**Appendix F**

# Results of Fieldwork and Survey Conducted During the Rulemaking Process from October to December of 2018

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## Background:

On October 17, 2018, CARB hosted the second "Workgroup" meeting for the proposed amendments to the Cargo Tank Vapor Recovery Regulation. In the meeting, staff indicated that the Program is currently underfunded by approximately $340,000, and does not have enough resources or staff to have a consistent field presence to monitor cargo tank compliance. The proposed regulation amendments are intended to allow CARB to adjust cargo tank registration fees to recover necessary costs. This would include the ability to fund adequate staffing to administer the Program and ensure compliance throughout the industry. Industry representatives expressed concerns that additional field presence many not be needed because the historical compliance rate of about 90% is based on out of date data, and the current rate of compliance is likely significantly higher. In order to address this concern, CARB staff conducted a survey and preformed field work to attempt to determine the current compliance rate, which could be used to determine the need for an increased field presence.

## Survey:

In August 2018, CARB staff sent out a component durability survey in order to understand the rate of failure for common cargo tank components. This survey was sent to every cargo tank tester email address within the cargo tank database. Additionally, it was given to the California Fuels Convenience Alliance (CFCA), formally the California Independent Oil Marketers Association (CIOMA), to pass along to additional members of industry. CARB received only six responses to the survey. Although not statistically significant, the data showed the following:

| Industry's Perceived Fail Rate | | |
|---|---|---|
| Internal Vent Valves | 4.2 Year Average | 1-7 Year Range |
| Dome Gaskets | 4.2 Year Average | 1-5 Year Range |
| Pressure/Vacuum Relief Valves | 2.2 Year Average | 1-3 Year Range |

## Field Study:

In October and November of 2018, CARB staff conducted a field study to evaluate the current compliance rate of cargo tanks operating in the State of California. Over a 2 month period, 24 days were spent performing inspections; 9 staff members, pulled from 3 other programs, inspected 702 cargo tanks and performed Vapor Recovery Test Procedure TP-204.2 on 193 cargo tanks. Staff issued 37 Notices of Violations (NOVs) with the following breakdown:

| Notice of Violation Breakdown | |
|---|---|
| Failed the Internal Vapor Valve Performance Standard | 26 |
| Failed the Static Pressure Performance Standard | 12 |
| Failed the Liquid Leak Standard | 1 |

*2 Cargo Tanks failed both Internal Vapor Valve and Static Pressure Performance Standards

## Summary:

Field data suggests that 68% of cargo tank failures are due to internal vent valve failures. This data supports the 2008 study conducted by CARB's Monitoring and Laboratories Division and Enforcement Division staff, which concluded that over 60% of cargo tank failures are due to internal vapor valve failures.

The Cargo Tank Compliance Rate for 2018 is approximately 81%. There are 6,061 cargo tanks certified for operation in the state of California. This suggests that more than 1,100 could be operating out of compliance.

## Conclusion:

Section 41962(f) of the Health and Safety Code requires that the state board shall charge a reasonable fee for certification, not to exceed the estimated cost and the fee shall reimburse the state board for the costs of administering the Certification Program. Additionally, section 41962(i) of the Health and Safety Code requires that the state board ensures that cargo tanks are operated in compliance with performance standards and procedures. Adding a mechanism in which CARB can reevaluate and assess the Program cost and the associated certification fee will allow it to fulfill requirements to recover costs of implementation and to ensure cargo tanks operate in compliance with performance standards and procedures to ensure emissions reductions envisioned by the regulatory program are achieved in practice.