Office of Senate Floor Analyses
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THIRD READING

Bill No: SB 667
Author: Hueso (D)
Amended: 4/29/19
Vote: 21

SENATE ENVIRONMENTAL QUALITY COMMITTEE: 7-0, 4/24/19
AYES: Allen, Bates, Hill, Skinner, Stern, Stone, Wieckowski

SENATE APPROPRIATIONS COMMITTEE: 6-0, 5/16/19
AYES: Portantino, Bates, Bradford, Hill, Jones, Wieckowski

SUBJECT: Greenhouse gases: recycling infrastructure and facilities

SOURCE: Author

DIGEST: This bill requires the Department of Resources Recycling and Recovery (CalRecycle) (1) on or before January 1, 2020, to develop a five-year strategy to meet the state's organic waste and diversion goals by supporting organic waste infrastructure development, and (2) on or before June 1, 2021, to coordinate with the State Treasurer's Office (Treasurer) on developing financial incentives for in-state recycling infrastructure. Additionally, this bill requires the Treasurer, in coordination with CalRecycle, to coordinate with the States of Nevada, Oregon, and Washington on infrastructure financing to support regional recycling needs, support development of interstate recycling infrastructure, and support markets for recyclable materials.

ANALYSIS:

Existing law:

1) Establishes, under the Integrated Waste Management Act of 1989 (IWMA), a state recycling goal of 75% of solid waste generated to be diverted from landfill disposal through source reduction, recycling, and composting by 2020. Requires each state agency and each large state facility to divert at least 50% of

all solid waste through source reduction, recycling, and composting activities. IWMA also requires a state agency and large state facility, for each office building of the state agency or large state facility, to provide adequate receptacles, signage, education, and staffing, and arrange for recycling services, as specified (PRC §§ 41780.01, 42921, 42924.5).

2) Establishes methane emission reduction goals that include targets to reduce the landfill disposal of organic waste of 50% by 2020 and 75% by 2025 from the 2014 level. (HSC § 39730.6)

3) Requires CalRecycle, in consultation with the Air Resources Board, to adopt regulations to achieve the organics reduction targets, which go into effect in 2022. (PRC § 42652.5)

This bill:

1) Makes findings and declarations.

2) Expands the purposes of the California Alternative Energy and Advanced Transportation Financing Authority Act to include providing an alternative method of financing for the establishment of facilities needed to develop organic waste diversion technologies.

3) Requires CalRecycle to support technology advancement and infrastructure to meet the state's 2025 organic waste reduction target and the state's recycling goals.

4) Requires CalRecycle to develop, on or before January 1, 2021, a five-year investment strategy to drive innovation and support technological development and infrastructure in order to meet the organic waste reduction targets and recycling goals, as specified.

5) Requires the investment strategy to set forth a five-year plan for the expenditure of moneys.

6) Specifies that an eligible expenditure may occur over multiple fiscal years and that CalRecycle may make multiyear funding commitments over a period of more than one fiscal year.

7) Requires the investment strategy to assess the amount of money needed to build the infrastructure necessary to achieve methane emission reduction goals that include targets to reduce the landfill disposal of organic waste of 50% by 2020 and 75% by 2025 from the 2014 level.

8) Requires the investment strategy to identify priorities and strategies for financial incentive mechanisms to help achieve organic waste reduction targets and recycling goals, as specified.

9) Requires CalRecycle, on or before June 1, 2021, to develop financial incentive mechanisms, to fund organic waste diversion and recycling infrastructure, as specified.

10) Establishes the California Recycling Infrastructure Investment Account in the State Treasury for the Treasurer to administer.

11) Requires the Treasurer, when providing any financial incentives, to do all of the following:

    a) Ensure that a recipient of a financial incentive leverages local, state, federal, and private funding sources to maximize investment in organic waste diversion and recycling infrastructure.

    b) Prioritize projects that have multiple benefits, as specified.

    c) Prioritize projects that maximize benefits while minimizing negative consequences to disadvantaged communities, as identified by CalEnviroScreen.

    d) Seek to achieve a portfolio approach to funding that supports a diverse set of projects.

12) Requires the Treasurer, in coordination with CalRecycle, to coordinate with the States of Nevada, Oregon, and Washington on infrastructure financing to support the recycling needs of the region.

13) Requires the Treasurer to create an advisory stakeholder committee to support development of interstate recycling infrastructure and markets for recyclable materials.

Background

1) *Solid waste in California*. For three decades, CalRecycle has been tasked with reducing disposal of municipal solid waste and promoting recycling in California through the IWMA. Under IWMA, the state has established a statewide 75% source reduction, recycling, and composting goal by 2020 and over the years the Legislature has enacted various laws relating to increasing the amount of waste that is diverted from landfills. According to CalRecycle's

State of Disposal and Recycling in California 2017 Update, 42.7 million tons of material were disposed into landfills in 2016.

2) *Operation National Sword and market challenges for recyclable materials*. The US has not developed significant markets for recycled content materials, including plastic and mixed paper. Historically, China has been the largest importer of recycled materials. According to the International Solid Waste Association, China accepted 56% by weight of global recyclable plastic exports. In California, approximately one-third of recyclable material is exported; and, until recently, 85% of the state's recycled mixed paper has been exported to China.

   In an effort to improve the quality of the materials it accepts and to combat the country's significant environmental challenges, China enacted Operation Green Fence in 2013, under which it increased inspections of imported bales of recyclables and returned bales that did not meet specified requirements at the exporters' expense. In 2017, China established Operation National Sword, which included additional inspections of imported recyclable materials and a filing with the World Trade Organization indicating its intent to ban the import of 24 types of scrap, including mixed paper and paperboard, polyethylene terephthalate (PET), polyethylene (PE), polyvinyl chloride, and polystyrene (PS) beginning January 1, 2018. In November 2017, China announced that imports of recycled materials that are not banned will be required to include no more than 0.5% contamination.

   In January of this year, the China announced that it would be expanding its ban even further – to encompass 32 types of scraps for recycling and reuse, including post-consumer plastics such as shampoo and soda bottles

   Earlier this month, the Indian government announced that it will ban scrap plastic imports, a move that threatens to further disrupt the state's recycling industry. It is presumed that these changes to policy took effect March 1, and, while the release did not specify the specific plastic resins that will be covered, it is speculated that the ban will apply to most plastics including PET, PE, PS, polypropylene, and more. After China's implementation of National Sword policy, India became one of the top importers of US plastic. US year-end trade figures for 2018 show that India imported 294 million pounds of scrap plastic from the US in that year. That was up from 271 million pounds in 2017 and 203 million pounds in 2016.

3) *Organic waste diversion goals*. CalRecycle is tasked with diverting from landfills at least 75% of solid waste statewide by 2020. Organic materials make

up over half of the waste stream (54.8%); food continues to be the greatest single item disposed, comprising approximately 18% of materials landfilled. Leaves, grass, prunings, and trimmings represent just under 7% of the total waste stream.

Local governments are required to submit Source Reduction and Recycling Elements and comprehensive annual reports to CalRecycle to identify the programs and plans to ensure they meet the state's 50% diversion requirement for local jurisdictions and to assist CalRecycle in meeting the state's 75% diversion goal. Pursuant to AB 341 (Chesbro, Chapter 476, Statutes of 2011), generators are required to arrange for recycling services and requires local governments to implement commercial solid waste recycling programs designed to divert solid waste from businesses. AB 1826 (Chesbro, Chapter 727, Statutes of 2014) required generators of specified amounts of organic waste (i.e., food waste and yard waste) to arrange for services to divert that material.

The primary beneficial reuse of organic waste is anaerobic digestion or composting. Anaerobic digestion is the controlled breakdown of organic matter without air, used to manage waste and/or to release energy. It is a biological process that produces an energy-rich biogas, which is used as a fuel. This technology has been used in the US for decades in wastewater treatment facilities and dairy manure digesters. It is increasingly being used to manage the state's organic waste stream, including food waste, to generate clean energy. Digestate, the material left over at the end of the process, is similar to compost and can be composted with other material or used alone as a soil amendment. Composting is the aerobic controlled decomposition of organic material, such as leaves, twigs, grass clippings, and food scraps to produce compost, which can be used as a soil amendment and for slope stabilization.

4) *Waste reduction and greenhouse gases (GHGs)*. Diverting organic waste provides significant GHG reductions over landfilling. Composting and other organics processing technologies reduce GHGs by avoiding the emissions that would be generated by the material's decomposition in the landfill.

Landfill gas is generated by the decomposition of organic materials such as food, paper, wood, and yard waste. Fifty percent of landfill gas is methane, a GHG that is 21 times more efficient at trapping heat than carbon dioxide. While most modern landfills have systems in place to capture methane, significant amounts continue to escape into the atmosphere. According to the Air Resources Board's GHG inventory, approximately seven million tons of

carbon dioxide equivalent are released annually by landfills. That number is expected to increase to 8.5 million tons of carbon dioxide equivalent by 2020.

Comments

Purpose of bill. According to the author, "California is facing a crisis due to a lack of infrastructure for local jurisdictions to meet our solid and organic waste diversion goals. In 2016, the Legislature passed SB 1383 (Lara), which set an organic disposal reduction target of 50% percent by 2020 and 75% by 2020. By 2020, Californians must dispose of no more than 2.7 pounds per day in order to meet the statewide 75% recycling goals. That's a reduction of almost 24 million tons per year. The lack of organic waste infrastructure is only one part of the equation. In 2018, China enacted strict contamination limits and an import ban on various types of solid waste, plastics and unsorted mixed papers. This has led to the stockpiling of materials at solid waste and recycling facilities in California. Previously, our recycling policies were built around the idea that China would buy our recyclable materials, but now California must take the necessary steps to address this decline and ensure we have the necessary tools to meet our recycling needs. Unfortunately, local jurisdictions do not have the resources to effectively handle these compounding issues. California needs to invest in domestic markets as well as partner with local and private entities to address this crisis. SB 667 addresses this by requiring CalRecycle to develop a five year investment strategy for infrastructure necessary to meet our organic and solid waste reduction goals. Through this strategy, California can develop the infrastructure necessary to properly manage all of our waste as our recycling needs increase."

FISCAL EFFECT: Appropriation: No Fiscal Com.: Yes Local: No

According to the Senate Appropriations Committee:

- Annual costs (General Fund and special funds) of $400,000 for fiscal year (FY) 2019-20 and around $1 million annually thereafter for the Treasurer to administer the investment strategy and perform other coordination responsibilities.

- One-time special fund costs (Integrated Waste Management Account) of around $900,000 in both FY 2019-20 and FY 2020-21 for CalRecycle to develop the strategy and financial incentive required in this bill.

- Unknown, likely significant cost pressures resulting from developing a strategy to financially support the state's organic waste infrastructure development.

SUPPORT: (Verified 5/16/19)

Association of Compost Producers
Athens Services
California Association of Sanitation Agencies
California League of Cities
California State Association of Counties
City of Thousand Oaks
Coalition for Renewable Natural Gas
CR&R Environmental Services
Orange County Sanitation District
Recology
Renewable Natural Gas
Republic Services
Rural County Representatives of California
StopWaste
Western Placer Waste Management Authority

OPPOSITION: (Verified 5/16/19)

None received

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5/18/19 12:13:45

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