



Memorandum

MONTEREY REGIONAL WASTE MANAGEMENT DISTRICT

DATE: October 10, 2008
TO: Board of Directors
FROM: General Manager
SUBJECT: Summary of October 8, 2008 Strategic Planning Advisory Task Force Workshops

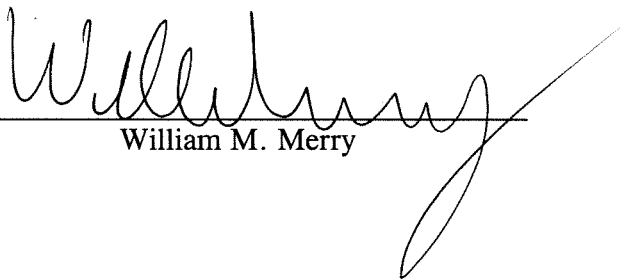
The Strategic Planning Advisory Task Force Workshop was held on Wednesday, October 8th, from 9 a.m. to noon at the District's administrative offices. Most of the District member agencies had at least one representative in attendance. There were a total of 18 people attending other than District staff (see attached attendance list). The meeting was facilitated by Candace Ingram.

The following discussion items were discussed and placed on a "Moving Forward" list

- a. **Revenue Enhancement.** District staff outlined measures taken to date to improve revenue, reduce expenses, and delay capital costs. Staff proposed the need to increase the landfill tipping fee by approximately \$5 per ton to minimize potential service reductions, to recover costs for unfunded state mandates, and to provide adequate funds to maintenance and capital outlay budgets. There was overwhelming support from the group in support for such an increase to the tipping fee, if accompanied by justification. A suggestion was made to phase in such an increase over several years, based on need, and in carrying out unfunded state mandates and new programs; express any fee increase as a percentage change in monthly garbage fee to the residential customer. The Task Force felt it was important to protect the Peninsula and County environments through programs to encourage recycling and conservation of resources.
- b. **Reduced Hours of Service and Service Levels.** The Task Force members were not supportive of reduced service levels at this time, as doing so may lead to increased illegal dumping and would not be responsive to the needs of small contractors in accessing the landfill and its related services.
- c. **Regional Organics Management.** There was support for this effort. The member agencies supported the concept of taking compost and mulch material back into their community in an approximately equal amount to the amount of green waste delivered to the District. The District is developing a Request for Proposals, in cooperation with Santa Cruz County representatives and the Salinas Valley Waste Management Authority for release in early 2009. More information on costs will be needed before the Task Force members will be able to make more firm commitments in support of the project.
- d. **Waste Flow Control Ordinance.** In response to waste leaving the wasteshed, the District is developing stronger waste flow control language for the franchise agreements and for the Construction and Demolition Ordinances. The Task Force members were requested to obtain their jurisdictions support to incorporate the stronger language into building permits and demolition permits, to insure that wastes were hauled to the District's facilities for processing and disposal, and to support the member agency investment in the infrastructure for management of the wastestream. More information, including sample language, will be provided to the Task Force at their next meeting.

- e. Single Regional Waste Hauling Contract. There was consensus in support of the concept of having one regional, perhaps countywide, waste hauling contract. This item will be discussed further in a subcommittee of the Task Force, to explore the pros and cons of such a proposal. The subcommittee will meet at least once before the next meeting of the Task Force in December.
- f. Assistance with Management of Franchise Agreements. There was consensus in support of this item. It will also be discussed further in the subcommittee of the Task Force to evaluate a regional waste hauling contract.
- g. County-Wide Waste Management Agency. There was a suggestion made by the County Environmental Health Director that consolidation of the two solid waste agencies in the County be put up for discussion. With declining waste streams and associated revenue declines, coupled with the potential benefits associated with increasing processing efficiencies and reducing haul distances and overall environmental impacts, this would seem to be a good time to seriously discuss this matter.

The next meeting of the Task Force is scheduled for 9 a.m. to noon on Wednesday, December 3, 2008.



William M. Merry

Attachment

Meeting of the Strategic Planning Advisory Task Force

October 8, 2008

NAME	AGENCY	SIGNATURE
Guillen, Rich	City of Carmel-by-the-Sea	
Burch, Heidi	City of Carmel-by-the-Sea	<i>Heidi Burch</i>
Evans, Dewey	City of Del Rey Oaks	
di Iorio, Christi	City of Marina	<i>Christi di Iorio</i>
Hudson, Neil	City of Marina	
Riechmuth, Bill	City of Monterey	<i>Bill Riechmuth</i>
Uslar, Hans	City of Monterey	<i>Hans Uslar</i>
Brantley, Angela	City of Monterey	<i>Angela Brantley</i>
Milton, Leslie	City of Monterey	
Greenway, Paul	Mo. Co. Dept. of Public Works	
Stroh, Allen	Monterey County Environ. Health Div.	<i>Allen Stroh</i>
Ramirez, John	Monterey County Environ. Health Div.	
Fore, Matt	Monterey County Environ. Health Div.	<i>Matt Fore</i>
Matarazzo, Steve	City of Sand City	<i>Steve Matarazzo</i>
Ingersoll, Diana	City of Seaside	
Anderson, Jill	City of Seaside	<i>Jill Anderson</i>
Martinez, Celia	City of Pacific Grove	<i>in attendance</i>
Becklenberg, Jim	City of Pacific Grove	<i>in attendance</i>
Niccum, Mike	PBCSD	<i>Mike Niccum</i>
Kilic, Suha	PBCSD	<i>Suha Kilic</i>
Merry, William	MRWMD	<i>William Merry</i>
Flanagan, Tim	MRWMD	<i>Tim Flanagan</i>
Shedden, Rick	MRWMD	<i>Rick Shedden</i>
Evelt, Glen	MRWMD	
Hunzie, Harry	MRWMD	<i>Harry Hunzie</i>
Petitt, Richard	MRWMD	<i>Richard Petitt</i>
Prescott, Don	MRWMD	<i>Don Prescott</i>
Rees, Chuck	MRWMD	<i>CR.</i>
Aguilar, Becky	MRWMD	<i>Becky Aguilar</i>
Laska, Leo	MRWMD Board/PBCSD	<i>Leo Laska</i>
Gray, Ken	MRWMD Board/City of Marina	<i>in attendance</i>
Ingram, Candace		<i>in attendance</i>
Myers, David		<i>David Myers</i>
Leader, Lewis		<i>Lewis Leader</i>
<i>WORTON, KICK</i>	<i>MRWMD</i>	<i>Kick Worton</i>
<i>O'HALLORAN, TIM</i>	<i>SEASIDE</i>	<i>Tim O'Halloran</i>

Hermann Kumbus MRWMD

Not pulp fiction: Researchers hope autoclave will turn trash into energy source

Monterey County Herald
09/29/2008
DANIEL LOPEZ

The organic garbage hauled away from the curb on trash day and from Salinas Valley agricultural fields could one day power a car or heat a house.

At the landfill on Crazy Horse Canyon Road, the Salinas Valley Solid Waste Authority is running a prototype plant that researchers hope will turn trash into a source of electricity or fuel for cars. "Solid waste is a resource, and we want to treat it as such," said Susan Warner, a waste authority manager.

In April, the Salinas Valley trash collector teamed up with Joseph Anderson, an inventor and green technology entrepreneur to develop the \$300,000 test facility.

The autoclave system, a rotating pressurized vessel that resembles a cement mixer, is packed with ordinary garbage that is tumbled and heated by steam to 270 degrees. The result of the process, which uses low-quality water and takes about an hour, is a sterilized organic pulp that is separated from unwanted metals, plastics and other debris that were in the trash and not broken down in the chamber.

In addition to killing any bacteria or parasites that might be in the trash, running garbage through the process can reduce its space in landfills by about 65 percent, Anderson said.

Warner said that during the test period, the waste authority runs the autoclave system about two days a week and that currently there is no other use for the organic pulp that goes into the landfill.

The hope is that will soon change. "We would like to find the most beneficial use for the remnants of this process," she said. "The goal, of course, is to not landfill anything."

Anderson, 81, a retired civil engineer with 45 years of experience in engineering and construction, started working on the autoclave system in 1993. He currently holds five patents on it. "I took a problem and said, 'What's the solution,'" he said.

Removing organic material from landfill trash eliminates the production of carbon dioxide and methane — greenhouse gases that can have a life of up to 50 years, Anderson said. "The stuff we send to the landfill no longer has organic material, all the organics are back here," he said. "What we are trying to say is don't put the organics in the landfill. Treat them, so we can convert that to a renewable energy in the form of a biogas."

If that biogas is methane, Anderson said, it could be used to run a cogeneration plant producing electricity. The organic trash pulp could also be used to make paper products or ethanol once it's put through a refinement process.

Currently two of Anderson's autoclave systems are moving into operation in England, he said. A full-scale commercial plant would cost about \$30 million.

Meanwhile, here in the United States, his idea has attracted the attention of the U.S. Department of Agriculture. "It's unsorted garbage and it's very easy," said Diana Franqui-Villanueva, a USDA microbiologist. "He's processing the whole thing."

Researchers are now doing studies to try to determine if the organic material from trash can be refined to produce liquid biofuels, such as ethanol.

Anderson said that while ethanol can partially replace gasoline, its production is controversial because corn grown for food is used to make it.

He said studies are looking at whether other items, such as rice straw, corn husks and even the pulp from trash, can be used instead of corn.

Part of the reason Anderson brought his pilot plant to Monterey County is because of the amount of agricultural food waste produced in the Salinas Valley, he said.

In the United States, 250 million tons of trash are produced each year, and 80 million tons of that are cellulosic wastes available for biofuel production.

In addition to helping the environment and creating new sources for energy, Anderson said he hopes his invention will turn a profit. "I'm looking for some brave investors who want to help us save the planet," he said.

Trash-to-gas plant fate uncertain

SANTA CRUZ SENTINEL

Donna Jones

10/08/2008

Santa Cruz County supervisors are growing skeptical about a controversial proposal to convert trash to energy in the face of questions about timing, cost, emissions and regulatory approval.

Still, supervisors agreed Tuesday to give staff another month to hammer out an agreement for a pilot garbage gasification plant. "I do believe this technology is going to be useful," said Supervisor Neal Coonerty. "But other jurisdictions out there might move forward more rapidly, and we'll have to wait until it's proven itself elsewhere."

The plasma-arc technology breaks down trash under the intense heat of an electrical "arc." Such facilities are largely untested in a municipal setting and critics worry about the potential for release of cancer-causing pollutants. Backers argue the process is clean and safe, producing a synthetic gas for powering generators and an ash residue that can be used as an additive in asphalt or concrete.

Carlsbad-based AdaptiveARC proposed the project to supervisors in the spring with the idea of having a pilot plant up and running by the end of the year. Then reality set in. The project, which would be built at the county's Buena Vista Landfill, faces stiff opposition among environmental groups and South County residents. In August, the Monterey Bay Unified Air Pollution Control District refused to issue a permit for the project, deeming AdaptiveARC's application lacking the necessary information for approval.

Tom Bolich, county public works director, said the permitting process will be more complicated than anticipated, and will likely require approvals by not only the air board, but the California Coastal Commission. An environmental review also would probably be needed, he said. "Final approval could take easily two to three years," Bolich said. "And if there's any litigation, it would take longer."

The increasing complexity also raises questions about cost, Bolich said. Initially, AdaptiveARC was to pay for all up-front expenses. Bolich said he'd "close the gaps" in a hosting agreement with the private company before returning the board on or before Nov. 25.

Several speakers urged the board to drop the project immediately. They cited a lack of emissions data, and asked why students at nearby Pajaro Valley High School and residents of neighboring farmworker housing complex should be guinea pigs for unproven technology. "If this were proposed for Westside Santa Cruz, would this be acceptable?" asked Sandino Gomez, speaking for the Watsonville Brown Berets. "If this were proposed for the Ben Lomond Transfer Station, would it be acceptable? If it were proposed somewhere in Live Oak, would it be acceptable. I don't think so."

Kris Skrinak, managing partner of AdaptiveARC, defended the project, saying the pilot project is designed to answer some of the questions. The existing landfill poses its own environmental risks, which the plant will be able to reduce, he said.

"We're not talking about a green pasture here," he said. "There are emissions today." Supervisor Ellen Pirie said speakers raised valid concerns. "There's very little about facts in the project," she said. "We're going to need facts, not best guesses."