

Articles related to the Plasma Arc proposal in Santa Cruz

Santa Cruz Sentinel

County dumps plan for waste-to-energy plant at Buena Vista

By Kurtis Alexander - Sentinel staff writer

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A much-hyped plan to vaporize the county's trash with an unprecedented waste-to-energy technology is likely off the table, for good.

County officials in discussion with Southern California-based AdaptiveArc say the company has failed to provide assurances that its technology is safe and effective. The county Public Works Department is expected to ask county supervisors to release them from negotiations next week.

"We think it's time to allow the company to try to install their hardware elsewhere," said Public Works Director Tom Bolich.

The move to end discussions with AdaptiveArc removes hope of a quick fix for the county's lingering trash problem. The landfill, at 1231 Buena Vista Drive, is expected to fill up within the next two decades, perhaps sooner, and county leaders have yet to identify an alternative for waste disposal.

AdaptiveArc, a privately funded start-up with about two dozen employees, had put forth a plan earlier this year to operate, at no cost to the county, a trial plasma-arc gasification facility at the county landfill. The proposal, largely untested in the municipal setting, would use the intense heat of an electrical "arc" to break down trash into a synthetic gas that could generate electricity. If county leaders were pleased with the operation, they could choose to expand it.

The plan, however, stumbled as questions emerged about its feasibility and potential air emissions.

A San Francisco environmental group that equates the technology to incineration helped organize a small group of local protestors, the Pajaro Valley Coalition for Environmental Justice, to draw attention to possible cancer-causing pollutants. Meanwhile, requests for additional data by the county and the local air board, which would need to sign off on the proposed facility, went mostly ignored by AdaptiveArc.

"They started by saying there was no emissions at all, and we should just issue them a permit. But that wasn't realistic," said Mike Sewell, air quality engineer for the Monterey Bay Unified Regional Air Pollution Control District. "There are emissions from everything."

Kris Skrinak, a managing partner with AdaptiveArc, concedes the company's information fell short of the regulatory demands, but says he had hoped there would be more leniency for a new and promising technology.

"It's a little bit sad," said Skrinak, of the county's plan to pull out of negotiations. "It's not like this technology is not needed."

Skrinak says AdaptiveArc has a list of 60 other agencies that are interested in working with the company. AdaptiveArc operates a plasma-arc facility in Monterrey, Mexico, though local engineers haven't seen evidence that the plant runs successfully.

While there are no comparable plasma-arc gasification plants in California, Santa Cruz hasn't been alone in considering the technology. The city of Sacramento is in discussions with a waste-to-energy company, though it is encountering similar information problems.

The county Public Works Department's request to end negotiations with AdaptiveArc is expected to be approved by the Board of Supervisors on Tuesday.

"We're thrilled to hear this news," said Bradley Angel, the head of San Francisco-based Green Action for Health and Environmental Justice, which protested this project and has opposed similar ones. "We think the health and environment of Watsonville and Santa Cruz is going to be better off for it."

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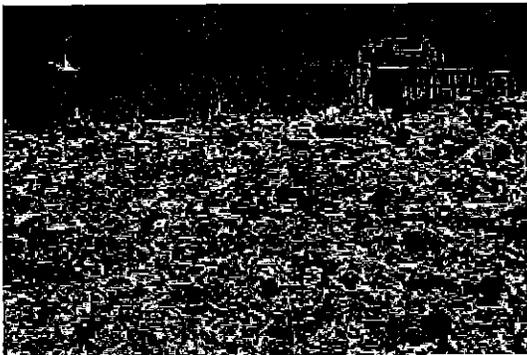
Metro Santa Cruz Weekly, July 23, 2008

<http://www.metro-santacruz.com/metro-santa-cruz/07.23.08/news-0830.html>

TALKING TRASH

Santa Cruz County Public Works officials are eyeing a technological breakthrough that could simultaneously eliminate waste and generate carbon-neutral electricity, but opponents have labeled the plan environmental racism.

By Steve Hahn



Photograph by Noelle Luchino

SET STUNNERS TO VAPORIZE: A proposal by a Southern California company to zap county trash stored at the quickly filling Buena Vista landfill using newfangled technology is getting local activists heated.

The trash talk between County Public Works and local community activists is piling up lately, with each accusing the other of engaging in a willful campaign of misinformation.

At the center of the fight is a potential deal between the County and a Southern California-based company called AdaptiveARC that could bring a state-of-the-art waste-vaporizing machine to the county's Buena Vista landfill in Watsonville. The machine can reportedly turn trash, including medical waste and sewage sludge, into a harmless gas by zapping the junk at over 2,000 degrees Fahrenheit. The gas is then used to generate electricity, leaving nothing except a small amount of ash, which can be mixed into concrete. Public Works officials have been excitedly eyeing the technology--known as plasma arc gasification--as part of a larger effort to extend the life of the Watsonville-based Buena Vista landfill, which is currently projected to run out of room by 2030.

So far the county and AdaptiveARC have just been talking, but a growing group of community activists are trying to stop what they see as an environmental injustice before it gets off the ground. Luis Alejo, a planning commissioner for the city of Watsonville, has started a group

called Pajaro Valley Coalition for Environmental Justice in response. Alejo is outraged that Watsonville residents, including migrant laborers that live near the dump, weren't consulted before Public Works started discussing the possibility of locating the plasma arc incinerator near their homes.

'There were no hearings whatsoever done in South County. There was no effort by the county to explain this technology or get people's questions answered,' complains Alejo. 'County staff is trying to shove this project down the throats of Pajaro Valley residents.'

Several regional environmental groups have also come out in opposition to the technology, including the Sierra Club, the Natural Resources Defense Council and GreenAction for Environmental Justice. All are concerned that Public Works officials are getting a bit too cozy with AdaptiveARC and might be overlooking the potential for harmful emissions of dioxin, a suspected carcinogen that could be emitted as a byproduct of burning the gas for electricity.

Bradley Angel, executive director of GreenAction, accuses the county of trying to push this project through without conducting a thorough environmental review or checking in with nearby residents.

'Even though Santa Cruz County has been considering this Buena Vista site as the location for months, they apparently never bothered to inform or solicit feedback from nearby residents,' accuses Angel. 'This is completely improper and smacks of environmental injustice. To us it seems like the same old, same old: They think it's a great project as long as it's located near brown poor people who don't speak English.'

Not true, says Public Works assistant director Brian Turpen. In fact, the only official action taken by the county so far has been to 'express interest and take a look at it,' he says.

The next step will be for Public Works to draw up a draft agreement with AdaptiveARC and then take it over to the Planning Department where it will undergo California Environmental Quality Act review. If the proposal can make it that far, it will still need to get a building permit from Planning and a permit from the Monterey Bay Unified Air Quality District.

All of these steps provide ample opportunity for public comment and thorough review, says Turpen.

'It will go through the same process as any other project,' he says. 'There is all this misinformation about what we're doing, and what's happening or what's not happening. This project is not fast-tracked. We don't even have enough information to submit a project description to Planning [which is the first step in the process]. So I don't know where they are

getting this information about lack of environmental review. We're not intent on avoiding anything, because I don't legally know how we could.'

AdaptiveARC, for its part, claims on its website that emissions from a similar plant it runs in Mexico are well below California thresholds. Environmentalists counter that those tests don't adequately measure dioxin levels. AdaptiveARC didn't return an email seeking further comment.

However, environmental groups are pointing to another section of the company's website that lays out a three-phase expansion plan for the Buena Vista landfill as evidence that this project could be rapidly extended and even used to zap trash from other counties.

'The whole rationale for this project is that we need something to get rid of that small amount of residual waste we can't eliminate through recycling programs,' says Angel, referring to the county's stated goal of recycling 75 percent of discarded materials, leaving only 25 percent as landfill. 'Yet, they are going to great lengths to partner with a company that has a stated goal of importing waste into the county.'

Turpen counters that any construction at the landfill, which has been rebranded as an 'EcoPark,' would be required to go through standard environmental review.

'The ecopark has property reserved for future conversion technology, which means we don't know what it could be,' says Turpen.

'However, we're pretty certain in the future there will be something developed to convert waste to something else. This proposal would convert it to gas for electricity, but there are other ones that ferment it and turn it into ethanol. Whatever is ultimately decided on for that space would have to go through the environmental process like anything else.'

Whatever the real situation on the ground, environmental groups are mobilizing for a long, hard fight.

'The battle is on,' says Angel.

The Board of Supervisors will be hearing a status report on the proposal on Aug. 12 at 9am, 701 Ocean St., Santa Cruz.

SoCal firm seeks permits for trash-to-energy plant in Santa Cruz County

Kurtis Alexander - Sentinel Staff Writer
Santa Cruz Sentinel

The Santa Cruz Sentinel, June 9, 2008

A Southern California firm has applied for permits with the Monterey Bay air board to run a trash-to-energy plant in Santa Cruz County, setting in motion what will be a curious, if not contentious, effort to bring an unprecedented waste technology to the Central Coast.

Carlsbad-based AdaptiveARC hopes to showcase so-called plasma-arc gasification at the Buena Vista Landfill just outside Watsonville. The test project would use temperatures as high as 3,000 degrees to break down municipal waste and convert it into fuel for electricity and, according to company representatives, virtually eliminate the county's need for another landfill.

But the technology remains unproven, at least in this country, and concerns about its viability, and to some extent its safety, have surfaced since talk of the plant emerged in April. The county's intent to contract with AdaptiveARC, originally slated for June, has been postponed so more research can be done, county officials said this week.

Kris Skrinak, a managing partner of AdaptiveARC, said reservations are natural with anything new but he expects his company's proposal to hold up to further examination.

'I'm convinced that we're going to leave an Earth-healing legacy,' he said.

Plasma-arc gasification, say its advocates, is not to be confused with traditional incineration and essentially vaporizes trash without harmful emissions.

The process applies heat in the form of electrified gas, or plasma, to waste, turning the organic materials into a synthetic fuel for electricity and the inorganic materials, such as metal, into an ash or slag residue that can be used in asphalt and concrete.

Skrinak's proposed project would employ plasma-arc gasification at a trailer-size plant at the landfill and would include generators for converting the synthetic fuel into electricity on site. The facility would handle about a third of the county's 600 daily tons of trash -- what's not recycled -- and could be scaled up in the future, according to Skrinak.

AdaptiveARC has offered the \$15 million demonstration facility at no cost to the county and would operate it for a yet-to-be-determined period of time. They hope to use the test project to market future facilities.

In April, the county Board of Supervisors gave the Public Works Department direction to move ahead with the offer, sensing there was little to lose.

But a number of critics have since surfaced saying that's not the case.

Energy watchdog Greenaction for Health and Environmental Justice says claims made by AdaptiveARC are, at best, untested and, at worst, distorted to disguise harmful emissions.

'There's a potential threat to health and the environment,' said Greenaction Executive Director Bradley Angel. 'They're proposing to make the residents of Santa Cruz County, particularly the Watsonville area, the guinea pigs.'

The group was among those who have asked the county to do more homework before committing to a gasification facility.

AdaptiveARC acknowledges trace emissions of such compounds as nitric oxide, carbon monoxide and sulfur dioxide but say they fall within state guidelines.

The company's application to the Monterey Bay Unified Air Pollution Control District was filed last month and regulators are still reviewing it.

'I've had a lot of people come into my office and say my project will have zero emissions,' said Lance Ericksen, manager of the air board's engineering division. 'We're pretty skeptical if people say that.'

That skepticism, Ericksen said, will translate into rigorous review, something that's made more difficult, but not impossible, by not having a working operation to study.

'Usually people have done smaller-scale work and we can work with that in our calculations,' he said.

AdaptiveARC has employed gasification technology in Mexico, which company representatives say will help address questions about the project here.

Plasma-arc facilities have been used on a small-scale basis and to address limited types of waste, but none are currently handling municipal trash in the United States. Several cities in California, including Sacramento and Los Angeles, are also looking into the technology.

The Santa Cruz County Board of Supervisors is scheduled to receive an update on the proposed facility at its meeting Tuesday at 9 a.m. at 701 Ocean St., Santa Cruz.

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Articles related to the Plasma Arc proposal in Red Bluff

Red Bluff Daily News June 17, 2008

InEnTec cancels Red Bluff facility By GEOFF JOHNSON

After three-and-a-half years of protest, InEnTec announced late Friday the cancellation of its proposed medical waste processing facility near Red Bluff.

In a press release, company President and CEO Jeff Surma said he is "disappointed" that the county will not have the opportunity to lead in its "environmentally sound solution to the disposal of medical waste" but said the decision is the result of "economic sense" that is pushing the company to look at the disposal of traditional waste.

The proposed facility would have used plasma technology to burn medical waste as a form of disposal. Local and regional groups opposed the construction fearing air pollution and increased traffic of waste in the area. Calls to InEnTec and InEnTec's press representative, Ruder Finn, were not immediately returned Monday.

A letter was sent to both Tehama County Planning Director George Robson and Air Pollution Officer Alan Abbs announcing the company's cancellation of both its use permit and its authority to construct.

As recently as June 11, InEntec was accused of violating county code, which states that a use permit becomes inactive after six months of disuse. Red Bluff-based Citizens for a Healthy Community and San Francisco-based Greenaction both said because the company did not seek to renew its building permit or spend money on construction for more than six months the permit was no longer valid, a claim that was refuted by County Counsel Arthur Wylene

Though InEnTec's statement makes no mention of these accusations, Greenaction and CHC are sharing credit for halting InEnTec's construction altogether. "I feel that it's about time," said CHC member Richard Clapp. "We had been fighting them constantly for the past three-and-a-half years." Clapp attributed a threat he made on behalf of CHC to continue litigation against InEnTec to being the "straw that broke the camel's back," he said. Prior to that statement the company said it was undecided about construction.

Greenaction's Bradley Angel also issued a press release to counter InEnTec's and celebrate the company's withdrawal. "InEnTec's press release omitted key facts, including the intense public opposition, problems with their plasma technology, inaccurate claims made by InEnTec, and the abandonment of their permit months ago in the face of ongoing opposition," Angel wrote.

InEnTec first came under public scrutiny in July 2005 when Lupe Green, a former executive director for the Sacramento River Discovery Center, formed Citizens for Review (later to

become CHC) after learning the Tehama County Air Pollution Control District approved a permit for InEnTec without asking for an Environmental Impact Report.

Green later bowed out formally after a head injury left her with fibromyalgia, she said. But, at their peak, the InEnTec hearings were drawing attendance in the hundreds. "It was people from all walks of life," she said. "A total blend of people who came together in opposition."

CHC and Greenaction will be holding a reception to commemorate InEnTec's departure from Tehama County at 7 p.m. Wednesday at the Red Bluff Community Center.

Plasma Group Letter – Attachment 2

Contents

Documents from Santa Cruz

- Nov. 18, 2008** *Recommendation to cease further consideration or negotiation of the hosting agreement with adaptive ARC for Plasma arc gasification, Letter from County Public Works Department to Santa Cruz County Board of Supervisors*
- Oct. 16, 2008** *Comment on Proposed Hosting Agreement with County from adaptive ARC, Letter from County of Santa Cruz Department of Public Works to President of adaptive ARC*
- Oct. 15, 2008** *Insufficient air emissions data notification, Letter from County of Santa Cruz Department of Public Works to President of adaptive ARC*