



THOMAS L. BOLICH
DIRECTOR OF PUBLIC WORKS

County of Santa Cruz

DEPARTMENT OF PUBLIC WORKS

701 OCEAN STREET, ROOM 410, SANTA CRUZ, CA 95060
(831) 454-2160 FAX (831) 454-2385 TDD (831) 454-2123

AGENDA: AUGUST 12, 2008

August 6, 2008

SANTA CRUZ COUNTY BOARD OF SUPERVISORS

701 Ocean Street
Santa Cruz, California 95060

**SUBJECT: DEMONSTRATION PLASMA ARC GASIFICATION PROJECT
AT BUENA VISTA LANDFILL**

Members of the Board:

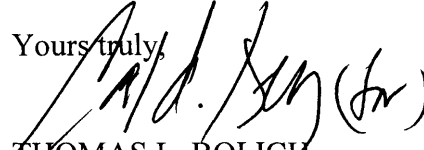
On June 10, 2008, your Board accepted a report on a proposed demonstration plasma arc gasification plant at the Buena Vista Landfill and deferred consideration of a hosting agreement with adaptiveARC for the proposed gasification plant until August 12, 2008. Your Board also directed Public Works to identify any County permits that would be needed for this demonstration project.

While Public Works has held preliminary discussions with the Planning Department and Monterey Bay Unified Air Pollution Control District (MBUAPCD) to clarify their permit and environmental review processes, we just recently received a comprehensive project description from the vendor, adaptiveARC, and have scheduled follow-up meetings with the Planning Department and MBUAPCD to discuss the exact scope of the demonstration project, the requisite permits needed for it to proceed, and the process for environmental review.

Without this project description these initial permit determinations have not been possible. As such, and because the County has still not entered into a hosting agreement with adaptiveARC, no formal permit application has yet been made for the demonstration project. Accordingly, it is important to make it very clear that the County has no intention of "fast-tracking" the demonstration plasma arc gasification project; it will have to go through the regular permitting process, including full environmental review.

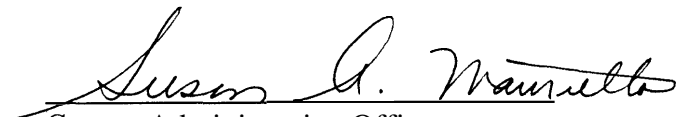
Furthermore, we cannot proceed with submitting a project application until your Board has first approved the hosting agreement with adaptiveARC. Since we have not yet received the proposed hosting agreement, we would request that consideration of this agreement and the subsequent permit application process be deferred until late September. At that time we also expect to have a complete outline of the permits required for this demonstration project and the accompanying process for environmental review.

It is therefore recommended that the Board of Supervisors defer consideration of the hosting agreement with adaptiveARC for a demonstration plasma arc gasification plant at the Buena Visa Landfill, and direct Public Works to return with the proposed agreement along with a complete outline of the permits required for the project on or before September 30, 2008.

Yours truly,

THOMAS L. BOLICH
Director of Public Works

TLB:BHT:lh

RECOMMENDED FOR APPROVAL:


County Administrative Officer

- copy to: Public Works
- Monterey Bay Unified Air Pollution Control District
- Planning Department
- County Counsel
- Integrated Waste Management Local Task Force
- Monterey Regional Waste Management District
- Salinas Valley Solid Waste Authority
- HDR Engineering
- Pajaro Valley Coalition for Environmental Justice
- Greenaction for Health and Environmental Justice
- Natural Resources Defense Council

July 9,2008

VIA ELECTRONIC AND U.S. MAIL

Board of Supervisors
Santa Cruz County
701 Ocean Street
Santa Cruz, CA 95060

Board of Directors
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Ed Kendig, Interim Air Pollution Control Officer
Monterey Bay Unified Air Pollution Control District
24580 Silver Cloud Court
Monterey, CA 93940

Re: Environmental Review of Permit Application by adaptiveARC

Dear Sirs/Madams:

On behalf of the Pajaro Valley Coalition for Environmental Justice, Greenaction for Health and Environmental Justice, and the Natural Resources Defense Council (“NRDC”), we strongly urge the Santa Cruz County and Monterey Bay Unified Air Pollution Control District to perform full environmental review for adaptiveARC’s permit application for a proposed plasma-arc facility at the Buena Vista Landfill in Watsonville. Current efforts by the County and other agencies to “fast-track” the permit violate mandatory environmental-review requirements and effectively deny due process to the citizens of Watsonville and Santa Cruz County.

Under the California Environmental Quality Act (“CEQA”), an environmental impact report is required for certain projects — also known as incinerators — that engage in “burning of municipal wastes, hazardous wastes, or refuse-derived fuel.” That is precisely what adaptiveARC’s plasma-arc facility intends to do. As described by adaptiveARC on its website, the facility heats municipal waste to temperatures as high as 5500” F, burning the resulting refuse-derived fuel—called syngas—to power a generator.² This process of heating the waste and burning the syngas constitutes incineration, requiring full environmental review. This understanding is further supported by the U.S. Environmental Protection Agency (“US. EPA”), which explicitly defines the process proposed by adaptiveARC as incineration.³ Therefore,

¹ CAL. CODE REGS tit. 14, § 15081.5(a)(1)(“EIRs Required by Statute”).

² Information about the proposed project was taken from the company’s website and blog: www.adaptivearc.com

³ See 40 C.F.R. § 260.10(plasma arc incinerator means “any enclosed device using a high intensity electrical discharge or arc as a source of heat followed by an afterburner using controlled flame combustion ...”); 40 C.F.R. §

because adaptiveARC’s proposed facility burns both municipal waste and the resulting refuse-derived fuel (syngas)—and is not subject to any of the exceptions from application of CEQA Guidelines § 15081.5 listed in Public Resources Code § 21151.1(d)—full environmental review is required. Moreover, research revealed no exemptions for “demonstration projects,”⁴ and it is bedrock CEQA law that exemptions should not be implied.⁵ The approval process for adaptiveARC’s plasma-arc facility will have to conform to the three-tiered evaluation provided under CEQA, including an initial study and, very likely, a full environmental impact report.

The environmental review of the proposed facility should cover all three proposed phases as set forth on the company’s website, with their proposed project culminating in a large, full-scale commercial facility importing wastes from other counties. As evidenced on adaptiveARC’s website, future expansion “is a reasonably foreseeable consequence of the initial project” and “will likely change the scope or nature of the initial project or its environmental effects.”⁶ This environmental review must take place before selecting a location and demonstration begins, since the purpose of CEQA is to “inform the public and its responsible officials of the environmental consequences of their decisions *before they are made.*”⁷

It is important to note that proposals made for similar projects in many other cities have been rejected or have otherwise fallen through over concerns about the technology and its disputed effects on the environment and public health:

- North American Power Company withdrew its proposal for a pyrolysis facility in Chowchilla, California, when it could not back up its claim of zero emissions;
- The Alameda Public Utilities Board, in Alameda, California, voted against proceeding with the siting of a municipal solid waste gasification plant;
- Plastic Energy LLC dropped its proposal for a catalytic cracking facility in Hanford, California, when the company could not produce any data to back up its claims of no emissions and ultimately admitted their claim was not correct; and
- InEnTec recently cancelled plans for a proposed plasma arc facility near Red Bluff, California, in the face of strong public outrage that in large part erupted due to the company’s incorrect claims about the technology being “pollution free” and having successfully operating commercial systems.

Here, approving such a project without the input and consideration of the public, including, but not limited to, the project location and local environmental impacts, will result in environmental

240.101 (incineration is defined as “the controlled process [by] which combustible solid, liquid, or gaseous wastes are burned and changed into noncombustible gases”).

⁴ See CEQA Guidelines §§ 15260, 15300 for a complete listing of statutory and categorical exceptions.

⁵ Implied exemptions to CEQA are disfavored. *Mountain Lion Foundation v. Fish & Game Commission* (1997) 16 Cal. 4th 105, 116 (citing *Wildlife Alive v. Chickering* (1976) 18 Cal. 3d 190, 195 (“[W]here exceptions to a general rule are specified by statute, other exceptions are not to be implied or presumed.”)). If there is any reasonable possibility that the activity in question might have a significant effect on the environment, recognizing an exemption would be improper. (2d Dist. 1997) 52 Cal. App. 4th 1165, 1191 (quoting *Wildlife Alive*, 18 Cal. 3d at 205-206).

⁶ *Laurel Heights Improvement Association v. Regents of the University of California* (1988) 47 Cal. 3d 376, 396.

⁷ *Citizens of Goleta Valley v. Board of Supervisors* (1990) 52 Cal. 3d 553, 564 (emphasis added); see also *Sundstrom v. County of Mendocino* (1st Dist. 1988) 202 Cal. App. 3d 296, 307 (citing *Mount Sutro Defense Committee v. Regents of the University of California* (1st Dist. 1978) 77 Cal. App. 3d 20, 35).

injustice. And it opens the door for new and potentially dangerous technologies to find a “laboratory” in California. The foremost purpose of CEQA is to require governmental agencies at all levels to document and consider the environmental implications of their actions? The citizens of Watsonville and Santa Cruz County expect and are entitled to the protections afforded to them.

We trust that the Santa Cruz County Board of Supervisors and Monterey Bay Unified Air Pollution Control District will follow the letter and spirit of the law. We look forward to working with you to ensure that the review of adaptiveARC’s permit application complies with CEQA’s mandates. In the event that there is a disagreement with our analysis, please inform in writing. If you have any questions or comments, do not hesitate to contact Bradley Angel at (415) 248-5010 or Tim Grabel at (310) 434-2300 or Luis Angel Alejo at (831) 726-6032. In addition, please place our names and information on the mailing list for future notices regarding this project.

Sincerely,

Luis A. Alejo, Esq.
Pajaro Valley Coalition for Environmental Justice
21-B Carr Street
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Elk Grove, CA 95624
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Marilyn Carmona
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Watsonville, CA 95076

Bradley Angel
Greenaction for Health and Environmental Justice
1095 Market Street, Suite 712
San Francisco, CA 94103
bradley@greenaction.org

cc: California Air Resources Board
Thomas Bolich, Director of Public Works

⁸ See Pub. Res. Code, §§ 21000,21001.

CBD BOSMAIL

From: CBD BOSMAIL
Sent: Sunday, August 10, 2008 4:34 AM
To: CBD BOSMAIL
Subject: Agenda Comments

Meeting Date : 8/12/2008

Item Number : 33

Name : Luis A. Alejo, Esq.

Email : laalejo@msn.com

Address : P.O. BOX 143
Watsonville, CA 95076

Phone : (831) 726-6032

Comments :
August 10, 2008

Santa Cruz County Board of Supervisors
701 Ocean Street
Santa Cruz, CA 95060

RE: ITEM 33: Defer consideration of the hosting agreement with adaptiveARC for a demonstration plasma arc gasification plant at the Buena Vista Landfill. OPPOSITION.

Dear Santa Cruz County Board of Supervisors,

I am writing to express my strong opposition to placing the "Demonstration ARC Gasification Plant" at the Buena Vista Landfill. As with your recent decision to place the new county waste management center (aka "EcoPark) in South County last March, I also continue to have many serious concerns about equity, fairness and environmental justice about this proposal. The latest proposal to burn county and other surrounding area trash here is a slap in the face to the people of the Pajaro Valley. As you know, this proposal is not a "demonstration." It will in fact be a permanent incinerator in South County if you continue to move forward with this proposal.

It is absolutely appalling that the County Public Works Department thinks it perfectly fine to look at South County as a good place to haul and burn county trash. This proposal also requires an Environmental Impact Report (EIR), and must also be reviewed by the County Planning Commission, the Monterey Bay Air Pollution Control District and the California Coastal Commission. Moreover, the residents of South County have a right to know what impact such an incinerator would have on our local environment, air quality, adjacent agricultural fields (currently being used for strawberry cultivation) and surrounding neighborhoods and schools.

In addition, county staff and Adaptive ARC are misleading the public by claiming this incinerator would be clean, provide no emissions and would be a "earth healing solution." I have many concerns and there are many unanswered questions about smoke stacks, other forms of air pollution, Brownsfields sites, and toxic waste that will likely be generated by the incinerator.

8/11/2008

33

As I have raised before, the new EcoPark and Buena Vista Landfill are also only a short distance from Pajaro Valley High School, and the Buena Vista Migrant Labor Camp, which is completely unacceptable. This proposal could harm the health and safety of our students and local working families. It is also next door to the Roundtree Detention Center that holds about 150 inmates and where dozens of county workers are employed.

There have been no community meetings whatsoever in South County about this proposal and therefore, there has been almost no information disseminated to local community residents, including the nearly 500 residents who live at the Buena Vista Migrant Labor Camp. As you already know, there was serious opposition to placing the EcoPark in South County from the very beginning. The Watsonville Planning Commission unanimously voted against place a waste or recycling center in Watsonville and the Watsonville City Council also opposed the project.

I respectfully urge to not approve any proposal of placing the plasma ARC incinerator in South County, and to reject any hosting agreement with this company now or in the future when your staff plans to bring this back for a vote.

It unfair and inequitable to the residents of South County. Thanks for you attention to the serious issues raised in this letter.

Sincerely,

LUIS A. ALEJO, J.D., Ed.M
Attorney At Law

Vice-Chair of the Watsonville Planning Commission

California Advisory Committee Member of the United State Commission on Civil Rights

The Santa Cruz Sentinel, June 9, 2008

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

Kurtis Alexander - Sentinel Staff Writer
Santa Cruz Sentinel
Article Launched:06/09/2008 01:33:15 AM PDT

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.

Contact Kurtis Alexander at 706-3267 or kalexander@santacruzsentinel.com.