STATE OF CALIFORNIA — DEPARTMENT OF FINANCE

MAJOR REGULATIONS STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

DF-131 (NEW 11/13)

STANDARDIZED REGULATORY IMPACT ASSESSMENT SUMMARY

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1. Statement of the need for the proposed major regulation.

SB 1383 (Lara, Chapter 395, Statutes of 2016) established methane emissions reduction targets in a statewide effort to reduce emissions of short-lived climate pollutants (SLCP) in various sectors of California's economy. In SB 1383, the Legislature specifically directed CalRecycle, in consultation with CARB, to adopt regulations to reduce the amount of organic waste that was landfilled in 2014 by 50 percent by 2020 and 75 percent by 2025, additionally the Legislature specified that the regulations include requirements to reduce the amount of edible food that is currently disposed by 20 percent by 2025. These targets effectively require the state to reduce organic waste disposal by 20 million tons annually by 2025. While the regulations cannot be enforced until 2022, it is incumbent on the Department to adopt the regulations prior to the first 2020 target of 50 percent. Additionally, early adoption will allow regulated entities approximately three years to plan and implement necessary budgetary, contractual, and other programmatic changes so that they can be in compliance with the regulations in 2022. Implementing the SLCP requirements for the waste sector will foster the development of a more sustainable economy, reduce global emissions, reduce hunger, and improve public health.

2. The categories of individuals and business enterprises who will be impacted by the proposed major regulation and the amount of the economic impact on each such category.

The regulations will affect all of the approximately 540 jurisdictions in California; millions of households; thousands of businesses; hundreds of haulers, food recovery organizations; hundreds of material recovery facilities, processors, recyclers, landfills; dozens of local government environmental enforcement agencies; all schools, federal and state agencies, and some end users of recycled organic products. Ultimately, the costs of implementing these regulations will be passed on to ratepayers, both commercial businesses and households. The cost to the 380,000 businesses that would be regulated, the majority of which are small businesses, will be approximately \$55 per month. The average increased cost per household is ~\$1.40 per month.

Description of all costs and all benefits due to the proposed regulatory change (calculated on an annual basis from estimated date of filing
with the Secretary of State through 12 months after the estimated date the proposed major regulation will be fully implemented as
estimated by the agency).

The estimated costs and benefits were calculated over a twelve-year period (2019-30) and a conservative baseline organic waste recycling rate of 30 percent was assumed (see sections 4 and 5). Over the analysis time-frame, a the regulations will: 1) benefit the environment and improve public health by reducing methane emissions from disposal of organic waste in California landfills; 2) increase distribution of edible food for human consumption; and 3) create markets for organic waste recycling products. The estimated economic benefit is ~\$17 billion.

The primary costs of the regulation are not the result of direct regulatory requirements, but rather are the costs associated with the required expansion of solid waste infrastructure necessary to collect, process, and recycle 20 million tons of material that are currently landfilled: capital investments in new recycling infrastructure (\$2 Billion), waste collection (\$7.7 Billion) waste processing (\$2.7 Billion), and operation and management (\$5 Billion). Additional costs are associated with regulatory compliance for various directly regulated entities (jurisdictions, solid waste facilities, etc.) These costs include contamination monitoring, sampling protocols, inspections, producing and circulating education materials (\$3.5 Billion).

Based on these analyses, the average net direct cost per year is approximately \$330 million.

Other benefits include monetized health benefits (e.g., avoided mortality) of \$4.8 billion from 2019-2025; the social "costs" (i.e., benefits) of reducing methane of \$40-100 million per year in 2030; and an estimated 12,000 new jobs. Other benefits not included in these totals include increased soil water-holding capacity, carbon sequestration, reduced use of synthetic fertilizers and pesticides, and increased domestic fuel production.

4. Description of the 12-month period in which the agency estimates the economic impact of the proposed major regulation will exceed \$50 million.

For the purposes of this analysis, the 12-month period in which the economic impact of the proposed regulation would exceed \$50 million is during calendar year 2019. This period is used because it represents the year regulations will be adopted, and the last calendar year before the first disposal reduction target is to be met. Although the regulations will not take effect until 2022, adopting them in 2019 allows regulated entities approximately three years to implement the necessary budgetary, contractual, and other programmatic changes. It is expected that industry and local governments will begin building the necessary infrastructure in 2019, and that the investment during 2019 will exceed \$50 million.

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5. Description of the agency's baseline:

For purposes of the baseline definition and ensuring that CalRecycle does not underestimate the financial impacts of these regulations, CalRecycle is using a conservative assumption to define business as usual (BAU) (i.e., without these regulations being promulgated) in this analysis. For BAU, CalRecycle assumes that in 2019 the State will only maintain the current organics recycling level of around 30 percent. While CalRecycle does consider it likely that the state will meet the 50 percent goal in 2020, it conducted the baseline analysis with more conservative assumptions because other existing statutes (such as AB 341 and AB 1826) do not require residential organics recycling, edible food recovery, or procurement.

Using a more conservative baseline increases the estimated amount of material that must be recovered and thus increases the overall associated costs and benefits of recovering that material.

- 6. For each alternative that the agency considered (including those provided by the public or another governmental agency), please describe:
 - a. All costs and all benefits of the alternative
 - b. The reason for rejecting alternative

Alternative 1: Less stringent regulatory requirements on jurisdictions by eliminating enforcement, i.e., jurisdictions would not be required to conduct inspections of the estimated 380,000 regulated businesses statewide. The analysis of Alternative 1 estimated overall benefits of \$8.9 billion and costs of \$9.8 billion. This alternative was rejected because CalRecycle estimates that only a 35 percent reduction in organics disposal would be achieved by 2025.

Alternative 2: Excludes regulatory provisions that allow for exemptions and waivers from the organic waste collection requirements and achieves an 80% reduction in level of statewide organic waste disposal by 2025. The analysis of Alternative 2 estimated overall benefits of \$18.3 billion and costs of \$22.9 billion. This alternative is projected to achieve a statewide organic waste recycling rate of 80 percent. This alternative was rejected because it will increase costs and reduce cost-effectiveness. In addition, since these would entail voluntary measures by the jurisdictions that would not specifically target organic materials and are unmandated local goals, CalRecycle would have little enforcement authority and could not reliably count on this additional recycling to meet a more stringent 80 percent organic waste recycling goal. Nor does CalRecycle have the authority to establish a more stringent 80% recycling goal.

7. A description of the methods by which the agency sought public input. (Please include documentation of that public outreach).

CalRecycle requested input from stakeholders and the public regarding provisions in the proposed Short-Lived Climate Pollutants (SLCP): Organic Waste Methane Emissions Reductions Regulation. In 2017, CalRecycle conducted a series of eleven workshops in northern and southern California, each webcast for remote participation, on the proposed regulatory concepts and draft regulatory language; CalRecycle conducted a two final workshops on draft regulatory language in May 2018. Information regarding these workshops and the associated materials are maintained on CalRecycle's SLCP web pages and distributed through multiple public listservs by CalRecycle and the Air Resources Board that include over 6,000 recipients. Workshop details were also distributed through listservs managed by other networks and program partners such as the California Resource Recovery Association, Governor's Office of Policy and Research, etc. Also, information has been sent out regularly on CalRecycle's listservs for cities, counties and state agencies/facilities. In addition to these workshops, CalRecycle has engaged with and requested input from multiple affected stakeholder groups via e-mail, teleconference, and face-to-face meetings. CalRecycle's SLCP webpage and the workshop agendas are attached for reference.

8. A description of the economic impact method and approach (including the underlying assumptions the agency used and the rationale and basis for those assumptions).

To estimate indirect and induced economic impacts, CalRecycle consulted with Regional Economic Models, Inc. (REMI) and used its analytical tool that is a single-region, 160-sector model which has been modified to include California-specific data (for population, demographics, and employment) as specified by the Department of Finance (DOF). The REMI Policy Insight Plus model (Version 2.1.1) employed for this analysis was "Software Build 4597" (May 8, 2017). This economic analysis of the proposed regulations encompasses the year regulations will be adopted(2019) through the 12 months after the estimated date the proposed Regulations will be fully implemented (2026), as estimated by CalRecycle. The baseline is assumed to be existing conditions (i.e., no regulations in place) as forecasted by DOF through 2026, the study period that covers full implementation of the regulations, and beyond to 2030.

Agency Signature	Date
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