

TERU Report - AB 341 and the Problem with Words

Waste Diversion and Mandatory Commercial Recycling in California

July 8, 2012 -- Michael Theroux

Introduction

California's Assembly Bill (AB) 341 establishes a detailed new Policy Goal "encouraging" diversion of more solid waste from the landfill by shooting for 75% to be processed through source reduction, recycling, and composting by 2020. The focus is on Commercial Waste Generators, a sweeping term that includes everything we do to make a living. Whether your business is running a city or a construction company, a university or a zoo, or if you just rent out units in multi-residential complexes, you are now responsible for reducing the amount of material you send to disposal by "arranging for recycling services."

California's Department of Resources Recycling and Recovery (CalRecycle) now must submit to the Legislature an implementation plan for the new law, and has circulated a first draft for comment. We provided written comment as did numerous others, and ours are [posted on Teru Talk](#) for your convenience. We also have provided a detailed [AB 341 Legislative Analysis](#) as a road-map through the bill's complex twists and turns. This Focus Report is the translation into common English.

A Rose by Any Other Name ...

After decades of institutionalized and industrialized waste management in California, a rather unique, internally conflicting language to describe the various parts of the whole has evolved. The terms now in common usage on this subject do *not* convey the same meaning as they do in other states or nations. The lingo is conflicted, because the terms bandied about so loosely do not even correspond to the state's own legal definitions.

Look at the word Recycling, which by California state law is:

"... the process of collecting, sorting, cleansing, treating and reconstituting materials that would otherwise become solid waste, and returning them to the economic mainstream in the form of raw material for new, reused, or reconstituted products which meet the quality standards necessary to be used in the marketplace."

Put another way, it looks like this:

Recycling = Collect > Sort > Clean > Treat > Reconstitute > Raw Material for Marketplace

Note that Recycling is NOT simply the act of segregation, or the business of collection, or the sorting that occurs at the Materials Recovery Facility (MRF), or even the brokerage of those recyclable materials. It is a process; a pathway that once completed performs a legal shift from being a waste to being a useful raw material. Reconstitute is to constitute again, reconstruct, reorganize, or recompose; to change the form or structure of something. This is what New York calls "cessation of waste", and it can only occur once the step of reconstituting takes place. Reconstituting is the back end of Recycling by law and definition, the industrial Magic that turns waste into non-waste.

The Law's Intent vs. CalRecycle's Strategy

AB 341 was designed to dramatically improve the efficiency of the entire process of Recycling as defined in law. By mandating that all of California's jurisdictions analyze and monitor commercial recycling, there is an increased need to understand exactly what that activity entails. After all, AB 341 did not change the legal definition of recycling.

The draft CalRecycle report presents the same abbreviated interpretation of Recycling as it always has, focused on segregation, collection, and sorting that is in common usage in the state. When measured against the legal definition, this foreshortened concept of Recycling perpetrates a dysfunctional view of the

infrastructure and distracts our attention from finding other ways to convert the collected materials into marketable commodities.

There are plenty of provisions for far more frequent data collection on who is or is not segregating recyclable material, what operations and facilities are active, how much trash is being diverted from landfills, and who gets paid. Authorization of recycling agents does not currently include a requirement that the agent document and report to whom and at what final percentage segregated recyclable materials are actually "cleaned, treated, and reconstituted" to a market-ready condition. Releasing materials to an authorized recycling agent proves collection, but the data stops there. It does not constitute proof of Recycling under law because no one knows what happens next, other than who gets paid.

There are NO provisions in the draft report to document, analyze, expand, and improve upon the back-end reprocessing steps. We know how much "recyclable material" is collected and sorted, but we have no way of knowing what actually happens to that material. The brokers we pay to sell our recovered, sorted, and bundled resources are not required to document where those bales of cardboard go, or how much of that bundled plastic was "reconstituted" and made ready for use as new material. We do not know what is burnt or dumped, or whether the reprocessing plants are clean or dirty. With no means to account for the back end of the process, there is no assurance that Recycling actually happens or happens cleanly.

"Recycling services" that collect, sort, clean, and sell "recycled materials" are not accomplishing Recycling, but simply brokering goods as part of a larger, undefined value chain. We live in a global economy, and business must seek the best margin. With few reprocessing facilities able to be permitted and operated in California, those margins require shipment of recyclable materials greater and greater distances. When there is an uneconomical marketplace, no end-of-path processing occurs and what can't be stored indefinitely gets dumped. Cardboard prices are up today? Pull more cardboard off the conveyor. No market today for that type of plastic? Let it go...

AB 341 recognized the need to expand the infrastructure in California to meet the new goals and provided specific direction:

"It is the intent of the Legislature to reduce greenhouse gas [GHG] emissions by diverting commercial solid waste to recycling efforts and to expand the opportunity for additional recycling services and recycling manufacturing facilities in California."

Of greatest concern for this draft report is: (a) lack of consideration for GHG and fossil fuel impacts of long-haul transport of segregated recyclable materials, and (b) a foreshortened interpretation of the legal definition of Recycling, resulting in undervaluing the importance of localized processing and reconfiguration to market-ready materials.

Local Reprocessing Benefits vs. Long-distance Outsourcing

The draft report refers to "Recycling Manufacturing" as industrial processes that can cleanly implement the final stages of remaking segregated materials into raw materials ready for the marketplace. The tools must fit the job, and the diversity of California's waste stream demands a diverse selection of clean, permitted industrial technologies. Comparative analysis of existing and potential pathways for the full path of recycling is needed to reduce reliance on long-distance shipping, and to increase opportunities for low-impact local alternatives.

CalRecycle can work with each jurisdiction to document and validate existing legal recycling pathways, to identify inadequacies in that infrastructure, and to capitalize on the economic development opportunities presented by an excess of supply and an available means of utilization, all within the dictates of AB 341. Transparent presentation of available choices will then encourage commercial waste generators to select methods best suited to their form of business, and result in an increase in full-cycle return of the recovered resources to the marketplace.

Tightly localized Total Recycling offers excellent opportunities to reduce transport-related impacts. Regardless of the existing local recycling infrastructure, Commercial Waste Generators can legally choose to implement two additional forms of waste reduction:

1. *On-site Utilization:* Globally, source reduction is coupled with integrated on-site reprocessing and remanufacturing industrial systems, reforming the company's residuals into fuel for combined heating, cooling, and power generation, into fuels for their fleets, and/or into raw materials and raw chemicals for primary manufacturing. This type of Total Recycling internalization should be aggressively sought by local jurisdictions, with the support of the state.
2. *Eco-Park Utilization:* There is no specific prohibition against "wheeling" recoverable materials from one business to another, creating multi-business Total Recycling. These opportunities where "one man's trash" becomes feedstock for another's business should also be sought at the local level and supported by CalRecycle expertise and funding.

Diverse Reprocessing: the Tools Must Fit the Job

CalRecycle is considering the phase-out of organics disposal to landfills, a step taken often on the international scene and common in Europe. Yet the draft report comes to an unwarranted conclusion: "the 75% goal cannot be reached unless a significant amount of organics now being landfilled is instead used in new composting / AD facilities." A great variety of processing methods are now available for clean conversion of organics to beneficial use and new products, beyond "new composting / AD facilities." Integrated chemical, kinetic, microbial and thermal processing capabilities must be considered also, without a predisposition to one pathway or another.

During the development and discussion of this draft report, Governor Brown's office has expressed support for legislative clean-up regarding implementation of a feedstock-driven, technology neutral approach to the tools necessary for conversion of waste into market-ready commodities. Total Recycling requires back-end processing capacity. Diverse wastes require diverse processing capabilities and regulatory changes are needed to promote diverse clean conversion.

CalRecycle's report to the Legislature must include an adequacy assessment of the knowledge base, the assumptions, the policy, the law, and attendant regulatory changes. If the Strategy proposed does not meet both the legislatively-directed Policy Goal and the encoded intent to "encourage the development of the additional solid waste processing and composting capacity," the report fails in its mission.

Parting Shots

Total Recycling needs funding at all levels, at least until the benefits of increased localized remanufacturing can become profitable. Much of CalRecycle's report focuses on new fees to support administration of this add-on infrastructure. Yet in the past, most funding for waste management has come from *disposal* related fees, not from diversion. CalRecycle must reverse the paradigm; funding must come from and be proportional to the tonnage recovered, not the tonnage lost to disposal.

AB 341 does not mandate increased recovery actions; it simply states a policy goal that 75% of all waste generated should be diverted from landfills by source reduction, recycling, or composting. Bringing about broader programs to "recover for reuse and recycling" is a good thing, and indeed the Commercial Waste Generator is a likely candidate for a state-wide mandatory waste diversion program. Directing an agency to seek the higher goal of 75% rather than the current 50% mandate should strongly encourage diversification of the tools and methods that can now cleanly and safely accomplish the goal. How CalRecycle will interpret the new code language and implement its policies and mandates remains to be determined.

There must be external, enforceable validation that segregation for recyclable goods does indeed result in Recycling per the state's legal definition, thereby benefiting California environmentally and socio-economically. A mechanism needs to be developed to ensure that to a measurable degree, segregated recyclable materials are further processed and made ready to re-enter the marketplace. Without validation of Total Recycling, all that CalRecycle can hope to accomplish is Commercial Waste Segregation.

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