY INCLUDING SMALL BUSINESS	5
VI. EMISSION REDUCTION POTENTIAL AND COST-EFFECTIVENESS OF THE PROPOSED NEW RULE	5
VII. CONCLUSION	6

EXECUTIVE SUMMARY

The San Diego County Air Pollution Control District (District) is required by federal and state law to adopt and periodically update rules to control and reduce ozone-forming emissions from stationary sources in the San Diego region, which is an ozone nonattainment area. The District's proposed new Rule 69.7 – Landfill Gas Flares is the result of these federal and state requirements.

Additionally, when adopting, amending, or repealing a rule that can significantly affect air quality or increase emissions, the District is required by state law to assess the socioeconomic impacts. Proposed new Rule 69.7 would affect emissions limitations by establishing emissions standards for landfill gas flares operated at municipal solid waste (MSW) landfills. Accordingly, this Socioeconomic Impact Assessment (SIA) has been prepared pursuant to state law.

The Federal Clean Air Act (CAA) Section 182(f) requires ozone nonattainment areas (Moderate and above) to implement Reasonably Available Control Technology (RACT) for specific types of nitrogen oxides (NO_x) sources. In July 2021, the San Diego Air Basin was reclassified as a Severe Nonattainment Area for the 2008 ozone and 2015 eight-hour ozone National Ambient Air Quality Standards (NAAQS). Consequently, the federal major stationary source threshold for the San Diego region was reduced from 50 tons per year to 25 tons per year of NO_x and volatile organic compounds (VOC). The U.S. Environmental Protection Agency (EPA) requires the District to write new or amend existing regulations for sources meeting or exceeding this new federal major stationary source threshold. Proposed new Rule 69.7 is being proposed pursuant to these federal requirements and a corresponding commitment in the District's 2020 Ozone State Implementation Plan (SIP) to regulate landfill gas flares operated at MSW landfills that are federal major stationary sources of NO_x emissions.

Overall, the proposed new rule is expected to have no significant impact on employment, business creation, elimination or expansion, or business competitiveness in the San Diego region. MSW landfills that operate landfill gas flares subject to the rule currently comply with the proposed emission limits and requirements. Since the affected MSW landfills already comply with the proposed emission limits and requirements, proposed new Rule 69.7 would not result in any NO_x emission reductions. Affected facilities would only incur additional costs for ongoing compliance source testing required by the proposed new rule.

I. INTRODUCTION

California law requires air pollution control districts (with populations of 500,000 people or higher) to perform an SIA when adopting, amending, or repealing rules and regulations that will significantly affect air quality and emission limitations.

The California Health and Safety Code Section 40728.5(b), specifies the following elements to be included in the SIA:

1. The type of industry or business, including small business, affected by the rule or regulation.
2. The impact of the rule or regulation on employment and the economy of the region affected by the adoption of the rule or regulation.
3. The range of probable costs to industry or business, including small business, of the rule or regulation.
4. The availability and cost-effectiveness of alternatives to the rule or regulation.
5. The emission reduction potential of the rule or regulation.
6. The necessity of adopting, amending, or repealing the rule or regulation in order to attain state and federal ambient air quality standards.

Pursuant to the California Health and Safety Code Section 40728.5(e), the analyses specified in items 2 and 4 listed above are not required if the proposed rule is substantially similar to or required by a state or federal law, regulation, or formal guidance document, including federal Control Techniques Guidelines. The District is proposing a NO_x emission standard within proposed new Rule 69.7 that is considered RACT and thus is required pursuant to both federal law and the District's 2020 Ozone SIP. Therefore, based on the California Health and Safety Code stipulation, this SIA does not address either the availability or the cost-effectiveness of the alternatives to proposed new Rule 69.7, or its impact on the employment and the economy of San Diego County.

II. NECESSITY OF PROPOSED NEW RULE 69.7

The San Diego County Air Basin is not in attainment with National and State Ambient Air Quality Standards for ozone. Both federal and State laws require the District to adopt and implement rules that control emissions of ozone precursors – NO_x and VOCs. Similarly, the California Clean Air Act requires the District to adopt all feasible measures to control and reduce ozone precursor emissions from stationary sources.

The District is required to implement air quality attainment plans that demonstrate our progress towards meeting all federal NAAQS for ozone. Because the attainment plans are developed using air quality models that depend on how much air pollution is emitted into the air, it is important to account for all air emissions reductions that occur as a result of the District's activities and because of the rules adopted by the Governing Board. Adopting proposed new Rule 69.7 with its emissions

requirements, and revised baseline emission factors, would allow the District to account for those emissions reductions in the region's air quality attainment plans, which will improve ozone modeling will improve modeling accuracy and the prognosis for attaining each ozone NAAQS.

III. SUMMARY OF PROPOSED NEW RULE 69.7

In summary, proposed new Rule 69.7 will include the following requirements:

- A NOx emission standard of 0.06 pounds per million British thermal units (Btu) of heat input
- A carbon monoxide (CO) emission standard of 0.20 pounds per million Btu of heat input
- Operational, monitoring, record keeping, and source test requirements
- Test methods and compliance schedule

IV. TYPE OF INDUSTRIES AFFECTED BY THE PROPOSED NEW RULE

Proposed new Rule 69.7 applies to all landfill gas flares located at a MSW landfill where the aggregate actual or potential emissions from such flares are at or above the federal major stationary source threshold of 25 tons per year for NOx. There are six enclosed landfill gas flares permitted with the District currently being operated at three MSW landfills that would be subject to the proposed rule.

V. RANGE OF PROBABLE COSTS TO INDUSTRY INCLUDING SMALL BUSINESSES

Proposed new Rule 69.7 is expected to have no significant impact on employment, business creation, elimination or expansion, or business competitiveness in the San Diego region. The proposal will not significantly affect MSW landfills operating flares because these landfills currently comply with the proposed emission limits, as well as operational and testing requirements required by state regulations. Therefore, only additional costs for ongoing compliance source testing would be required by the proposed new rule.

VI. EMISSION REDUCTION POTENTIAL AND COST-EFFECTIVENESS OF THE PROPOSED NEW RULE

NOx emission reductions of proposed new Rule 69.7 were determined using emission factors based on (1) District source testing of enclosed flares, (2) the District's existing emission factor of 0.08 pounds per million Btu of heat input (MM/Btu) for landfill gas flares, (3) a revised emission factor of 0.06 lbs/MMBtu consistent with the proposed rule, and (4) the annual landfill gas throughput obtained from the 2021 Emissions Inventory or source test data.

Since the subject landfills currently comply with the proposed requirements, there are no SIP-creditable NOx emission reductions, and no costs associated with the proposed new rule, outside of ongoing costs incurred for source testing.

VII. CONCLUSION

Overall, the proposed new rule is expected to have no significant impact on employment, business creation, elimination or expansion, or business competitiveness in the San Diego region. MSW landfills that operate flares subject to the proposed new rule currently comply with the proposed requirements.

The proposed new rule will provide air quality benefits by ensuring NO_x emissions from regulated sources, which are precursors of ground level ozone, a major component of photochemical smog, remain below the required standards.