

2 July, 2012

To: Caroll Mortenson, Director, Cal Recycles

From: Northern California Recycling Association, by Arthur R. Boone, President and Special Editor, and John Moore, Chair, Zero Waste Advocacy Committee.

Re: Feedback on your "California's New Goal: 75% Recycling"

Our association was started in 1976 as the Association of Bay Area Recycling Groups and Environmentalists [ABARGE] and renamed as present in 1982. Since our beginning we have opposed landfilling and incineration and have striven to make the highest and best use of all discarded materials our goal and our region's practice.

Less than two months ago we received your above-referenced document and have, collectively and individually, pondered its many words and concepts. To our reading, it is a compendium of what has been talked about for years and attempts to resolve some of the many problems that emerge in developing a sustainable materials management policy and practice in our state. Some of its proposed solutions to our problems seem excellent, others are much less satisfactory. Arthur Boone, our president, was present at both the Sacramento and Diamond Bar meetings in May and a number of our members were on the line; we are pleased that five of our members have contributed to this report.

THE NUMBERS! (pages 6-11): While Mr. Boone's historical approach to the issues of measurement are persuasive, as a group we cannot confirm the accuracy of his research but do affirm his conclusions. We agree with his points that 1) the legislature did not intend per capita data to be used for state-wide program measurements, 2) the legislature expects the calculated generation and diversion rates to continue, 3) per capita disposal numbers seem easily able to be manipulated to create some "right to dispose of waste" ideology, and 4) relying on a reversal of the Bustamante law of 1996 seems precarious in a state where landfill-owning and -operating firms still drive policy at the state level.

THE POLICY DRIVERS: (page 12). You Ask for "whether any key areas/concepts are missing;" we see three.

1. PRICING RECYCLING AND WASTE SERVICES: We think that the economics of pricing existing wasting practices needs state-level attention. Several points:

a. In Alameda County we did a survey of the rates for large trash carts (95 gallons carts) comparing those charges with the charges for a 20 gallon (so-called lifeline service rate) cart. We were surprised to realize that the larger cart is priced at anywhere from 6 to 1.75 times as much as the smaller cart. Based strictly on capacity, the larger cart would be 4.75 times the price of the smaller cart but that is near done. What other factors are at work?

b. The City of Oakland receives \$30 million from Waste Management Inc. as a charge for operating its garbage franchise for a calendar year. Waste Management's charges to its customers recover these costs and become an indirect source of municipal revenue. If the Oakland practice is a valid indicator of cumulative local experience in the state, then waste haulers are contributing \$2.775 billion per year to local governments in California each year. Is this a valid number? What portion of municipal revenues is this? How does this affect the cities' approaches to waste reduction? What are the alternative pricing structures that can help maintain municipal revenues while altering services, much of which will slip off to unregulated industries.

2. RECYCLING BEHAVIORS: The public's knowledge of the virtue of waste avoidance is incredibly varied. We think we need continuing state-level of public information and education on these matters; much more than an updated website. Discuss EEI on landfills and incinerators.

3. ROUTINIZATION AND STANDARDIZATION : Over the last fifteen years, the "green cart" has become a near-universal practice and symbolic color for the organics container in the state. There is no such uniformity on garbage carts (isn't black best?) or in recyclables carts (some blue, some grey, etc.). It's a hodge-podge and needs state attention. Stop signs are red; caution is yellow – mixed colors result in mixed (and weaker) messages. People moving between communities have to learn new practices.

1. INCREASE RECYCLING INFRASTRUCTURE:

- a. The second paragraph on page 13 claims that increased recycling depends on new markets for used materials in California. We think this is an erroneous assessment of how the loop for used materials functions. In the basic industries, California has been de-industrialized for at least a generation; nobody who knows can either state or estimate how much of the paper, metal, glass, plastics, or wood that is consumed in California is made in California. These five basic industries which grew in California as the industrial revolution came to the state after 1900 have mostly left the state and California is a major net importer of paper, metals, and wood; NOBODY, repeat NOBODY, knows the extent of that dependence on out-of-state producers of either virgin or reprocessed/recycled content basic materials. And yet we're recycling (according to your questionable numbers) at a 65% rate for used materials with this little understood, never-measured, existing market structure. Going to 75% does not require more markets, it requires more people keeping their goodies out of the garbage. The focus on markets for used materials rather than on the failures of source separation in the state has been a myth that the CIWMB, now agency, has followed for at least 15 years.
- b. We don't think the financial incentives that are mentioned in para. one on page 13 are the key factors; one analyst said recently about the solar revolution, "It may get designed in California, it may get installed in California, but it won't get built in California." We think the same issue is true about the reprocessing of used materials back into new materials and products. The trade imbalance which results in hundreds of thousands of sea containers moving westward across the Pacific empty has created what one of our members has referred to as "the great Chinese vacuum cleaner" that sucks up all the discarded and available papers, metals, and plastics collected in California (population: 39 million) for consumption in China (population 1.4 billion). While it is true that with CIWMB and DoC assistance we have constructed a series of PET and HDPE washing and cleaning facilities in California that has created a large supply of RPET and RHDPE for use by California fabricators, that is the exception to the general export of basic industrial materials and of the basic industries. If they can build an OCC mill from scratch on Staten Island, NY relying 100% of recycled furnish, we can do it in California but most of the market dynamics work against such installations here. California has gotten used to being a suburb, dependent on others; to go from 65% to 75% recycling will not do much to change that.
- c. On page 17 the report writes, "Develop and implement capacity criteria regarding the siting or expansion of solid waste landfills." The CIWMB never saw a landfill or a landfill expansion it didn't like. Landfill capacity becomes an asset on the books of a publicly-traded landfill owning company and a matter of much desire. California has been over-capacitated for landfill space for at least five years and neither the agency nor the landfill owners show any sign of losing their ambition to acquire more permitted space. One of our members has suggested publicly that the state ration landfill daily capacity to reflect the anticipated shrinking volume of space needed to put away the planned declining volume of garbage; nobody

- paid any attention. With the current imbalance of teams in Sacramento, two on the waste less team; five, six, seven on the waste more team, little change can be expected in this area.
- d. On page 20 the agency envisions a role for itself to improve collection efficiency or quality. Our experience has been that few state employees have much useful knowledge about materials or collection and processing systems. Some municipal staff have developed a strong knowledge base in these areas but not state people; the most we expect of state people is to refer us to other persons in other parts of the state who may (or may not) have useful information about a problem that we are working at on the local level. As said in another context, “the federal government has all the money, the states have all the power, and the locals have all the problems;” this seems true in our field as well.
 - e. On page 22, when you speak of “information needs and barriers” you identify as the key stakeholder groups “local jurisdictions and the solid waste industry.” The IWM paradigm is constructed with these two stakeholders as the key players but, in point of fact, they play a small role in the world-wide movement of new and used materials to meet the needs of seven billion people. The really key stakeholders are the people who own and control used materials and the people who need them to serve as feedstocks for their own industrial processes so the materials can be reconstituted/refurbished to make more usable materials to go “into the stream of commerce.” Local governments and waste collectors/haulers are most often today impediments to the proper management of used materials. The scrap dealers/packers and the basic industries they serve have, to a large extent, been left out of the 939 conversation and conversion; their omission at this point in your narrative is indicative of the agency’s low respect for their work and their role in solving the resources “crisis,” (not a good word here but usable). .

2. ORGANICS:

1. In the Bustamante bill of 1996, the legislature made as a finding of fact the judgment that “at the present time, the amount of green materials generated in California is in excess of the quantity that existing markets can absorb;” see Stats 1996, c. 978, Sec.2(b)(2). This finding is still state policy although not printed in Public Resources Code s. 41781.3(b) with the rest of that bill’s directions. The insufficiency of the composting industry is certainly not true in northern California; all the compost created in northern California is consumed locally. The law needs to be revised and this finding removed.
2. There are periodic shortages of compost production capacity in certain locations so that it is necessary to move both raw materials and finished product long (and inconvenient/expensive) distances due to restrictions on quantities allowed to enter or stay in facilities but that is the exception rather than the rule.
3. The failure of the board’s Strategic Directive 6.1 seeking the diversion of all organics at 50% by 2020 is due to price competition from landfills underpricing compost yards at the gate. The agency needs to make a full and complete study of the head-to-head

competition for raw materials that was envisaged in PRC s. 41781.3(b) but overlooked by the agency in 1996.

4. The European Community model of landfill surcharges in the range of \$20 to \$40 per ton is not considered possible in California but should be studied. Under those fees, not unlike taxing cigarettes, composting will rapidly become the cost-competitive market.

5. The agency should support as much as possible the current proposal of the City of Napa to the California Energy Commission for funding to create an anaerobic digestion facility on its property. Public ownership, properly protected and managed, will yield a large amount of usable data and reports that will be public knowledge and assist the development of other AD facilities as they prove their feasibility.

6. Support for Anaerobic Digestion: **We applaud CalRecycle's placement of anaerobic digestion (AD) on equal footing with composting as organics management techniques. It's a significant step in the right direction, and provides encouragement at the conceptual level for efforts initiated by the East Bay Municipal Utility District and taken up by other public agencies within NCRA's geographic area.**

7. We support the need for incentives/funding to facilitate the development of new AD facilities and the expansion of existing AD operations, such as EBMUD's food scraps digestion project, to increase distributed renewable energy production and to make it more economically practical to compost the digestate.

8. Indirect Incentives, 2e. **The development of offset project protocols for recycling of organic material, including anaerobic digestion, could potentially provide additional financial incentives to facilitate development of new facilities, which in turn would support CARB's cap-and-trade program under AB 32 by reducing emissions and providing in-state offset credits.**

3. INCREASE COMMERCIAL RECYCLING:

1. The idea that waste haulers will create routes to serve commercial customers with recycling services is naïve in the large metropolitan parts of the state. The amount of material flowing to independent packing plants for paper, metals, glass, and plastics is of an order of magnitude (but never measured, to our knowledge) greater than what gets collected in residential curbside programs which are well known to agency staff but of minimal importance in the overall scheme of materials recovery. Waste haulers will have costs and fees which will make their commercial recyclables collection programs non-competitive on price unless all ratepayers are required to subsidize the

collection. The existing recycling service industry has been competing with waste haulers for years on price and always wins.

2. At subsection (d), the report discusses the prospect of granting funds to support the roll-out of recycling collections programs for multi-unit buildings. We have seen several different programs succeed without direct grants to building owners. The City and County of San Francisco has hired people to work as local program advocates at multi-units with, by city staff's assertions, satisfactory results. In both Orange County and the southern Alameda County area, private firms are working as subcontractors to building owners to screen the set-outs of residents, removing the recyclables, organics and bulky products from the trash and arranging for their separate disposal with materials recovery; these businesses function like a contract landscaping company. Waste haulers get less volume to haul away but the owner creates a mini-MRF type situation on his own property that diverts materials to a proper destination. Encouraging these types of programs seems more useful to us than a direct grant program.
3. Threshold for coverage of commercial businesses: In the early iterations of the agency's formulation of its response to AB 32 requirements, the line was to be drawn for coverage at 4 cubic yards of garbage and recycling volumes per week. After NCRA reminded staff about the difficulties of measuring weekly recyclables volumes, the agency amended its draft regulations and chose to cut off coverage at four cubic yards of garbage per week. NCRA would have preferred that a lower threshold be set or, at the least, that a timetable would be announced when a lower threshold for coverage would be set. That is still our opinion.
4. Confusion about coverage in local public agencies already at 50%. At various points in your report you indicate some confusion about the coverage of the AB 341 requirements: who will enforce, etc. A question of any state enforcement against non-compliant operations within a community that is at or above 50% diversion remains unclear to us.

4. ESTABLISH EXTENDED PRODUCER RESPONSIBILITY:

1. It seems likely that real EPR is perceived as a threat by the basic industries of our country (and that also comprise a significant portion of the Fortune 200 companies here) and will be opposed legislatively in the states and nationally for the foreseeable future. The fact that we don't even have a list of non-recyclable products and materials (in the early part of the 20th century, the medical community created a list of incurable diseases that became the jumping off point for the extensively funded research in the second half of the 20th century on heart, cancer, etc. disease; nothing like this has happened with used materials) shows that shifting the true responsibility for discarded materials beyond the range currently involved in recycling programs from the buyer to the producer is still in its infancy.
2. It's conceivable that the various non-recyclable products will be lined up at the legislators' doorstep and, one-by-one, be put in the position of being 1)

banned from landfills, 2) given a surcharge at point of sale to pay for collections and processing, etc. Whether the legislature will ever turn this duty over to an agency, any agency, remains at best unclear at this time. It took 60 years of labor strife to get an NLRB; it took a 100 years of state child labor laws to get a federal law, etc., basic change comes hard and it seems unlikely that the legislators will turn over regulatory power to an agency in this area in any wholesale fashion for some time yet to come. The basic rule in USA is that the buyer takes possession and is responsible irremediably for the product, its packaging, etc.; we think this rule will die hard and its death will receive little support from the product-producing industries. While the California legislature has been working on EPR for various HHW and universal waste materials, there has been almost no progress on ordinary MSW objects that have no long-term home. Every couch ever sat in in California ends up in a landfill or incinerator some day and nobody has any plans to do otherwise.

5. REFORM BEVERAGE CONTAINER PROGRAM:

6. INCREASE PROCUREMENT/DEMAND:

7. OTHER MATERIALS:

8/ GOVERNANCE/FUNDING:

9. SOURCE REDUCTION:

1. At 9c (page 61) you speak of the 90% diversion from landfills standard; we think this is too low a number. What we know from our experience as trash sorters and earnest recyclers is that the only reason we do not have 100% diversion from landfills is 1) people don't care to take the time and effort to keep their discards unmixed (we acquire things unmixed but have been spoiled by the existing garbage system to discard them mixed); we think this accounts for 90% of the materials that go to landfills, and 2) there is no market that can reprocess the segregated material (e.g., duct tape, some plastic films, dirty old couch, etc.), accounting for 10% of what goes to landfills and incinerators. We think state studies which have claimed that only 60% of what's in the garbage could be recycled or composted are defective and under-represent what's available in the now-named "waste stream."
2. THE FIRST R: REFUSE, as in "refuse to accept the material if it has no market." One of the early zero waste espousing companies developed as its first R that practice of telling its suppliers to ship them no product or packaging that the supplier would not itself recycle or accept for return. The ZW company would refuse to accept non-recyclable product or packaging. To my knowledge the agency has never espoused any such analog of this type of policy.

3. It's important for a public agency to recognize that source reduction practices go to the heart of a private venture's bottom line; source reduction activities are cost-reduction activities and will generally not be shared among firms because it reduces the early adopter's competitive advantage. Unfortunately, the requirement that energy-reduction strategies be "voluntary" in order to be given credit under the cap-and-trade systems means that regulatory agencies will be discouraged from requiring proven techniques or systems; a tangled web we weave.
4. In the last two years our association has been deeply involved in the so-named Zero Waste Brain Trust that has attempted to capture the best management practices of municipalities and waste collectors, haulers and processors trying to move towards a zero waste economy. Not clear to what extent the agency has been a participant or observer to this Bay Area-centered confab, but it bears knowing; ZWBT has its own website.

10. THE OTHER 25%:

1. There is now and has always been, lurking beneath the choice to recycle, the option to find one process/technology that will manage all the discarded materials which wasteful people have chosen to mingle. Under the "garbage-as-usual" paradigm, mingling all discards was an acceptable practice; giving up this practice and noticing/paying attention to your discards and managing them so that the materials and objects can be redirected to their "highest and best use" is a matter of personal choice. Integrated waste management envisioned removing some of the discards from the waste stream and reusing and recycling them. The "zero-waste" paradigm looks at the sustainable management of all materials removed from their natural setting and managing and processing each separate material in a way that 1) keeps the materials in the stream of commerce, 2) finds the highest and best use for those separated materials, and 3) does it all at a reasonable cost. The one-stop disposal people will claim that re-sorting all discarded materials to maximize the three-fold goal is too expensive, not possible, etc. It's very important that the definition of "residue from recycling activities" not be defined by the people who want one-stop disposal options (what you call the "recovery facility operator," in most cases highly embedded with the existing waste hauling infrastructure). Eisenhower warned of the military industrial complex; we would warn of the waste hauler/single process complex which will have unsustainable residues and low-value effluents.
2. "Past efforts to gather recycling performance data from MRF operators have not worked" (page 62, under "Implementation, para. 2). For over 50 years waste haulers in California have met their legal obligations by 1) collecting materials in trucks that don't leak on the road and, 2) delivering their assorted materials to a licensed disposal site. Any salvaging of collected materials they wanted to do was on their own initiative and unregulated beyond various OSHA and sanitation laws. AB 341 accepts "mixed waste processing" as a hauler-based compliance activity but offers no guidance on how the hauler or the facility should be measured or regulated. Unscrupulous waste sorters will

make a simple pass on unsorted materials and claim that they have retrieved all the materials that can be economically salvaged. It's essential that the state define acceptable levels of contamination (materials in the collected materials that should not have been there in the first place, an error attributed to the person or business overseeing the collection container between outhauls) and residue (the useful material omitted from diversion in the facility due to poor management practices or inefficient machinery). As Susan Collins points out in her article on the failures of single stream recycling to deliver high portions of recyclable glass to the glass factories (see Resource Recycling, February 2012, pp. 18-19), it appears to be the co-collection of mixed materials itself that results in only enough glass to make six bottles from the 10 wine bottles going into a single-stream collection container and subsequent sorting operation whereas 9.8 bottles can be made from the 10 bottles fed into a buyback or redemption system where rigorous source separation is the rule not a discouraged practice.

Again, thank you for the opportunity to comment on your draft report.