

## **APPENDIX D**

### **Economic Analysis for Rule 4901**

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## **ECONOMIC ANALYSIS FOR AMENDMENTS TO RULE 4901 (WOOD BURNING FIREPLACES AND WOOD BURNING HEATERS)**

Pursuant to California Health and Safety Code (CH&SC) requirements, the District has performed a cost effectiveness analysis and socioeconomic analysis to assess the economic impacts of amendments to Rule 4901 in the Valley.

The proposed amendments to Rule 4901 establish a contingency measure provision for the PM<sub>2.5</sub> NAAQS that includes enhanced wood burning curtailment thresholds for the counties of San Joaquin, Stanislaus, Merced, Madera, Fresno, Kings, Tulare, and the Valley air basin portion of Kern.

### **I. COST EFFECTIVENESS ANALYSIS**

Per CH&SC Section (§) 40920.6(a), the District conducts absolute and incremental cost effectiveness analyses of available emission control options to evaluate the economic reasonableness of a rule or rule amendment prior to adoption. Absolute cost effectiveness of a control option is the additional annual compliance cost (in dollars per year) of the control technology or technique divided by the emission reduction achieved in tons of pollutant reduced per year (tons/year). Incremental cost effectiveness is the difference in cost between two successively more effective controls, divided by the additional emission reduction achieved.

The costs of the proposed amendments are not anticipated to be significant. For the proposed contingency provision, which will result in additional days of no burning, the costs incurred by Valley residents would be the cost of turning on the home's heating system instead of burning an approved fuel such as seasoned wood or pellets in the home's wood burning heater. Because the cost of the electricity is offset by the cost of the approved fuel, amendments to this rule are considered no cost amendments. The District is aware that some residents burn free wood; however, this is considered an anomaly due to its rarity and will therefore not be accounted for in this analysis.

### **II. SOCIOECONOMIC ANALYSIS**

Pursuant to CH&SC §40728.5, the District conducted a socioeconomic analysis of the proposed rule amendments. This socioeconomic analysis, guided by the CH&SC, examines how rule amendments may impact the San Joaquin Valley's (Valley's) industries and businesses, employment rates, and economy.

#### **A. Socioeconomic Analysis**

The CH&SC consists of six specific requirements. The discussion of the necessity of amending Rule 4901 is discussed further in the staff report. The emission reductions potential of amendments to the rule are discussed in

Appendix C (Emission Reduction Analysis). The other CH&SC requirements for a socioeconomic analysis are satisfied through this appendix.

***Type of industries or businesses, including small businesses, affected by amendments to the rule***

A socioeconomic impact is any effect to the Valley's employment or economy due to a regulatory action. The following groups that could potentially be affected by these rule amendments are manufacturers of the devices, retailers who sell the devices and associated fuels, retailers who sell the seasoned wood for fireplaces, and Valley residents who live in homes with fireplaces or wood burning heaters that do not qualify to be registered with the District.

There are no manufacturers of wood burning heaters in the Valley. Retailers who sell residential wood burning devices and associated fuels are in a position to increase profits due to the estimated increase in Valley residents who will upgrade their existing fireplaces and older more polluting devices for EPA certified devices. Retailers who sell the seasoned wood for fireplaces may potentially experience some decrease in profits due to the additional No Burn days. No significant socioeconomic impacts are expected to result from rule amendments.

***Availability and cost effectiveness of alternatives to the rule amendments***

There are no alternatives to lowering the episodic wood burning curtailment thresholds and the costs are not significant; therefore, there would be no increased cost.

***Impact of amendments on employment and the economy of the region***

Because this is essentially a no cost rule and the socioeconomic impacts on Valley businesses and industries is not significant, no impact is anticipated on employment or the economy of the region.

**B. Additional Socioeconomic Analyses**

Per the *2011 Economic Analysis Process Recommendations* document, District staff is advised to include additional analyses as a part of each socioeconomic analysis for new or amended rules. As such, the District also evaluated the costs and socioeconomic impacts from previous versions of a rule and impacts to small businesses, municipalities, and at-risk communities.

***Costs and Socioeconomic Impacts from Previous Versions of the Rule***

Rule 4901 was adopted on July 15, 1993 and subsequently amended in 2003, 2008, September 2014, and June 2019. For purposes of this analysis, the

District did a historical review which included the September 2019 amendments. The analyses for the 2019 amendments resulted in the conclusion that impacts stemming from the proposed amendments are less than significant across the board, particularly from the vantage point of the retailers that sell logs and small businesses are not disproportionately impacted by the rule.

***Impacts to Small Businesses, Municipalities, and At-Risk Communities***

As discussed in the analyses above, the impact to small businesses and at-risk communities is less than significant and municipalities would not be affected by rule amendments.