

cc MNCMNT  
Board June



# County of Santa Cruz

## DEPARTMENT OF PUBLIC WORKS

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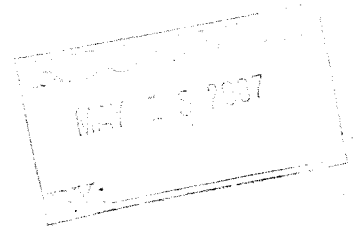
THOMAS L. BOYLE  
DIRECTOR OF PUBLIC WORKS

**APPROVED AND FILED**  
**BOARD OF SUPERVISORS**

DATE: 5/15/07  
COUNTY OF SANTA CRUZ  
SUSANA MAURIELLO  
EX-OFFICIO CLERK OF THE BOARD

AGENDA: MAY 15, 2007

May 3, 2007



SANTA CRUZ COUNTY BOARD OF SUPERVISORS  
701 Ocean Street  
Santa Cruz, California 95060

SUBJECT: LONG RANGE RESOURCE RECOVERY  
AND WASTE MANAGEMENT PLANNING

Members of the Board:

On January 23, 2007, your Board directed Public Works to report back on the Long Range Resource Recovery and Waste Management Plan. To advance this study and provide the level of detail your Board will need to make an informed decision on these future facilities, we have held informational meetings with the public and outside agencies who may have oversight and/or involvement with the approval, permitting and development processes. The feedback we have received to date has been informative and is helping us develop a clearer picture of the issues that will need to be addressed as we move forward with project development.

Some of the suggestions we have heard include the idea of utilizing existing landfill space for some of the proposed facilities, decentralizing the facilities, using other existing facilities if possible, limiting new facility development and community impacts around Watsonville, minimizing loss of agricultural lands, and seeking more public input through more extensive notification. All of these issues are being considered along with the essential community needs served by these future facilities. It is our hope, through this ongoing public discourse, that we can arrive at a set of recommendations that balances all the public and stakeholder needs and concerns.

Your Board also approved a 30-year waste disposal agreement with the Monterey Regional Waste Management District (MRWMD) on April 17, 2007. This agreement is available to the County for up to 30 years and is structured to include all of the County Service Area 9C waste shed if we elect to exercise this provision. This is considered an essential piece of the long range plan and while not a permanent waste disposal solution, this does open up a number of facility development options that could reduce costs and address some of the suggestions and concerns outlined above. As an example, constructing a transfer station on the one remaining undeveloped landfill disposal cell at our existing Buena Vista Landfill site is now a potential option with the MRWMD agreement in place. This option could reduce the amount of new land and cost required for some of these new facilities.


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Our goal today is to present an overview of the identified resource recovery and waste management facility needs and to receive Board and public input on the proposed direction of this study. Attached you will find a copy of today's presentation materials for your reference. Our consultant on this project is HDR/Brown, Vence and Associates (HDR/BVA) who will be presenting the project background and needs assessment to your Board. Based on the input we have received from the public, stakeholders, Integrated Waste Management Task Force, and your Board, HDR/BVA will be able complete preparation of their final facility development plan recommendations and siting options for further consideration on or before June 12, 2007.

It is therefore recommended that the Board of Supervisors take the following action:

1. Consider this report on the Long Range Resource Recovery and Waste Management Plan.
2. Direct Public Works to return on or before June 12, 2007, with a report on the facility development plans and siting options for future resource recovery and waste management services.

Yours truly,

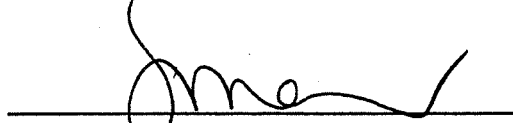


THOMAS L. BOLICH  
Director of Public Works

TLB:RPM:mg

Attachments

RECOMMENDED FOR APPROVAL:



County Administrative Officer

Copy to: Integrated Waste Management Local Task Force  
 William Merry, Monterey Regional Waste Management District  
 Planning Department  
 County Counsel  
 Environmental Health  
 Public Works

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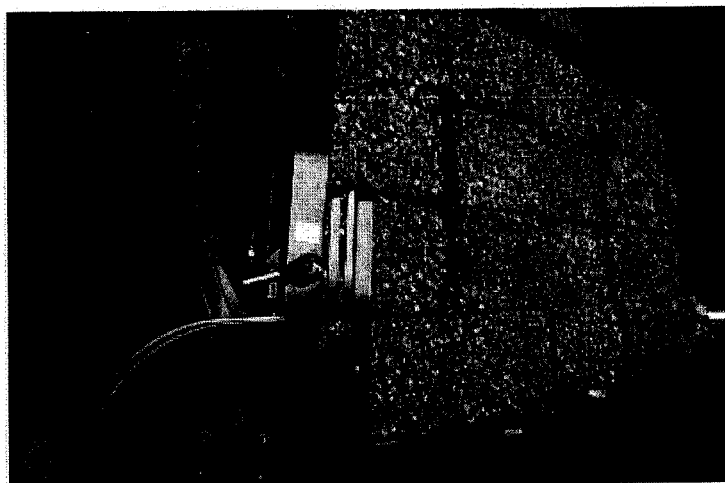
# Local Recycling Programs Demand Space, Technology and Manpower

Santa Cruz Wants to Stretch Life of Landfill with New Eco Park

The Mid-County Post  
May 29, 2007

By Michael Thomas

Over the past few years, recycling has gotten a lot easier in Santa Cruz County. Residents no longer have to separate aluminum cans from glass bottles, or pull apart the newspapers from the plastic. Pie tins can cohabitate with corrugated cardboard in one bin until rubbish day when waste haulers collect the lot.



Improved sorting equipment has helped to make that possible, and more than half of all the waste in Santa Cruz County is now recycled — a respectable figure as recycling goes.

But public officials are aiming even higher. In April, county supervisors held hearings to discuss the creation of an Eco-Park that would provide space for more aggressive recycling of construction debris and food waste. Those sources account for a big part of the waste that still winds up in landfills.

With Santa Cruz County's only dump, the Buena Vista landfill, nearing capacity and the community deadlocked over where to locate a new facility, politicians are looking for different solutions — adopting a goal of diverting 100 percent of all the trash produced here.

Can such a goal be realized? The short answer is that complete recycling remains theoretical.

"I don't think we'll ever get to 100 percent," said County Supervisor Jan Beautz. "It would require a much bigger commitment from the people who create what we are dealing with."

Recycling everything anybody discards may be too ambitious a plan, but something more than 50 percent is possible. Maybe the better question is how do waste managers hope to divert more trash without relying on you to help?

## Where Does Your Trash Go?

The current program demands little or no effort by residents. One can't help but wonder how all the rubbish generated by a quarter million residents and that many more annual tourists gets sorted out.

Jeffrey Smedberg, the County's Recycling Programs Coordinator, says there is no silver bullet, no magic contraption that separates trash into batches of recyclable material.

"There is a lot of hand labor involved in sorting out the materials and getting clean materials of a certain type," Smedberg says.

However, there are some impressive and clever machines that make the whole process easier. Major upgrades have accompanied the switch to co-mingled recycling, both at the city of Santa Cruz landfill and at the Castroville facility that processes recyclables from Santa Cruz County residences, including homes in Aptos, Soquel and Capitola.

Santa Cruz' new system fills an entire warehouse. It's a maze of interlocking and overlapping conveyor belts. The recyclables literally fly from bin to bin, propelled by air jets, through tumblers, deflected by magnets and of course, separated by the human hand. It hasn't always worked that way.

### **Proof that Recycling Works**

Recycling has become so commonplace it's surprising to recall that residential pickup began in Mid-County neighborhoods as recently as 1990. In the beginning, it took some effort at home, with three separate crates for newspapers, cans and bottles. In 1997, a new franchise agreement with Waste Management brought the first curbside carts with dividers to separate paper and containers.

While Capitola residents have had single cart recycling for many years, only in the past 12 months were those dividers pulled out to allow complete co-mingling in the County's unincorporated communities.

Widespread recycling has made a real and measurable impact. In Monterey County, the Marina landfill is now expected to last for more than 100 years. That's much longer than planned, thanks in large part to recycling.

Santa Cruz County is now using some of Marina's excess capacity. In April of this year, the County penned a 30-year contract with Monterey County to send as much as 120,000 tons there every year. Initially, between 24,000 and 26,000 tons will go to Marina every year, extending the life of the Buena Vista landfill from 12 to 16 years.

However, 16 years is still a perilously short time in which to plan for the closure of the County's primary landfill.

In 2004, a task force brought together elected officials and residents from throughout the County to evaluate new landfill sites. The task force ended up deadlocked and decided to abandon the search. They adjourned with the expectation that the County's trash might be transported to landfills outside the region for a reasonable cost.

In the meantime, new recycling ordinances have made an impact at Buena Vista. In 2003, about 145,000 tons of trash was bulldozed into the ground there, amidst the flocks of circling seabirds. Since then, the County has begun recycling debris from construction and demolition sites and has passed ordinances making residential recycling mandatory. As a result, the amount of trash buried at Buena Vista was slashed to just over 100,000 tons by this year.

### **A Day on the Line**

It's not too difficult to break down piles of paper, metal or plastic and make them into new raw material. The technologies are well established.

The hard part is turning mountains of waste into tidy bundles of specific materials. Indeed, the idea that the majority of our trash could find new life in recycled products seems to defy the laws of entropy.

Machines help make it possible. In Castroville, a new separator was added in the last two years to accommodate Santa Cruz' co-mingled waste. It removes paper with a series of spinning wheels that allow heavier containers to fall below.

"It's not perfect, but it works," Smedberg explains.

Other separators use air pressure. Santa Cruz' new system employs a "cyclone tumbler" as the first step to separate paper, but the waste stream first passes by a team of handlers that pluck out bulky items like children's toys and automotive brake drums.

In the course of a half hour, the line grinds to a halt twice when a hypodermic needle is spotted on the belt. It's removed with tongs and the nearby material is scanned for others. Hazardous wastes such as syringes should never be tossed in a recycling bin, recyclers say.

Farther along, an electromagnetic device magically extracts steel soup cans and other ferrous metals. They're lifted off the belt and strike a perpendicular belt flying overhead, which tosses them aside.

Since aluminum cans don't react to magnetism, they're ejected from a conveyor belt using an "eddy current." It behaves similar to a magnet, but repels aluminum rather than attracts it, so the cans literally jump off the line into the appropriate chute.

Glass presents some challenges, not the least of which is its tendency to shatter and end up as part of the 5 percent residual allowed from processed recyclables. It also needs to be separated by color to produce high quality recycled material.

Much of that is done by hand, but as Smedberg explains, some advanced technology has been adapted to help out. Some recycling systems now have optical sorters that use tiny beams of light to check the color of glass.

"The technology was originally developed to sort tomatoes — green would go one direction and red would go the other," Smedberg added.

In recycling systems, optical scanners activate air jets that separate glass by color. There's always some material left over when recyclables are sorted, but it's surprisingly little. The County's new contract with Green Waste Recovery limits residual to 5 percent.

"Residents are pretty good, but they're not perfect in their sorting," Smedberg says. "There is going to be a pizza box that's soaked with grease, something the system can't handle and we have no way to recycle."

### **Proposed Eco-Park Could Further Slash Waste**

The County currently has consultants seeking land for a facility devoted entirely to more intensive recycling. As with a landfill, the search isn't easy. A location in Watsonville was considered, but the city passed an ordinance last fall prohibiting the construction of any new waste facility there for at least the next year.

"The goal is to find a piece of land large enough to do a full-scale sorting facility and composting," Smedberg says. "Then all those green waste carts, you'd be encouraged to [also] put food waste in there."

A pilot compost program is already running at the Buena Vista site, processing waste from a number of local restaurants. One of the hurdles for a larger compost project is getting restaurant employees trained to properly collect the material.

The Eco-Park would also have space for more construction and demolition recycling. As much as 90 percent of the debris from construction sites can be converted into reusable material. There too, public education is key.

On a recent afternoon, a local contractor dropped off a big load of recyclable shingles, but with several bags of trash hidden inside.

"It's not going to be fully effective until people at all job sites do a little better preparation," Smedberg said.

Although residential recycling is now commingled, a bit of extra effort can make commercial recycling far more effective.

The non-profit Grey Bears currently does recycling pickup from businesses and collects 45 tons of cardboard a

month. Grey Bears Business Development Director Ed Martinez explains that if businesses separate cardboard properly, it's far more compact and requires fewer truck trips and less fuel to transport.

"It's great that they're single-streaming. It makes life easier for people to recycle," Martinez said. "[However], single-streaming isn't necessarily the best way to do this."

Though the Castroville facility was recently upgraded to accept commingled recyclables, the County's materials won't be going there much longer.

Green Waste plans to build a new out-of-county processing center and start sending recyclables there by April of 2008.

"We are assuming there are going to be using the most advanced and effective technologies," Smedberg said. "The County has adopted a zero-waste goal. We don't think we'll ever quite get to 100 percent but we will always be working towards that."

## Landfill project wins OK

By DAWN WITHERS  
The Salinas Californian  
5-31-07

A Gonzales landfill is set to expand by 4.5 million tons of capacity as Monterey County officials race to find solutions for handling the region's waste. The decision comes after a food-safety expert said dumping more garbage won't contaminate nearby agricultural fields. The use permit approved Wednesday by the Monterey County Planning Commission allows the Salinas Valley Solid Waste Authority to raise the height of the Johnson Canyon landfill by 100 vertical feet of garbage. "Extending the life of this landfill hopefully means no landfills in other parts of the county," Commissioner Miguel Errea said. Food safety concerns delayed the approval of the use permit in December. That's when commissioners requested more environmental tests from SVSWA to see if thousands of acres of crops could be compromised by bacteria from the nearby landfill. University of California researcher Trevor Suslow found the expansion would have almost zero risk of affecting nearby agricultural fields.

SVSWA wants to add 4.5 million tons of capacity to Johnson Canyon before the Crazy Horse Canyon landfill outside Prunedale closes in 2009. At that point, Johnson Canyon will be the only landfill accepting garbage from Salinas Valley cities and the eastern portion of unincorporated Monterey County. Steven Johnson, SVSWA's general manager, said the Salinas Valley's growing cities and communities already produce 250,000 tons of waste each year. The extra capacity will keep the landfill, in use since 1976, operational until about 2030, he said. Before the agency can actually add to the landfill's capacity, the project must be reviewed by the Monterey County Health Department's Environmental Health Division, the Regional Water Quality Control Board, the California Integrated Waste Management Board and the Monterey Bay Unified Air Pollution Control District, Johnson said.

In October, the agency suspended its plans to build a landfill in San Lucas after encountering significant community opposition, high costs and state pressure to explore alternative means of disposing garbage besides building new landfills. Under the plan, the agency will improve roads leading to and around the landfill and construct parking lots as well as a scale house, or weighing station, a staff facility and a building to collect and treat household hazardous waste.

# Landfill report finds little toxic threat to crops, grapes

## Points way for expansion of Johnson Canyon site

By LARRY PARSONS

Herald Staff Writer

05/23/2007

The proposed expansion of a critical landfill near Gonzales poses little or no threat of contaminating nearby row crops and wine grapes, a new report says.

That is good news for the Salinas Valley Solid Waste Authority, because a bigger Johnson Canyon landfill figures to be the primary recipient of solid waste from growing valley communities for the next 25 years.

"This is one of the utilities in the infrastructure that every area needs," said authority manager Stephen Johnson on Tuesday. "Johnson Canyon is well-suited to handle that."

A county permit to allow the 16-acre expansion is pending before the Monterey County Planning Commission, which put off making a decision five months ago because of food-safety concerns.

A new report prepared for the commission says the proposed expansion would present "negligible risk" of harmful microbes wandering from the landfill to nearby crop-growing areas.

"There is no science-based evidence to predict an elevated risk," Johnson said.

Without expansion, the 31-year-old landfill would fill by 2014. The expansion, which would raise the landfill elevation by 40 feet, would provide room for another 4.5 million tons of waste and extend the landfill's usefulness for at least 25 years.

The commission delayed action in December about concerns the enlarged landfill could contaminate nearby farm fields and vineyards. With last summer's E. coli spinach outbreak fresh on their minds, commissioners ordered more analysis of

food-safety implications of the expansion.

The new report says a University of California-Davis plant-science expert and county environmental health officials agree the threat to crops from the landfill would be negligible. They say the spread of potential pathogens would be blocked by environmental controls used by the landfill, including impermeable liners, leachate collection fields and daily soil cover.

Johnson said the report states there is more risk of contamination to growing areas from a cattle feed lot next to the landfill than from the landfill itself.

Brian Finegan, a produce company attorney who raised concerns about the expansion in December, said he hadn't seen the new commission report and couldn't comment. His client, D'Arrigo Brothers Co., would review the issue, he said.

Johnson said there is irony to the E. coli issue holding up the landfill permit. After the nationwide outbreak, many local growers who couldn't sell spinach ended up dumping it at the Johnson Canyon landfill.

"We got 350 tons of spinach in two and a half weeks," he said.

Today, planning commissioners will take a field trip to the landfill, starting at 9 a.m. at the Salinas government center. They are scheduled to consider approving the expansion at their May 30 meeting.

County planners recommend approving the project, which includes a new entrance and new maintenance and office buildings.

The Johnson Canyon landfill opened in 1976. The expansion is a key part of the solid waste authority's plans to keep pace with solid-waste disposal needs in the Salinas Valley. The agency's Crazy Horse Landfill in Prunedale is scheduled to close next year. The agency dropped the idea of enlarging its Jolon Road landfill near King City, Johnson said.

"The waste needs a place to go," he said.

Larry Parsons can be reached at 646-4379 or [lp Parsons@montereyherald.com](mailto:lp Parsons@montereyherald.com).

## Salinas OKs increase to garbage fees

*New prices set to begin July 1*

By ROBERT SALONGA  
The Salinas Californian  
May 16, 2007

The Salinas City Council voted Tuesday to raise garbage rates for the coming fiscal year, with the average city resident paying about 70 cents more per month. A typical resident with a 32-gallon garbage can and 64-gallon recycling can would see monthly rates rise from \$12.89 to \$13.58, a roughly 5 percent increase. Commercial customers would have to pay closer to a 6 percent increase, with typical monthly rates for a three-yard bin collected twice weekly rising from \$368.09 to \$389.59. The fee increases take effect July 1. Most of the annual increase - about 86 percent - will go to BFI Waste Services of Salinas, with the rest going toward city administrative expenses. According to a report produced by city maintenance staff, the increases are intended to cover yearly inflation and rising fuel and transportation costs. Despite the rate increase, Salinas residents pay some of the lowest garbage fees in the county by at least \$3 a month, with only Monterey paying slightly less.

BFI General Manager Doug Kenyon said about half the rate increase will go toward rising disposal costs at landfills run by the Salinas Valley Solid Waste Salinas Authority. Reducing landfill use is part of a multi-year goal by the waste authority and BFI, with the aim of diverting 75 percent of the city's garbage volume toward recycling, composting and other sustainable programs by 2015. To that end, Kenyon said, his agency is also pushing to make recycling mandatory for apartment complexes, mobile home parks and commercial customers. "Recycling activity is growing, but to really get to that number by 2015, we need to make more things mandatory," he said.

Starting July 1, BFI Waste Services of Salinas is set to raise monthly rates for trash and recycling pickup. The following new rates would apply to typical residents and may differ for seniors and low-income residents:

**20-GALLON:** \$11.65  
**32-GALLON:** \$13.58  
**64-GALLON:** \$18.49  
**96-GALLON:** \$24.51

*Contact Robert Salonga at  
 rsalonga@thecalifornian.com.*