

Providing a Road Map to Implementing AB 341

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This is an exciting time to be a solid-waste professional in California. CalRecycle, the state agency responsible for managing our waste, is actively soliciting comments from stake holders and industry professionals on how best to implement a law known as [AB 341](#). This law directs CalRecycle to prepare a plan, which is due at the end of this year, for recycling 75 percent of the states' solid waste by 2020. This is a significant increase above the 50-percent, state-wide recycling mandate found in AB 939, which was passed in 1989 and has been the primary driving force for improving recycling in California.

CalRecycle has prepared a [comprehensive report](#) on how the department would like to proceed, and everyone interested in managing waste in California should read it. To their credit, CalRecycle recognizes that we need to make major improvements in the entire infrastructure used to recycle waste, including: source separation, collection, recovery at materials-recycling facilities (MRFs) and sale to recycled waste brokers.

As envisioned by CalRecycle, to make the most progress, we need to focus our efforts on recycling of commercial waste, which is often collected and buried in a landfill without any attempt to recover recyclables. Unfortunately, as most of you know, this is often the lowest-cost method of managing waste, and short of regulatory intervention such as AB 341, there will be no incentive to change in the near future.

It is important to note that AB 341 is a continuation of the effort by the state to reduce greenhouse-gas (GHG) emissions, as required by AB 32, which became law in 2006. Simply stated, recycling reduces GHG emissions, and implementing AB 341 will make a significant reduction in these emissions.

Because it will not be easy, implementing AB 341 will require the support of both the public and private sectors. Further, in addition to a major investment in our recycling infrastructure, it will take a commitment to develop local markets for recovered plastics and scrap paper and metal. The goal of this article is to provide a roadmap for implementing AB 341 in a way that compliments and strengthens our existing recycling infrastructure, while moving the state toward truly sustainable waste management.

Correcting a Fundamental Misunderstanding about MRFs

In general, MRFs treat two types of waste streams: source-separated (multi-stream) and mixed (single-stream) waste. Naturally, it is easier to recover recyclables from multi-stream waste, such as waste generated by curbside-recycling programs, than it is from single-stream waste. This is largely because mixed waste, particularly municipal waste, contains a significant fraction of food waste which contaminates the recyclables and reduces their value.

At the CalRecycle [workshop](#) held at the Los Angeles County Department of Public Works on November 26, 2012, it became clear that CalRecycle was working hard on developing performance standards that could be used to "certify" both multi-stream and single-stream MRFs. Clearly, the goal was to establish standards that CalRecycle could eventually use to monitor the performance of MRFs. It is not hard to imagine a situation in which anyone operating a "low-performing" MRF would need to improve, or be subject to some type of regulatory discipline. Although this performance-based approach to monitoring MRFs has merit, it highlights a fundamental misunderstanding in how MRFs operate.

From an owner's perspective, a MRF is operated to make money, not recyclable materials. If a MRF cannot make money, the operation is not sustainable, and the owner may be forced to shut it down. Further, the products a MRF recovers and the degree to which the MRF is pushed to recover these products are determined by the value of the products, which is generally determined by local market conditions.

Critical Role of the Recycle Market in Sustainable Waste Management

Sustainable waste management is based on a delicate balance between the competing needs of our society, economy and environment. Regulatory agencies generally formulate public policy to address the needs of our society and environment. For the most part, these agencies develop policies which are not based on economic considerations. Naturally, because these policies do not take economics into consideration, they are not sustainable. In defense of CalRecycle, they are pursuing a broad-based strategy which will review improvements in eleven "focus areas" within waste management.

Although several focus areas are related to improving the market for recyclable materials, we need to encourage CalRecycle to place a greater emphasis on this area. For example, implementing standards for improving MRF performance, with the goal of increasing the recovery of recyclable materials, without improving the market for these materials could result in the production of materials for which there are no buyers. This would discourage the construction and operation of MRFs, which is exactly the opposite of what AB 341 is supposed to accomplish.

"Wastesheds" to Monitor the Recycle Market and Set MRF Standards

The market for recyclable materials varies over the state of California, based on the proximity to urban centers, recycled materials brokers and transportation hubs such as railroads and ports. Given the critical link between the increased production of recyclable materials and a market that can absorb these materials, it makes a lot of sense to divide the state into "wastesheds" which represent local markets for recycled materials.

The concept of wastesheds is not new. The City of Los Angeles is divided into six wastesheds, which are used to optimize the city-wide, waste-collection effort. The wastesheds proposed here, however, are different than conventional wastesheds, which are geographically based. Instead, the boundaries of the state-wide wastesheds proposed here would be market-based, drawn around the local markets for recyclable materials such as paper, plastic and glass bottles and scrap metal. Drawing the boundaries of the new wastesheds would be an excellent opportunity for CalRecycle to collaborate with the owners and operators of MRFs and waste brokers in California. Importantly, this would create a positive working relationship between CalRecycle and the regulated community which will be needed if AB 341 is to succeed.

Establishing market-based wastesheds in California would have the following benefits:

- CalRecycle would be able to establish higher MRF performance standards in strong recycle markets without concern that the additional recovered materials would have no buyers.
- CalRecycle would be able to focus their work on developing markets for recyclables in those wastesheds with poor markets for recyclables.
- CalRecycle could phase in higher MRF performance standards in wastesheds with poor recycle markets as soon as those markets improve.

Using Carbon Credits to Stimulate the Recycle Market

California is the first state in the United States to develop its own cap-and-trade market for GHG emissions. The program, which is administered by the California Air Resources Control Board

(CARB), went into effect on January 1, 2013. Up to eight percent of a company's "compliance obligation" may be met using "offsets" or verified reductions in GHG emissions. Given that recycling reduces GHG emissions, the legislature should ask CARB to create an offset system for recycled materials or products made from recycled materials. The amount of the offset would be determined by calculating the amount of avoided GHG emissions.

In practice, manufacturers of products made from recycled materials would receive GHG offsets which could be sold on the open market to California companies needing allocation allowances under state's the cap-and-trade program. Because California is a [member of the Western Climate Initiative](#) (WCI), these offsets could also be sold to any state participating in the WCI emission-trading program. As a result, a number of manufacturers would be willing to enter into long-term contracts with waste brokers for specific recycled materials. This would greatly stabilize the market for recycled materials and promote recycling.

Summary and Conclusions

The plan presented here is based on practical, workable steps that CalRecycle should take to implement AB 341 and create a sustainable waste-management program for California. These steps include:

- Agreeing that performance-based standards for MRFs will be implemented only when a local market can absorb the additional recovered materials that will be produced.
- Dividing the state into market-based wastesheds which will be used to monitor the market for recycled materials and develop strategies for improving them.
- Working with CARB to develop GHG offsets for manufacturers which use recycled materials to manufacture new products.

The report by CalRecycle on how to implement AB 341 is not due until January of next year. There is still time for the regulated community and solid-waste professionals to work with CalRecycle on developing a sustainable, workable plan.

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