The Governor Goes Organic

Governor Jerry Brown signed four bills that will change the way California views organics forever. This is the turning point where signals are being sent that cheaper landfill tipping fees will not dictate the final disposal of organics. These four bills will set a course of action to 2020 and beyond: SB 498 (Lara) – biomass conversion; SB 605 (Lara) – Methane Mitigation; AB 1594 (Williams) - Green waste alternative daily cover; and AB 1826 (Chesbro) - Mandatory commercial organics collection.

SB 498 (Lara) is a renewable energy bill that clarifies that using gasification technology on clean source-separated biomass feedstock qualifies as biomass conversion. Couple this bill with SB 1122 (Rubio, 2012), and biomass conversion facilities up to 3 mega-watts of distributed generation will be able to produce carbon neutral renewable energy that counts as landfill diversion. With technology commercializing, and eight plants already entitled, urban wood waste will be able to be converted for on-site power, with LEA oversight.

SB 605 (Lara) is a greenhouse gas reduction bill which places portions of the AB 32 Scoping Plan into statute for the Air Board to develop a comprehensive strategy to reduce emissions of short-lived climate pollutants, such as methane, by January 2016. Methane’s global warming potential could increase to up to 84 times carbon dioxide from 25 times, with a focus on landfills being the third largest source. The Air Board will be busy in 2015 preparing the methane mitigation plan in concert with another AB 32 Scoping Plan action measure to eliminate the disposal of organic materials at landfills in 2016.

AB 1594 (Williams) is a recycling bill that finally removes landfill diversion credit for the use of green waste as alternative daily cover (ADC) at landfills in 2020, but is still permissive by allowing green waste to be placed in a landfill after 2020. Taking away recycling credits should be enough to divert green waste, regardless of the state fee issue.

AB 1826 (Chesbro) is a recycling bill that should be motivational to start building the infrastructure needed to handle five to seven million tons per year of organics by 2020. AB 1826 phases in the mandatory collection of commercial organics but exempts accounts that generate up to 100 tons per year of organics until 2019. In 2019, accounts with four cubic yards per week of solid waste, or over 60 tons per year of organics, will need to be part of a program. After 2020, accounts that generate 30 tons per year of organics could be brought into the system.

In signing these bills the Governor attempts to mesh AB 32 with the draft 75% Recycling Plan by promoting emerging technologies, increasing recycling, discounting ADC, and reducing greenhouse gases. While CalRecycle will easily pass regulations to inspect biomass conversion facilities and expand the AB 341 mandatory commercial regulations to include food waste, the Air Board will have a much tougher time in developing a SB 605 methane mitigation plan in 2015 and eliminating the disposal of organics at landfills in 2016 given the permissibility of AB 1594 and the phased implementation of AB 1826. With all good intentions, the Governor goes organic in 2014. Let’s see how the Air Board does the greenhouse gas math in 2015 regarding methane and organics.
**AB 1594 (Williams)** – will 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 has been signed by the Governor on September 28. While CalRecycle policymakers asked 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. The Governor’s signing message asks the legislature and stakeholders to work with CalRecycle to “ensure that this law does not hamstring their efforts” at fee reform.

**AB 1826 (Chesbro)** – will require a business that generates a specified amount of organic waste per week to arrange for recycling services for that organic waste in a specified manner starting on April 1, 2016. AB 1826 mandates threshold amounts in relation to the amount of organic waste generated per week from businesses from 2016 to 2018. Starting in 2019, AB 1826 thresholds reverts to the AB 341 mandatory commercial recycling of four cubic yards per week of solid waste. After 2020, the threshold could be reduced to just two cubic yards per week of solid waste should statewide disposal of solid waste not be reduced by 50% of the level of disposal in 2014.

AB 1826 has been signed by the Governor on September 28.

**SB 498 (Lara)** – will 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 has been signed by the Governor on September 28.

**SB 270 (Padilla)** – will eliminate the distribution of single-use plastic bags at grocery stores and other retail establishments over the next two years. It also establishes requirements for reusable bags and prohibits stores from distributing reusable bags and recycled paper bags for less than $0.10 per bag. While the bill grandfathered in ordinances that have been approved prior to September 1, 2014, it establishes a statewide standard for all other jurisdictions.

SB 270 has been signed by the Governor on September 30.

**SB 605 (Lara)** – will require the State Air Resources Board to complete a comprehensive strategy to reduce emissions of short-lived climate pollutants, such as methane, in the state. This bill puts in statute requirements for ARB to complete their Methane Mitigation Plan before January 2016, which includes landfill methane emissions quantification and reduction.

SB 605 has been signed by the Governor on September 21.

**SB 498 (Lara)**

TOPIC: Solid waste: biomass conversion.

STATUS: 9/28/14 – Approved by Governor.

LOCATION: Chaptered by Secretary of State - Chapter 746, Statutes of 2014, on Sept. 28.

> SUPPORT

**SB 605 (LARA)**

TOPIC: Short-lived climate pollutants.

STATUS: 9/21/14 – Approved by Governor.

LOCATION: Chaptered by Secretary of State - Chapter 523, Statutes of 2014, on Sept. 21.

> WATCH

**First Annual Association Of Compost Producers 2014 California Compost Summit in Sacramento**

Government and industry organics leaders are coming together from 9 am to 3:30 pm on Oct. 15, 2014 to discuss and collaborate on key policy and regulatory issues as well as emerging technology and marketing trends facing California’s organics recycling and compost industry today. The California Compost Summit will be held in Sacramento at the CSAC Convention Center on 11th and K St. [Follow this link to register or visit www.HealthySoil.org](http://www.HealthySoil.org)
Revision to Compostable Materials and Transfer/Processing Regulations

Over the last three years, CalRecycle has undertaken efforts to update existing regulations regarding compostable materials and transfer/processing facilities, in order to address the changing nature of organic waste handling throughout California, as well as safely enable the needed growth in diversion of this waste stream to meet their Strategic Directive 6.1 and the sustainability goals of the state. In this quest, CalRecycle staff and stakeholders have identified more than 15 issues, of varying levels of importance, with formal rulemaking to begin later this month.

CalRecycle hosted a final informal workshop on September 25 and outlined the current status in this process as well as next steps. Per their information, the bulk of the last year has been spent conducting a requisite economic analysis – revealing a substantial cost of implementation for these regulations (the largest expense attributed to proposed contamination limits) – which, along with the complete rulemaking package, is awaiting final approval from Cal EPA.

Additionally, key issues discussed included: the definition of vegetative food material; physical contamination limits; land application of compostable materials; odor; in-vessel digestion regulations; and Solid Waste Facility Permit Application form changes.

The following key issues continue to be contentious, with staff and stakeholders failing to come to any consensus on solutions: allowable contamination of outgoing compost or chipped/ground green material to be applied to land; land application restrictions; lesser permitting requirements for dairy digesters; and a refined definition of “food material”.

Setting appropriate limits on contamination of outgoing materials has been problematic for both chipping and grinding as well as compost products; current draft language has proposed contamination for all materials to be limited to 0.1%. Nearly all stakeholders believe that 0.1% contamination limits – taken from the Ventura County ordinance limits on the green material land application – cannot be met for compost from food waste (or mixed waste) given available technology and a lack of standards for incoming feedstocks.

We believe that an achievable limit on outbound compost contamination is tied to a limit on inbound food material contamination. Current proposed language will be prohibitively costly - as is reportedly apparent in the economic analysis – and unachievable for a majority of composting operators and the jurisdictions they serve.

Land application of urban green waste has been in the news recently as a potential pathway for movement of invasive pests. While these new draft regulations for chip and grind operators require sampling and testing of outbound materials going to land application, there is no requirement for records retention, according to CalRecycle staff, in what appears to be a significant oversight.

Dairy digesters are subject to reduced CalRecycle oversight, purportedly under the reasoning that Water Board waste discharge requirements provide adequate environmental protection. Although CalRecycle staff believes that the WDRs preclude transfer/processing activities at dairies, but our review of the referenced Central Valley RWQCB WDRs reveals no certainty or clarity that restrictions exist.
Atlas ReFUEL is Carbon Negative

Atlas ReFUEL understands the power of organics and the value of carbon negative renewable compressed natural gas (RNG), and is the newest member of CCC. Atlas ReFUEL is RNG that is made following a biological process in which naturally occurring microorganisms break down food waste to produce gas, including methane, and carbon dioxide. This gas is then cleaned and compressed for use in vehicle engines with a carbon intensity of minus 15.

Atlas ReFUEL, with Andrea Stephenson as the general manager, is making news nationwide. The Atlas ReFUEL station and digester facility is the first of its kind in the United States — efficiently processing food waste into a stable, cost-effective fuel source that:

- Burns so cleanly it actually generates carbon credits.
- Eliminates 100% of Greenhouse Gas emissions from landfilling food waste.
- Replaces nearly one million gallons of diesel fuel annually.
- Results in significant cost-savings.

Clean World Partners, with Atlas Disposal, opened the Sacramento biodigester in December 2012 and is currently in the process of expanding the facility that will soon be able to convert 100 tons per day of food waste into renewable energy in the forms of heat, electricity, natural gas, and organics fertilizer.

Atlas Disposal runs a fleet of 17 front-end loaders using RNG. The City of Sacramento has also established a sourcing agreement for up to 2,500 gallons of CNG per week with at least 30 percent RNG at the fueling station. This will be used to fuel 14 new CNG with Cummins ISLG engines where the CNG from the BioDigester meets Cummins specifications for their ISLG engines. Cost per gallon for the 30 percent renewable fuel is half the cost of diesel per gasoline gallon equivalent.

In 2009, Dave Baker of the Green Restaurant Alliance Sacramento (GRAS) began partnering with restaurants, farms, and Atlas Disposal to create a pilot project to divert restaurant food scraps from the landfill. “This is farm to fork and back to farm,” Baker said, “imagining a local food system that produces zero waste”.

What began as a pilot project to take unused food from a few restaurants to a farm for composting has turned into something bigger now that makes RNG and organics fertilizers. GRAS calculates that they have diverted hundreds tons of material to local farms since they started, and now, with the help of new technology developed locally, they’re expanding the scope and scale of their mission. Atlas shrugged at landfilling organics to create a sustainable food waste to fuel and farm system that California will be modeling with the passage of AB 1826.

Simon Sylvester-Chaudhuri wrote an article about “New York City’s Chance to Become a World Leader in Urban Sustainability” In his article he describes that the Department of Sanitation in New York (DSNY) may be the best hope for the success of NYC’s sustainability programs.

“While other U.S. cities may be years ahead of New York when it comes to separate collection of organics, only a handful have begun to utilize the resultant biogas for heat/power applications or vehicle fuel, and none to the scale that DSNY could. Sacramento-based Atlas Disposal is powering 17 of their refuse trucks using RNG produced from organics they collect and process.”