

Orange County Landfills: Talking Trash



GRAND JURY 2017-2018

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SUMMARY

Landfills are much more than simply places to dump trash. Orange County Waste and Recycling operates an efficient and finely balanced county system of waste disposal. It is a valuable and essential asset, supplementing County revenue and power generation. As Orange County continues to grow, extending the life of the landfill system is necessary to accommodate the County's expansion. However, there are both near term and longer term issues which could adversely affect the life of our landfills and have a negative effect on Orange County's development. The near term problem is the possible closure of one of the landfills. The longer term factors are the state regulations regarding recycling and the importation of trash from outside the county.

Although one of the three county landfills, Olinda Alpha, is not at its permitted capacity, the current Memorandum of Understanding (MOU) with the City of Brea expires in 2021. It allows for closure if not renewed, which would have major countywide impact. Rerouting trash disposal traffic from Olinda Alpha to the two remaining landfills, Frank R. Bowerman in central county and Prima Deshecha in south county would affect traffic and infrastructure countywide. Waste disposal rates could increase for both residential and business customers because of increased travel distance from the pickup point to the landfill. The Grand Jury recommends that the County and the City of Brea initiate formal negotiations as soon as practicable to ensure identification and resolution of potential issues around Olinda Alpha.

Longer term, laws and regulations regarding recycling are changing. A key factor extending landfill life is recycling, since recycled materials do not enter the landfill. In addition, new state laws will soon require county residents and businesses to divert organic waste from landfill systems.

Another long term factor is the importation of trash from other counties, which increases the rate of fill and decreases landfill life. Importing trash, however, does provide revenue to the County. The Grand Jury recommends that the County should update and publish a cost/benefit analysis

on the imported trash revenue stream and the future costs associated with earlier closures in the landfill system.

REASON FOR THE STUDY

The three Orange County landfills operate under state permits, which must be renewed periodically until the landfills reach capacity and are closed. The State of California also requires that the County reach an agreement with cities impacted by the landfills. County agreements with the City of San Juan Capistrano regarding Prima Deshecha Landfill (PD), and the City of Brea regarding Olinda Alpha Landfill (OA) must be renewed in 2019 and 2021, respectively. The County agreement with the City of Irvine regarding the Frank R. Bowerman Landfill (FB) does not expire until 2025.

While negotiations relative to Prima Deshecha are ongoing, formal negotiations regarding Olinda Alpha have not begun. The Olinda Alpha Landfill is at risk of early closure if the agreement between the County and the City of Brea is not renewed. In addition, Olinda Alpha has only 18% of its estimated capacity remaining; however, Orange County continues to import trash from outside the county into the landfill, which could accelerate closure.

Closure of any of the landfills will affect the balance of the entire system with countywide effects. The Grand Jury sought to evaluate the various factors affecting operation of the landfills and to suggest steps which may extend their useful life.

METHOD OF STUDY

The Orange County Grand Jury interviewed key personnel of Orange County Waste & Recycling (OCWR), representatives from the Cities of Brea, Irvine, and San Juan Capistrano, and three private waste haulers responsible for the majority of the county waste collection. The Grand Jury also reviewed the state's waste disposal and recycling laws and regulations. In

In addition to completing extensive online research and document review, the Grand Jury conducted onsite visits to each of the County's active landfills and three major Material Recycling Facilities, as well as the Orange County Sanitation District.

BACKGROUND AND FACTS

Orange County waste disposal system includes three active landfills and four household hazardous waste collection centers (HHW).

Figure 1: Orange County Waste Disposal System



Source: Adapted from Orange County Waste and Recycling, *OCWR Strategic Plan, November 2016, Appendix 2*

Waste Disposal System

Orange County Waste & Recycling Department (OCWR) operates and staffs the landfills with County employees. The HHWs are operated by a subcontractor. The system serves residents and businesses in all thirty-four cities and unincorporated areas of the county. (See Figure 1)

Policy decisions regarding the system are made by the Orange County Waste Management Commission, an eighteen member advisory board formed by and reporting to the Orange County Board of Supervisors. Composed of city council members, an appointed city manager, members of the public and the Director of OCWR, it meets quarterly. The role of the Commission is to advise the Board of Supervisors on matters relating to municipal solid waste and hazardous waste management. It also addresses operations and maintenance of the County's landfills and other facilities related to the County's solid waste disposal system. OCWR provides support staff for the Commission.

The three landfills are the destination of all non-hazardous, non-recyclable solid waste. Typically operating under city or County contracts, commercial trash haulers pick up trash and recyclable material from residences and businesses throughout Orange County. The haulers separate recyclable materials by type and bundle them for sale to a wholesaler or broker, who in turn sells them to domestic or foreign manufacturers. The remaining solid waste is taken to the landfills.

Landfills are located in north, central and south Orange County. Together the County's three landfills accept approximately 16,900 tons of trash per day. In Fiscal Year 2017-18, Orange County landfills will accept an estimated total of 4.9 million tons. Revenues to operate and maintain the landfills come from several sources, principally contract landfill disposal fees paid by the county's commercial trash haulers, landfill gate fees paid by public self-haul, and a portion of revenues from imported trash. Table 1 summarizes key landfill information.

Table 1: Orange County Landfills Key Information

LANDFILL	TOTAL ACREAGE	PERMITTED ACREAGE	TONNAGE PER DAY-ACTUAL	TONNAGE PER DAY-PERMITTED	CAPACITY REMAINING (%)	RENEWAL DATE	ESTIMATED CLOSURE DATE
Olinda Alpha	565	420	7,000	8,000	18	2021	2031
Frank R. Bowerman	725	534	8,500	11,500	67	2025	2053
Prima Deshecha	1,530	678	1,400	4,000	99	2019	2067

Source: Solid Waste Facility Permits 30-AB-0035, 30-AB-0360, 30-AB-0019; Orange County Waste Management Commission; Meeting Agenda of September 14, 2017, and interviews

OCWR also has four regional facilities which accept household hazardous waste from county residents. The facilities are staffed and operated by a national company that specializes in hazardous materials disposal. One of the collection centers is located at the San Juan Capistrano landfill. The other three are located in Irvine, Huntington Beach and Anaheim. All four offer drop-off locations for county residents and have a Materials Reuse Program for residents to obtain free, partially used materials, such as cans of paint. The collection centers are a means of managing hazardous materials and reducing illegal and improper disposal of hazardous waste by residents. Businesses, churches, and schools must use commercial services to dispose of the hazardous materials they produce.

Olinda Alpha Landfill, Brea

The Olinda Alpha (OA) Landfill opened in 1960. It consists of 565 acres, 420 acres of which is permitted for refuse disposal.

Located on unincorporated county land at the base of the Chino Hills range, it is adjacent to the City of Brea. The OA Landfill accepts an average of 7,000 tons per day of both commercial and public trash. It is permitted a maximum of 8,000 tons on any given day. Service areas include Brea, Anaheim, Garden Grove, Fullerton, La Habra, La Palma, Orange, Placentia, Villa Park, Yorba Linda, and north county unincorporated areas. To minimize noise and inconvenience to the adjacent neighborhoods, operating hours are limited to 7 a.m. to 4 p.m. Monday through Saturday.

The OA Landfill produces 32.5 megawatts (MW) of electricity from an onsite Landfill Gas to Energy (LFGE) plant using methane gas collected from decomposing organic waste in the landfill. The power is used to operate the landfill and is also sold to Anaheim Public Utilities, providing electricity to 17,000 homes. Revenue from this operation helps support the operation of the landfill.

Frank R. Bowerman Landfill, Irvine

The Frank R. Bowerman (FB) Landfill opened in 1990 with a projected closure in 2053. It consists of 725 acres, 534 acres of which is permitted for refuse disposal.

The FB Landfill accepts 8,500 tons per day of commercial trash. The Solid Waste Facility Permit for the FB Landfill permits a maximum of 11,500 tons per day. Service areas include Costa Mesa, Newport Beach, Santa Ana, Fountain Valley, Huntington Beach, Irvine, Lake Forest, Laguna Beach, Laguna Hills, portions of Anaheim, and unincorporated areas in central Orange County.

The FB Landfill accepts commercial trash hauler disposal only. No public self-haul dumping is allowed. Customers must have a valid contractor or business license.

The FB Landfill operates a 20MW onsite LFGE plant serving the landfill and 14,700 homes.

Prima Deshecha Landfill, San Juan Capistrano

The Prima Deshecha (PD) Landfill, opened in 1976, includes two zones: Zone 1 and Zone 4. These two zones encompass 1,530 acres, with 678 acres permitted for refuse disposal.

The PD Landfill currently accepts 1,400 tons/day of commercial and self-haul waste. The Solid Waste Facility Permit allows a maximum disposal of 4,000 tons per day. Zone 1 operation is permitted through 2019, while Zone 4 is permitted through 2067. Negotiations to extend Zone 1 operations are in progress.

Most of Zone 1 is located within the city limits of San Juan Capistrano. Residential subdivisions and San Juan Hills High School are located within a mile of the landfill. To date the relationship between the landfill and its neighbors has been collaborative. Service areas include Dana Point, Laguna Beach, Laguna Hills, Laguna Niguel, Lake Forest, Mission Viejo, San Clemente, San Juan Capistrano, and south county unincorporated areas. PD operates a 6.0 MW LFGE plant for landfill needs.

The Highly Regulated Life of a Landfill

The Resource Conservation and Recovery Act, enacted in 1976, is the principal federal law governing the disposal of solid waste and hazardous waste. It is implemented in Title 40 of the Code of Federal Regulations (CFR) entitled “Protection of the Environment.” In compliance with 40CFR, California, in turn, regulates every aspect of a landfill’s construction, use, and retirement under Title 27, Chapter 3 of the California Code of Regulations – Environmental Protection. The major state requirements for a continuing landfill operation include the following:

- A Solid Waste Facility Permit
- Agreement of affected cities
- Periodic inspections

All landfills have a useful life defined by the amount of trash deposited and the permit restrictions which govern the use of the landfill. Barring disasters such as earthquakes and 100-year floods, a landfill will close when the trash reaches the permitted height above mean sea level. See Table 2.

Table 2: Permitted Landfill Height Above Mean Sea Level

LANDFILL	PERMITTED HEIGHT ABOVE MEAN SEA LEVEL (FT.)
Olinda Alpha	1,415
Frank R. Bowerman	1,350
Prima Deshecha- Zone 1	600
Prima Deshecha- Zone 4	1,010

Source: Solid Waste Facility Permits 30-AB-0035, 30-AB-0360, and 30-AB-0019

Each facility is governed by a Solid Waste Facility Permit which is renewed every five years by the Orange County Healthcare Agency (OCHCA), subject to review by the California Department of Resources Recycling and Recovery (CalRecycle). The landfills are inspected monthly by the Solid Waste Local Enforcement Agency within OCHCA, often in the company of a state environmental inspector. The inspections are detailed and encompass everything from windblown paper on the access roads to holes dug by coyotes on the working face. Permit renewal is not automatic. Facilities with serious, repeated or uncorrected violations can be subject to penalties, including closure.

In addition to the Facility Permit, cities hosting the landfills or within the sphere of influence of landfill activities have input about landfill operations and how they impact the city residents. The agreement between the city and the county takes the form of a Memorandum of Understanding (MOU) or equivalent. The 2013 MOU renewal between Brea and the County, for instance,

included noise reduction measures, odor reduction measures, street upgrades, and amenities for the neighborhoods directly affected by landfill traffic. The MOUs are negotiated for varying terms, but these usually do not coincide with the five-year Facility Permits.

The current MOU between Brea and the County expires in 2021. The current Olinda Alpha Facility Permit expires in 2020. Each of these events could lead to closing of the landfill. If the lack of an MOU threatens a premature closure of a landfill, California state authorities may intervene to prevent the closure. It is likely any such action would result in lawsuits and risk of the landfill being closed by court action.

A landfill puts different parts of its permitted area into use at different times, depending on the availability of access roads, the type of underlying soil, and the accumulated trash height, among other considerations. A portion of a landfill may be retired from use without affecting the rest of the landfill. Plans for closing a section of a landfill must be approved by state and county authorities. A detailed plan is submitted to the Environmental Health Division of OCHA. After the plan is approved there, the request moves to CalRecycle on the state level. The approval process can take months. The landfill operator remains responsible for upkeep of the inactive landfill sections, and of the entire landfill in perpetuity when it finally closes. Even a closed landfill is subject to quarterly inspections. OCWR currently maintains or monitors twenty closed disposal sites.

California Law on Recycling

Extending the life of all the landfills is necessary to accommodate the future growth of Orange County. One way to do this is to increase recycling, since recycled material does not go to a landfill. California has been a leader in passing legislation to encourage environmentally sound waste management practices. New state regulations, coupled with significant landfill technology advances, also contribute to extending the useful life of landfills.

California's Integrated Waste Management Act of 1989 (IWMA, AB 939) established a baseline for recycling. Current recycling of solid waste has reached the IWMA goal of 50%.

Several additional bills have been enacted by the California Legislature which affect the landfills. See Table 3 for key legislation.

Table 3: Summary of Key California Recycling Legislation

Legislation	Key Points
California IWMA (AB 939, 1989)	Divert 50% of all solid waste from landfills by January 1, 2000
AB 341 (2011)	Raised the solid waste diversion goal to 75% by 2020
AB 1826 (2014)	Business organic waste must be sent to organic waste recycling services beginning 2016
SB 1383 (2016)	Waste-produced methane levels, as measured in 2013, should be reduced 50% by 2030

Source: [website www.calrecycle.ca.gov/laws](http://www.calrecycle.ca.gov/laws)

These bills do not specify how local jurisdictions were to achieve these goals, nor how programs will be reimbursed for the cost of achieving them. They do require establishing a process in which organics are diverted from the solid waste stream and recycled. Private trash haulers have begun to develop proprietary plans and technology for compliance. However, many important issues and details remain unaddressed.

Recycled Materials as Commodities

The recycled materials market is a commodities market in which prices continually fluctuate. For foreign markets, prices are affected by exchange rates. The price of each material type varies as manufacturers’ needs change. Historically, old newspapers were a valuable commodity. The recent decline in the use of newsprint means supplies are no longer sufficient to make newspaper recycling profitable, although cardboard cartons are beginning to replace it due to the increase in online shopping.

Processors of recyclable materials, especially in China, have begun to require that material bundles have reduced amounts of “contamination” from previously accepted levels. Chinese government regulations introduced early in 2018 require that bales of recycled material contain no more than 0.5% of contamination. Thus a 1,850 lb. bale of cardboard would be rejected by a customer in China if it included more than nine pounds (0.5%) of non-cardboard material, such as plastic sheeting or newsprint. The entire bale would be returned to the original hauler at the hauler’s expense and sent to a county landfill. This could lead to higher trash rates and increased fill rates.

Organic Solid Waste

Methane is produced by the decomposition of organic waste at the landfills and is considered to be a destructive greenhouse gas. In the United States discarded food, one type of organic waste, is the single largest component of all municipal solid waste. According to the National Environmental Education Foundation, landfills are the third largest source of total methane. Many landfills, including all three in Orange County, collect the methane and burn it in LGFE plants to produce electricity.

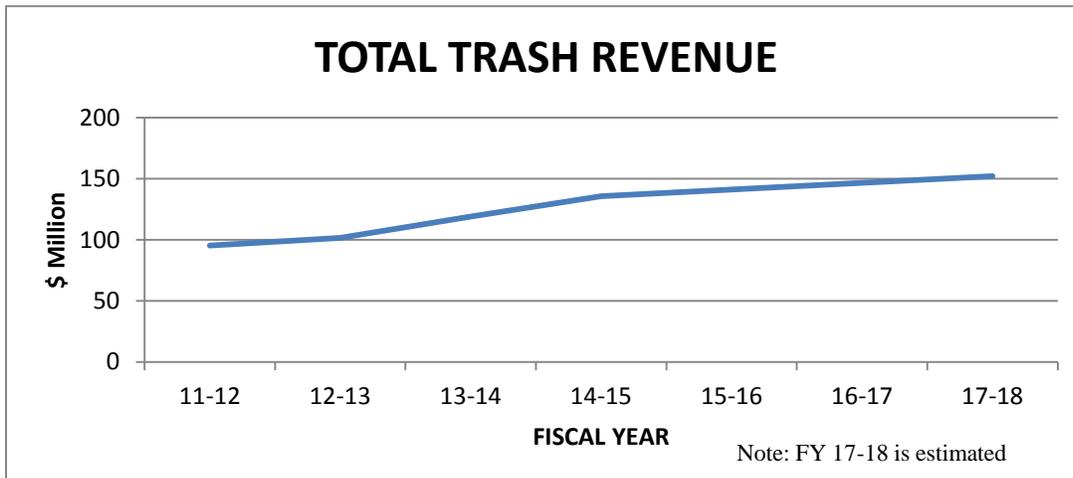
Beginning in 2016, the State required restaurants, supermarkets, large venues and food processors to separate food scraps and green waste for organic recycling. This creates a challenge for the trash haulers, who must collect the organic material and dispose of it in a cost effective manner, or pass on these costs as increased fees for residents and businesses. Regardless of the recycling techniques used, any decrease in organic solid waste will increase the useful life of County landfills and reduce the amount of methane emissions currently used for LFGE facilities that provide electrical power. Less methane means less electricity produced by the LGFEs. Royalties are paid to OCWR by contractors based on the amount of electricity sold. For the three fiscal years 2015-2017 the total amounted to \$9 million. Current estimates predict

an appreciable reduction of methane by 2030, but the fiscal impact of the reduction is hard to determine.

Trash Revenue

Not all revenue raised at OC landfills directly benefits OCWR. Fees collected from Orange County commercial trash haulers and self-haulers directly support OCWR landfill operations. Income raised from importing trash is treated differently.

Figure 2: Total Trash Revenue



Source: Waste Management Commission Meeting Agenda of March 8, 2018

Imported Trash

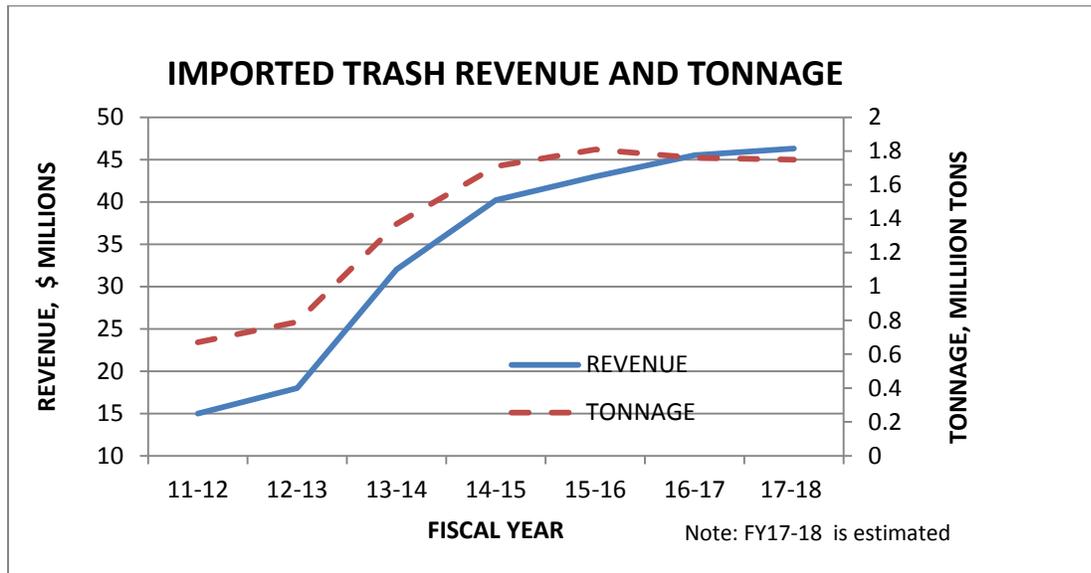
The 1994 Orange County bankruptcy resulted in a fiscal emergency that required extreme measures. Accepting trash from outside Orange County and collecting associated disposal fees was selected as an additional source of revenue for the County to be used toward payment of the bankruptcy debt. In 1995, county landfills began to accept trash from Riverside, Los Angeles

and San Bernardino counties for a fee. Currently, importation is 37% of the total annual waste in the landfills and contributes 30% of the total annual revenue.

In Fiscal Year 2016-17, the County of Orange received \$45.5 million from the imported trash fees. OCWR received about 25% of that money for landfill support. About 7% was retained by the County and 5% was used to compensate the host cities. The great majority, 63% or \$28.7 million, was used to retire the bankruptcy bonds and to pay other bankruptcy-related expenses.

The bankruptcy bonds were discharged by July 1, 2017, but the County continues to import trash and collect fees, with contracts running until 2025. Most of these fees will be used to pay the \$33.3 million owed to a handful of cities, special districts and internal county accounts that elected not to be repaid out of bond proceeds. A surplus, estimated to be between \$5-8 million annually, remains beyond that.

Figure 3: Imported Trash Revenue and Tonnage



Source: 1 Waste Management Commission Meeting Agency of March 8, 2018

The distribution of the imported trash is rebalanced among the three landfills periodically. In 2017, 95% of the imported trash was divided between Olinda Alpha and Frank Bowerman Landfills, with the remainder sent to Prima Deshecha. Over the last two years, the imported trash received by OA Landfill has decreased, but it continues to receive nearly half of the total. (See Table 4)

Table 4: Distribution of Imported Trash per Landfill

	FY 2016/17		FY 2017/18 *(1st two quarters)	
	Total Trash (%)	Tonnage (million tons)	Total Trash (%)	Tonnage (million tons)
OA Landfill	60	1.06	47	0.43*
FB Landfill	35	0.61	47	0.43*
PD Landfill	5	0.09	6	0.05*
Total	100	1.76	100	0.91*

Source: 2 Waste Management Commission Meeting Agency of March 8, 2018

Olinda Alpha: The Crunch Point

OA Landfill will reach its permitted capacity before the other two landfills. The amount of space remaining at the OA Landfill is approximately 18%. Both FB and PD retain large available capacity: FB has 67% remaining capacity and PD, 99% remaining capacity (Waste Management Commission, Agenda of December 14, 2017 Meeting).

As a result of recycling and other mitigation measures, recent capacity estimates project a closure date of 2028 or later for OA Landfill. However, the MOU between the County and the City of Brea specifies a closure date of 2021. The renewal process, including revision of the

specified closure date, is lengthy, involving multiple state and county reviews. Without a renewal agreement, the continued operation of the OA landfill may be jeopardized, even though it is not at permitted capacity.

Implications for the City of Brea

Half of the total waste truck trips in Orange County, more than quarter of a million per year, travel over Valencia Avenue, the only access road to OA Landfill. Two large Brea master planned communities, Olinda Ranch and Blackstone, border Valencia Avenue. Amenities for these communities include public parks, hiking and equestrian trails and wildlife corridors.

In 2009, after lengthy negotiations, the County and the City of Brea implemented a \$35 million package of odor, noise, and traffic mitigation measures, as well as landscape upgrades along Valencia Avenue in exchange for continued operation of OA.

A further extension of the MOU between the OA Landfill and the City of Brea means continuing the daily stream of large trash trucks entering and leaving the landfill. Although the County has made great strides in addressing community landfill concerns, these remain long term considerations for many of those residents. The negotiations between the County and City of Brea to reauthorize use of OA could be as complicated as in the past.

Implications for the Entire County

The closure of the OA Landfill would upset the balance of the entire county landfill system, not just north Orange County and the City of Brea. All self-haul vehicles and heavy trash truck traffic to and from the OA Landfill would be diverted to Irvine and south county via existing highways and local streets. OCWR reports that there were 267,000 truck trips to OA Landfill in 2017. Such a large number of heavy truck trips to the FB and PD Landfills would significantly increase freeway and local street traffic, hastening the degradation of the road infrastructure.

Adding travel distance and time would increase operating costs, resulting in higher trash bills to Orange County residents and businesses.

Conclusion

As Orange County's population continues to grow, so will its waste stream. While the landfills still have capacity, it is in the best interests of residents to keep the Orange County solid waste disposal system intact and extend its life as long as possible. Three major factors affect the system:

- risk of Olinda Alpha Landfill closure in 2021, which would have major negative impact on the system
- imported waste, which adds to the burden of the landfills
- volatility in the market for recyclable material, which could have a negative effect

While there is little that can be done at a local level with regard to the recyclables market, managing the other factors is even more crucial to the future growth and quality of life for Orange County.

Commendation

Orange County Waste and Recycling is to be commended for operating an efficient and cost effective system of landfills and hazardous waste disposal centers that constitutes an important economic asset to Orange County.

FINDINGS

In accordance with *California Penal Code* Sections 933 and 933.05, the 2017-2018 Grand Jury requires (or, as noted, requests) responses from each agency affected by the findings presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation titled “Orange County Landfills: Talking Trash,” the 2017-2018 Orange County Grand Jury has arrived at five principal findings, as follows:

- F1.** The Orange County waste disposal system is efficient, well balanced, geographically distributed, and works to mitigate disturbance to nearby neighborhoods.
- F2.** The Orange County landfill system would be disrupted by the closure of any one of the landfills.
- F3.** The Olinda Alpha Landfill is a possible candidate for closure in 2021 if negotiations with City of Brea prove unsuccessful.
- F4.** Importing trash from outside of the County, initiated to help the County survive the 1994 bankruptcy, continues even though the bankruptcy bonds were retired as of July 2017.
- F5.** Continued importation of trash tends to decrease Orange County landfill life.

RECOMMENDATIONS

In accordance with *California Penal Code* Sections 933 and 933.05, the 2017-2018 Grand Jury requires (or, as noted, requests) responses from each agency affected by the recommendations presented in this section. The responses are to be submitted to the Presiding Judge of the Superior Court.

Based on its investigation titled “Orange County Landfills: Talking Trash,” the 2017-2018 Orange County Grand Jury makes the following two recommendations.

- R1.** By December 30, 2018, the County of Orange and the City of Brea should initiate formal negotiations to ensure identification and resolution of potential issues with the Olinda Alpha Landfill Memorandum of Understanding. **(F1, F2, F3)**

- R2.** By June 30, 2019, Orange County Waste and Recycling should update and publish a cost/benefit analysis on the imported trash revenue stream surplus and the future costs associated with earlier closures in the landfill system. **(F4, F5)**

RESPONSES

The following excerpts from the California Penal Code provide the requirements for public agencies to respond to the findings and recommendations of this Grand Jury report:

§933(c)

“No later than 90 days after the grand jury submits a final report on the operations of any public agency subject to its reviewing authority, the governing body of the public agency shall comment to the presiding judge of the superior court on the findings and recommendations pertaining to matters under the control of the governing body and every elected county officer or agency head for which the grand jury has responsibility pursuant to Section 914.1 shall comment within 60 days to the presiding judge of the superior court, with an information copy sent to the board of supervisors, on the findings and recommendations pertaining to matters under the control of that county officer or agency head or any agency or agencies which that officer or agency head supervises or controls. In any city and county, the mayor shall also comment on the findings and recommendations. All of these comments and reports shall forthwith be submitted to the presiding judge of the superior court who impaneled the grand jury. A copy of all responses to grand jury reports shall be placed on file with the clerk of the public agency and the office of the county clerk, or the mayor when applicable, and shall remain on file in those offices. . . . ”

§933.05

“(a) For purposes of subdivision (b) of Section 933, as to each grand jury finding, the responding person or entity shall indicate one of the following:

- (1) The respondent agrees with the finding.*
- (2) The respondent disagrees wholly or partially with the finding, in which case the response shall specify the portion of the finding that is disputed and shall include an explanation of the reasons therefor.*

(b) For purposes of subdivision (b) of Section 933, as to each grand jury recommendation, the responding person or entity shall report one of the following actions:

- (1) The recommendation has been implemented, with a summary regarding the implemented action.*
- (2) The recommendation has not yet been implemented, but will be implemented in the future, with a timeframe for implementation.*
- (3) The recommendation requires further analysis, with an explanation and the scope and parameters of an analysis or study, and a timeframe for the matter to be prepared for discussion by the officer or head of the agency or department being investigated or reviewed, including the*

governing body of the public agency when applicable. This timeframe shall not exceed six months from the date of publication of the grand jury report.

(4) The recommendation will not be implemented because it is not warranted or is not reasonable, with an explanation therefor.

(c) However, if a finding or recommendation of the Grand Jury addresses budgetary or personnel matters of a county agency or department headed by an elected officer, both the agency or department head and the board of supervisors shall respond if requested by the grand jury, but the response of the board of supervisors shall address only those budgetary or personnel matters over which it has some decision-making authority. The response of the elected agency or department head shall address all aspects of the findings or recommendations affecting his or her agency or department.”

Comments to the Presiding Judge of the Superior Court in compliance with Penal Code §933.05 are required from:

Responses Required:

Findings:

Orange County Board of Supervisors: Findings: F1, F2, F3, F4, F5

City of Brea City Council Findings: F1, F2, F3

Recommendations:

Orange County Board of Supervisors: Recommendations: R1, R2

City of Brea City Council: Recommendations: R1

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APPENDIX – GLOSSARY

Hazardous Waste - Speaking in general terms, hazardous wastes are solid wastes that are toxic, ignitable, reactive, or corrosive according to Chapter 11 of Division 4.5 of Title 22 of the California Code of Regulations.

Household Hazardous - Waste includes paint, antifreeze, used motor oil, batteries, pesticides, caustic cleaners, needles, fluorescent light bulbs, medications, and other items that may present handling problems or other hazards if they are left in the solid waste stream.

Integrated Waste Management - Managing waste by multiple techniques to achieve solid waste and resource conservation goals. The techniques may include waste reduction, reuse, recycling, composting, transformation, disposal to landfills, and other means.

Municipal solid waste or MSW - "Municipal solid waste" or "MSW" means all solid wastes generated by residential, commercial, and industrial sources, and all solid waste generated at construction and demolition sites, at food-processing facilities, and at treatment works for water and waste water, which are collected and transported under the authorization of a jurisdiction or are self-hauled. Municipal solid waste does not include agricultural crop residues (SIC Codes 071 through 0724, 0751), animal manures (SIC Code 0751), mining waste and fuel extraction waste (SIC Codes 101 through 1499), forestry wastes (SIC Codes 081 through 0851, 2411 and 2421), and ash from industrial boilers, furnaces and incinerators.

Organic waste - "Organic waste" means solid wastes originated from living organisms and their metabolic waste products, and from petroleum, which contain naturally produced organic compounds, and which are biologically decomposable by microbial and fungal action into the constituent compounds of water, carbon dioxide, and other simpler organic compounds. Sometimes called **biodegradable waste**.

Recycling - Using waste as material to manufacture a new product. Recycling involves altering the physical form of an object or material and making a new object from the altered material.

Solid wastes - Discarded or abandoned materials. Solid wastes can be solid, liquid, semi-solid or containerized gaseous material. For regulatory purposes, **hazardous waste** is a subset of solid waste.

Waste - Objects or materials for which no use or reuse is intended.

Source: CalRecycle