

# Green Waste Landfill Cover Up

CalRecycle recognizes the 3:1

waste to cover ratio as the

industry standard.

CalRecycle started investigating alternative daily cover (ADC) since the California Compost Coalition raised the

issue at their December 2013
monthly meeting. CCC presented
information that many landfill
operators were using co-collected
residential green waste with food
waste as ADC and that landfills were
using excess amounts of green waste
ADC – in some cases without even

pre-processing the green waste. It has been 10 years since the state had evaluated the use of ADC, and it was about time to take another look, given the recent legislative ADC efforts and the 75% Recycling Plan policies to discontinue the diversion credits for ADC in 2020.

CalRecycle will be presenting an ADC Investigative Report at their monthly meeting August 19, 2014. At first read, it's just another *Green Waste Landfill Cover Up*. No mention about the use of residential co-collected organics used as ADC. No mention of possible lost state fees of over a million dollars per year. The "Findings" and "Next Steps" recommended in the Investigative Report follows the same path from ten years ago that found there was misreporting and that there needs to be LEA and operator training.

There will be enhanced focus on ADC use and record keeping during the CalRecycle's 18-month state inspections. However, the Investigative Report found no indication of overuse based upon site inspections and a review of the

records for landfills use green waste ADC in amounts of greater than 25% green waste ADC.

LEA Advisory #45 uses a refuse-to-cover of 4:1 in the methodology for determining remaining landfill capacity. The recognized Landfill Bible, *The Handbook of Landfill Operations* by Neal Bolton, P.E., uses the industry standard of 3:1 waste to cover, or 25%. CalRecycle in their previous LEA train-

ing recognizes the 3:1 cover ratio as the industry standard.

The 3:1 cover ratio includes the intermediate cover (which is one foot for every 15 foot lift – or 7%) and the final cover (which is 4 feet for an average landfill thickness of 150 feet – or 3%). With 25% being the industry standard for cover material, minus 7% for intermediate cover and 3% for final cover, daily cover should only take up 15% of the volume of a landfill – not 43.5% at Scholl or 28.6% at Calabasas.

In a brave move, CalRecycle has indicated they may ask for a governor's veto on AB 1594 (Williams), which would phase out green waste ADC diversion credit in 2020, because AB 1594 would still exempt this ADC from the state's \$1.40/ton fee. The "Next Steps" need to do more to limit green waste ADC to 15%, analyze the millions in lost fees, and stop residential co-collected food waste to be used as ADC.

Landfill	2012 Disposal Tons	2012 Green Waste ADC tons	Green Waste ADC % of Disposal
Scholl Canyon Landfill	210,512 tons	91,551 tons	43.5%
Calabasas Sanitary Landfill	197,403 tons	56,526 tons	28.6%
L and D Landfill	96,362 tons	33,534 tons	34.8%

## Legislative Update

AB 1594 (Williams) – would eliminate the solid waste diversion credit for green waste used as Alternative Daily Cover (ADC) at a solid waste landfill. CalRecycle regulations (Title 14) contain an approved list of ADC materials, which includes processed green material. Jurisdictions currently receive landfill diversion credit for the use of green materials as ADC, which is a major barrier to compost facility development due to its low cost and reduction of available feedstock supply.

AB 1594 passed out of the Senate Appropriations Committee on August 14 with minor amendments. Remaining local government amendments, exempting ADC green materials from the mandatory \$1.40 disposal fee surcharge, were added in Assembly Appropriations. CalRecycle policymakers have signaled that they may ask for a Governor's veto, as the disposal fee exemption creates bad precedent and policy at a time when they are looking to revamp the current Integrated Waste Management Account fee structure.

AB 1826 (Chesbro) – would establish a mandatory commercial organic waste diversion program, requiring businesses that generate a specified quantity of organic waste to arrange for recycling services. CCC has maintained a Support, if amended position in an effort to reduce current bill language thresholds for program enrollment – currently 8 cubic yards of organic waste in 2016, and 4 cubic yards in 2017, with a final goal of 1 cubic yard in 2019.

Our solid waste hauling clients have advised us that the 8 and 4 cubic yard thresholds are too high, disallowing any significant increase in organic waste volume due to the limited number of businesses who produce that level of organic waste which are not already enrolled some kind of program, thus restricting the potential revenue generation necessary to fund new or expanding programs.

We will continue to push for a 2 cubic yard threshold in 2016. The Solid Waste Industry Group (SWIG) has been seeking amended bill language which would set a new 2019 trigger for businesses which generate 1 cubic yard of organic waste and 4 cubic yards of MSW.

AB 1826 moved through the Senate Appropriations Committee, on August 6, under special rules provisions. On August 11, the bill moved off the Senate Floor and returned to the Assembly, where Senate amendments were concurred with and the bill was enrolled to the Governor on August 14.

SB 498 (Lara) – would revise the definition of the term "biomass conversion" to mean the production of heat, fuels, or electricity by the controlled combustion of, or the use of other noncombustion thermal technologies on, specified biomass materials.

SB 498 passed out of the Assembly Appropriations Committee, on August 6, and will next be taken up on the Assembly Floor. Amendments, previously taken in Assembly ESTM, include new compliance provisions for the inspection of all biomass facilities, by LEAs, and the tracking and reporting of inbound feedstocks and outbound ash.

### Legislators of the Year

Californians Against Waste honored Senator Kevin de Leon and Assembly Member Das Williams as CAW's Legislators of the Year at their 37th Birthday Celebration on August 12th. CAW also had a special recognition of Assembly Member Wesley Chesbro and his decades of service to Recycling with a Lifetime Recycling Champion Award. Earlier that day, the "State of Organic Waste in California" was held on the Capitol steps where Williams and Chesbro spoke about AB 1594 and AB 1826.

### Bill Watch

### AB 1594 (Williams)

TOPIC: Solid waste: recycling: diversion: green material. ADC

STATUS: 8/14/14 - From committee:

Do pass. (Ayes 5. Noes 0.)

LOCATION: Senate Floor

CALENDAR: August 22: Last day to amend bills on the Floor. August 31: Last day for each house to pass bills

CO-SPONSORS: CCC/CAW

> SUPPORT

#### AB 1826 (Chesbro)

TOPIC: Solid waste: organic waste

STATUS: 8/14/14 – Re-referred to Committee on Appropriations.

LOCATION: Assembly enrolling to Governor.

CALENDAR: 8/14/2014, Senate amendments concurred in. To Engrossing and Enrolling.

> SUPPORT, if amended

#### **SB 498 (Lara)**

TOPIC: Solid waste: biomass

conversion

STATUS: 8/11/14 - Read second time.

Ordered to third reading.

LOCATION: 8/11/14 - Assembly Floor

CALENDAR: August 22: Last day to amend bills on the Floor. August 31: Last day for each house to pass bills

> SUPPORT

### AB 1021 (Eggman)

TOPIC: Alternative energy: recycled feedstock – Sales Tax Exclusion

STATUS: 08/30/2013 In committee: Held under submission.

LOCATION: Senate Appropriations CALENDAR: Held under submission.

> WATCH - bring back next year

# Regulatory Affairs

# Biomass Conversion Facility to Report Tonnages to CalRecycle Under SB 498

**CEQA** entitled Biomass

**Conversion Facilities** 

Clover Flat Resource

Tracy Material Recovery

Napa Material Diversion

Intermountain Material

Recovery Facility

Cabin Creek

Recovery Park

Facility

Biomass conversion facilities were under a grave regulatory threat last year, had SB 804 (Lara) been signed into law. SB 804 would have required that all hazardous waste and by-products be treated on-site. The spent lubricating oils and low pH process water would have been treated at these small 40-ton-per day, 1 mega-watt biomass conversion facilities, making it cost prohibitive to comply. CCC asked the governor for a veto last year, to which he obliged.

In his veto message, the governor agreed with the intent of the bill and directed his administration to work with stakeholders to develop a more straightforward, technology neutral approach. After 10 years of trying to explicitly allow gasification

technology to be used just on biomass feedstocks, SB 498 finally gets it right.

SB 498 would simply expand the definition of biomass conversion to include non-combustion thermal conversion technologies, and will be heading for the governor's desk again. This time around, the hazardous waste will be allowed to be treated off-site at permitted facilities, but there will be regulatory tonnage reporting to CalRecycle starting in 2016. CCC is supporting SB 498 to allow the development of CEQA-entitled facilities at CCC member facilities.

Current law defines "biomass conversion" as the controlled combustion of defined clean biomass materials - such as wood, lawn and garden clippings, agricultural waste, leaves, tree pruning as well as non-recyclable paper – when separated from other

solid waste and used for producing electricity or heat. This bill would simply include thermal conversion technologies in the biomass conversion definition, allowing for cleaner and more efficient technologies to be used to process biomass, and providing conversion technologies processing biomass with the same incentives afforded to biomass combustion.

SB 498 requires a solid waste facility that sends materials to a biomass conversion facility to ensure that the

**Facility** 

Size

1.0 MW

1.0 MW

1.0 MW

1.0 MW

2.0 MW

materials are limited to those clean biomass feedstocks and authorizes LEAs to inspect solid waste facilities and operations for compliance with this requirement. Beginning April 1, 2016, and annually thereafter, SB 498 requires the owner

or operator of a biomass conversion facility to provide a report to CalRecycle with specified information about the facility, the materials accepted by the facility, and the end user of ash or biochar generated by the facility. If any information provided by a biomass conversion facility pursuant to this section is designated as confidential, CalRecycle shall treat it as such.

Current biomass conversion facilities have been eligible for CEC grants, RMDZ loans, and renewable energy credits by rationalizing that the syngas from gasifying the biomass feedstock was being combusted. Phoenix Energy built their first plant in Merced with a RMDZ loan from CalRecycle, and has negotiated heavily with PG&E on interconnection agreements and incentive pricing. SB 498 will ensure that the grants and incentives will stay in place.

### Regs Watch

### **TITLE 14/27**

**TOPIC:** Revision to Compostable Materials & Transfer/Processing Regulations

CalRecycle is updating regulations to address a broad list of topics, mainly related to the expanding diversion of organic materials from landfills. Addition of new language regarding anaerobic digestion, and feedstock definitions, odors, permitting tiers, etc. at composting facilities. Allowable contamination in compost and mulch products remains the largest remaining unresolved issue.

STATUS: Final draft regulations have been published in October 2013. Economic analysis is underway.

Formal rulemaking is expected to be undertaken in August and concluded by the end of 2014.

### WASTE DISCHARGE REQUIREMENTS

Formal rulemaking has begun by the State Water Resources Control Board (SWRCB) to implement statewide Waste Discharge Requirements (WDRs) for composting facilities.

SWRCB intends to adopt a general order that would assist their regional boards in the regulation of composting facilities, which they have deemed a substantial threat to water quality.

STATUS: Final draft regulations have been published in August 2013. Economic analysis has been completed. The EIR process is underway, with release of a DEIR and General Order expected in August 2014.

### **CFDA RENDERING REGULATIONS**

TOPIC: Clarification/revision of Agriculture Code regarding meat scraps collection by solid waste haulers

STATUS: Letter of petition to CDFA by SWIG-led coalition

LOCATION: California Department of Food and Agriculture – Animal Health and Food Safety Services

CALENDAR: TBD



The California Compost Coalition (CCC) is a registered Lobbying Coalition with the Fair Political Practices Commission (FPPC), created in 2002 by a group of compost operators in response to demands for increased recycling of organic materials and production of clean compost and bioenergy.

The California Compost Coalition represents member organic material recyclers and compost operators with a unified statewide voice on many issues: product safety and standards, government regulations, environmental planning, and marketing.

### Members

Agromin Caglia Environmental California Wood Recycling Cold Canyon Compost Mt. Diablo Recycling Napa Recycling Compost Northern Recycling Compost Organic Waste Solutions Phoenix Energy Quackenbush Mt. Compost Rainbow Environmental Services Sonoma Compost Tracy Delta Compost Upper Valley Recycling Zanker Road Resource Management **Z-Best Compost Facility** 

### **Executive Committee**

Bill Camarillo
Agromin
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### **CCC** News

### CEC Awards Napa Recycling Project \$3 million

Napa Recycling, together with the City of Napa, is ready to launch the Napa Renewable Resource Project this month, that integrates emerging technologies STORM WATER at the Napa Material SOLAR Diversion Facility. Greg Kelley of Napa Recycling and Kevin Miller with the City of Napa have been working on this concept for the last five years, as AB 32 policies were implemented and technologies emerged. The Napa Renewable Resource Project integrates solar and biomass energies with fuel production into a carbon-neutral recycling and compost facility that will have a carbon negative fleet and an upgraded storm water system.

As announced on July 18, 2014, the City of Napa was among 11 proposed awards announced under Round 2 of the California Energy Commission's (CEC) Grant Solicitation PON-13-609 for Pilot-Scale and Commercial-Scale Advanced Biofuels Production Facilities. The proposed "Anaerobic Digestion to Renewable Compressed Natural Gas" project was awarded \$3 million and plans to utilize Zero Waste Energy (ZWE) technology coupled with a BioCNG fueling system to convert 25,000 tons per year of food waste and green waste into fuel for a fleet of 35 trucks.

The City will manage the project; Napa Recycling will oversee construction and daily operations, while ZWE will provide the High Solids Anaerobic Digestion (HSAD) "SMART-FERM" dry organic waste fermentation technology and the renewable natural gas (RNG) fueling station. The project will produce 328,000 diesel gallon equivalents (dge) per year of carbon negative fuel. The City will provide \$9.69 million in matching funds, covering 76.4% of the project expenditure. The CEC will decide on proposed awards in its mid-October Board Meeting.

This Napa project will serve as a truly unprecedented

ANAEROBIC

and replicable model for self-contained, community-scale distributed renewable transportation fuel production and environmental sustainability throughout California. In their award, CEC

recognized that this model could be located in communities of 100,000 people or more, ideally co-located at one of the 100 transfer stations, 60 material recovery facilities, or 50 composting facilities throughout the state where the collection fleet is parked.

Such as the governor has been promoting distributed generation for electricity, this project will show that renewable transportation fuels can also be distributed within the community and engender significantly lower vehicle miles traveled. Right-sizing the facility at 25,000 TPY limits the environmental impacts and mitigation measures. Traffic is less than 20 vehicles per day and air emissions do not exceed thresholds.

Compost facilities and AD facilities are compatible and are not in competition; the AD digestate needs to be composted. CalRecycle and CARB have estimated that between 2.5 to 3.75 million tons will need to be anaerobically digested (about 100 projects at 25,000 TPY) in 2020, and another 2.5 to 3.75 million tons will need to be composted in 2020. Community-scale AD facilities can be co-located in-town and in-vessel at existing facilities receiving commercial food waste and some green waste. Almost all of the Climate Action Plans being adopted by hundreds of jurisdictions throughout the state target the development of alternative fuel infrastructure, alternative fuel production, and waste diversion, where this community-scale model delivers.