

**La Raza Network
Environmental Council of Sacramento (ECOS)
Global Alliance for Incinerator Alternatives
Greenaction for Environmental Health and Environmental Justice
Justice Reform Coalition
Search for a Cause**

November 18th, 2008

Sacramento City Council
City of Sacramento
City Hall
915 I Street, 5th Floor
Sacramento, California 95814-2604

Dear City Council Members:

On behalf of the undersigned organizations, we write in opposition to the adoption of any contract with US Science and Technology (USST) by the City of Sacramento. We applaud any efforts to come up with alternatives to shipping Sacramento's garbage to landfills, creating clean energy and generally making our communities more sustainable. However, we believe that entering into the proposed contract with USST is a mistake for the following reasons:

1) Not a Solution to Our Waste Problems

Plasma Arc Incineration does not accomplish the goals of reducing trash or air pollution and would undermine zero waste goals and mandates. According to a letter from the state's leading recycling advocates, Californian's Against Waste, the City of Sacramento could and should improve and expand its waste reduction and recycling programs. The City of Sacramento is currently collecting about 12 pounds of recyclables per household per week while other jurisdictions are collecting over 20. Based on the state's waste characterization study, 65% of residential municipal solid waste we are currently disposing is recyclable, compostable, or otherwise recoverable for beneficial use. Ton for ton recycling and zero waste programs offer greater environmental benefits than a plasma arc facility.

2) A Plasma Arc Facility Will Emit Toxic and Criteria Pollutants into Our Air

The limited data available from plasma arc facilities does show emissions of toxic and criteria pollutants. According to Professor Thomas Cahill from UC Davis, "The information I have seen indicates that the process will have the same hazards as those we saw in the World Trade Center collapse piles, namely the liberation of toxic metals from the chlorine-rich waste stream." (Source: Sac Bee, Letter to the Editor). From documentation provided to the city, it is clear that USST wants to import waste to Sacramento from other areas, in order to meet the design specification of handling 1000 tons per day. Despite the claim that a Sacramento facility would result in a reduction of diesel pollution, the proposed facility would thus increase emissions in the local host community on account of increased truck traffic from the importation of additional waste from neighboring municipalities. The proposed contract does not preclude USST from importing waste from other municipalities.

3) Not Renewable Energy

According to California law, no utility can be given credit towards meeting renewable energy goals for a facility engaged in the combustion of municipal solid waste. In addition, there has been absolutely no proof submitted by USST that a facility could generate any energy whatsoever. Their model facility, the Hitachi Metals plant in Utashinai, Japan, is not putting any energy into the grid.

4) Community Concerns

It appears that a facility if built would be located closest to low-income people of color residents, raising serious environmental justice concerns. Also, this project enjoys very little support and has drawn criticism and questions from the Sacramento Bee, NPR, Sacramento Municipal Utility District, Environmental Council of Sacramento, Californians Against Waste, La Raza Network, Justice Reform Coalition, Greenaction for Health and Environmental Justice, Professor, Thomas Cahill from UC Davis, and Global Alliance for Incinerator Alternatives.

5) Incorrect and Misleading Claims of USST

USST has made numerous claims and representations that have proven to be simply untrue. The City Council was right to question the “strings attached” to performing due diligence as well as USST’s claim that their financial viability depended upon a 25 year “put or pay contract.” Public process and public health should not be dependant on a company’s pursuit of a lucrative contract. The assertion that carbon credits would be generated is completely speculative as there is no such regulatory scheme that provides such a thing.

As you may know, the Santa Cruz County Board of Supervisors today voted unanimously to reject a similar plasma arc proposal when their review found that the company proposing the facility could not document its claims that this was a safe technology with no emissions.

We respectfully request the Sacramento City Council to reject the proposed plasma arc facility and instead to embark on pursuing comprehensive zero waste programs and real renewable energy. We pledge to work with you to find safe, environmentally-friendly and just solutions that will protect public health.

Sincerely,

Rafael Aguilera
La Raza Network

Jon Ellison
Environmental Council of Sacramento

David Ciplet
Global Alliance for Incinerator Alternatives (GAIA)

Bradley Angel
Greenaction for Health and Environmental Justice

Rev. Ashiya Odeye
Justice Reform Coalition

Paul Schramski
Search for the Cause

Plasma Group Letter - Attachment 1

Contents

Articles related to the Plasma Arc Proposal in Sacramento

- Nov. 17, 2008 *Sacramento trash-to-energy plan raises red flags*, Terri Hardy and Chris Bowman, Sacramento Bee
- Nov. 08, 2008 *Time out! Bring in some experts! CITY NEEDS TRULY INDEPENDENT LOOK AT PLASMA GARBAGE PROPOSAL*, Sacramento Bee Editorial
- Nov. 07, 2008 *Sacramento City Council delays action on proposal to vaporize garbage*, Terri Hardy, Sacramento Bee
- Nov. 06, 2008 *Testimony on proposed trash-vaporizer wasn't wholly independent?*, Sacramento Bee, Terri Hardy
Worried about trash-burning plant, Thomas Cahill, Letter to the Editor, Sacramento Bee
- Sept. 08, 2008 *No reason to rush into plasma future*, Sacramento Bee Editorial
- Sept. 04, 2008 *Hope, uncertainty both high for Sacramento high-tech garbage plant*, Terri Hardy, Sacramento Bee

Articles related to the Plasma Arc proposal in Santa Cruz

- Nov. 13, 2008 *County dumps plan for waste-to-energy plant at Buena Vista*, Kurtis Alexander, Santa Cruz Sentinel
- July 23, 2008 *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*, Steve Hahn, Metro Santa Cruz Weekly
- June 9, 2008 *SoCal firm seeks permits for trash-to-energy plant in Santa Cruz County*, Kurtis Alexander, Santa Cruz Sentinel

Articles related to the Plasma Arc proposal in Red Bluff

- June 17, 2008 *InEnTec cancels Red Bluff facility*, Geoff Johnson, Red Bluff Daily News

Articles related to the Plasma Arc Proposal in Sacramento

Sacramento Bee

Sacramento trash-to-energy plan raises red flags

By Terri Hardy and Chris Bowman
thardy@sacbee.com

Published: Monday, Nov. 17, 2008 | Page 9A

Presented with a controversial and highly technical proposal to vaporize garbage into energy, Sacramento City Council members earlier this month wondered what other cities had found – and whether those lessons were being considered in Sacramento.

The plan's chief proponent, Councilwoman Lauren Hammond, said Friday that while she remains committed to working on a viable waste-to-energy plan for Sacramento, she believes the vetting process by the city's upper management was "done wrong."

"If we have to start all over, we start all over," Hammond said.

On Dec. 9, the council is scheduled to vote on whether to bind itself for decades to a company that vows to zap Sacramento's trash at the same price it would cost to bury it in a landfill.

Under the proposed deal, Sacramento-based U.S. Science & Technology and a consortium of energy and engineering companies would build a "plasma arc gasification" waste-to-energy plant at no cost to the city, then sell the energy for profit.

But a Bee review of two other municipalities that have considered the same technology – and evaluated proposals from companies involved in the Sacramento deal – raises several red flags:

- The effort is faltering financially in St. Lucie County, Fla. The developer there, GeoPlasma of Atlanta, has scaled back the proposed project by at least 80 percent.
- Los Angeles County rejected GeoPlasma's pitch at the outset, saying financial details and performance data were lacking.
- Environmental experts in both locales have questioned whether toxic metals would be filtered from the waste gas produced for sale to various energy buyers.

Process touted as clean, safe

The technology is alluring, scoring high in "gee-whiz" value and as an alternative to filling landfills. Gas heated to temperatures approaching those on the sun's surface vaporizes trash, producing a synthetic fuel. Also, the residual molten glass and metals can be sold as filler for road and building construction.

U.S. Science & Technology has told Sacramento the technology has been used for decades in steel plants. The group portrays the process as safe and cleaner than many other alternatives.

"We don't just want to build a facility in Sacramento to address the problem on municipal waste," the company's president, William Ludwig, said recently. "We want to give Sacramento the opportunity to be in a leadership position solving environmental problems."

The deal before the City Council would have Sacramento relying on the company to process waste at a steady flow of 2,100 tons per week.

GeoPlasma, the energy company that would build and operate the St. Lucie County plant in Florida, told officials there that the process would empty the landfill in 20 years.

Troubles with Florida contract

That promise fell through before construction even began. Initially, the plant was to process 1,000 tons of garbage daily, gradually ramping up to 3,000 tons a day. In September, two years later, GeoPlasma announced that it would vaporize only 200 tons a day, said Chris Craft, a St. Lucie County commissioner.

The St. Lucie team also includes Alter NRG and its subsidiary, Westinghouse Plasma Corp., which would design the plant. (Alter NRG and Westinghouse are part of the Sacramento deal, and GeoPlasma once was listed as a partner here, too.)

Craft said revenue troubles, not technological ones, were rocking the deal there. For instance, he said, a plan for GeoPlasma to sell steam from the facility to a nearby Tropicana juice plant didn't materialize.

Now GeoPlasma is scrambling to find more customers for the energy and recyclable leftovers, Craft said, to keep its promise not to charge the county more than it pays for sending its trash to a landfill.

Lack of details sends up 'red flag'

In Sacramento, financial details have not been shared with the city. U.S. Science & Technology said it would not divulge that information until the council had approved a binding agreement – a demand City Councilman Steve Cohn, an attorney, recently called a "red flag."

Sacramento Bee Editorial: Time out! Bring in some experts!

CITY NEEDS TRULY INDEPENDENT LOOK AT PLASMA GARBAGE PROPOSAL

PUBLISHED SATURDAY, NOV. 08, 2008

In unmistakable terms this week, the Sacramento City Council ordered its staff to hold off on an ambitious but ambiguous plan to partner with a private firm to turn city garbage into electricity.

Council members were right to postpone this deal. Too many important questions remain unanswered.

Chief among the questions is a basic one: Will this process work as its proponents claim it will?

Under the deal being negotiated, a private firm would build a plant to vaporize city garbage and use the synthetic gases created in that process to generate electricity. The city would have to deliver at least 2,100 tons of municipal waste a week as feedstock for the plant.

This futuristic waste-to-energy proposal, which the city has been considering for many months, always has had a kind of too-good-to-be-true quality to it. It contemplates turning what has been an expensive burden for cities, garbage, into a potential gold mine, energy.

Skeptics have raised serious doubts about whether the plan is technologically feasible. Nothing exactly like it has ever been done before, certainly not on the scale Sacramento contemplates. Critics say "plasma arc gasification," as the new technology is called, is a promising but unproven technology, particularly in the municipal waste arena.

Obviously, city government is ill-equipped to evaluate such a proposal. So it seemed sensible for the city to bring in experts in April to explain the proposal to the council.

But as The Sacramento Bee's Terri Hardy reported this week, at least two of the supposedly independent experts who briefed council members had financial ties to U.S. Science and Technology, the company pushing the project. That significant fact was never disclosed to the council.

On Thursday, Councilman Kevin McCarty was clearly angry about the city staff's reliance on experts with ties to the company. "It makes us look rather silly," he said.

Even Councilwoman Lauren Hammond, a longtime champion of the project, expressed concern. "Our analysis has to be independent. If that isn't true, it's troubling," Hammond told the Bee.

An increasingly skeptical City Council voted Thursday to postpone a vote on a preliminary agreement on the proposal. Council members rightly worry that there are just too many unanswered questions.

The city doesn't know for sure that the facility U.S. Science and Technology proposes to build would be financially viable, whether it can meet air-quality and emission standards or if it will use more energy than it generates.

These are basic questions that should have been answered before the city entered into exclusive negotiations with a private company.

To answer them, the city now needs to turn to individuals with truly independent expertise in this highly technical field. That should be possible in a state that includes such citadels of technical expertise as UC Berkeley, Stanford, Cal Tech and the Bren School at UC Santa Barbara.

And if the city can't find such expertise or if these questions can't be answered definitively in the very near future?

Then Sacramento should pass on this deal. There's no shame in letting some other municipality become the first to enter the brave new world of plasma arc garbage disposal.

Sacramento City Council delays action on proposal to vaporize garbage

thardy@sacbee.com

PUBLISHED FRIDAY, NOV. 07, 2008

A key vote on a controversial plan to vaporize Sacramento's garbage and turn it into energy was delayed Thursday after perturbed City Council members questioned whether experts who have testified before them about the technology were truly independent.

At times angry, council members directed Jim Rinehart, the city's economic development manager, to contact other scientists and work out a more palatable agreement with the Sacramento company proposing the deal. The matter will next be heard Nov. 18.

The council reacted in part to a Bee story published Thursday that detailed how U.S. Science & Technology – the company proposing the waste-to-energy plant – had handpicked and paid for two people to travel to Sacramento to speak to the City Council. It described how U.S. Science & Technology's CEO said he was discussing future research employment and other financial deals with those experts.

City Councilwoman Lauren Hammond, who has championed the U.S. Science & Technology proposal, said new voices were needed.

"The only nagging concern I have is independent analysis," Hammond said. "Then the mayor and council will feel better about entering into an agreement."

Councilman Kevin McCarty agreed. "As policymakers, we want to know the people who have a stake in the game."

McCarty added that one expert, architect Lou Circeo – who helped develop the "plasma arc gasification" technology – couldn't be viewed as independent.

"What the hell is the guy who is the godfather of the technology going to say?" McCarty said. "It makes us look rather silly."

A chastened Rinehart, who had allowed U.S. Science & Technology to choose two of four experts who appeared before the council at an April workshop, said he would do better due diligence as the council prepares to consider a binding agreement – one step in the approval process.

"My intent was honorable," Rinehart said. "If the implementation didn't come through, I apologize."

Circeo is on contract with a company called Geoplasma, through Georgia Tech University, campus officials said. Circeo told The Bee he is being paid by Geoplasma as a spokesman and adviser.

Geoplasma was described in U.S. Science & Technology's original proposal to the city as a corporate partner, and the company is a sometimes-partner of Alter NRG Corp., currently slated to design the Sacramento facility.

In addition, Circeo is CEO of a company named Plasma Arc Consultants Inc., according to Georgia Secretary of State documents.

William Ludwig, the CEO of U.S. Science & Technology, told The Bee earlier this week that he had discussed offering Circeo research work at the Sacramento plant, but nothing had been finalized. He also said that Iowa engineer Gary Young, the other expert, had approached him about perhaps using Young's patented technology on the Sacramento project.

At Thursday's council meeting, Ludwig said Circeo was not affiliated with U.S. Science & Technology or Geoplasma. He said his company had been "totally transparent" with city officials.

But under questioning by McCarty, he acknowledged Circeo might have agreements with other companies, including Geoplasma. McCarty then asked Ludwig if that wasn't something that the council and the public should know.

"No," Ludwig said. "I consider that normal academic behavior."

With plasma arc technology, superheated electrified gas, or plasma, along with coke (a derivative of coal) vaporizes trash, producing a synthetic fuel that can be sold to energy companies. The Sacramento plant would be built and operated privately.

Under the proposal being considered by the council, the city's primary obligation would be to pledge 2,100 tons of garbage a week for 25 years.

Rinehart and Ludwig told the council that the binding agreement was necessary to signal the city's interest in the plan. That agreement then could be taken to lenders considering providing financing.

Rinehart said agreeing to the deal is the only way the city could gain access to complete information about U.S. Science & Technology's financing plans. He said that also is the only way to get emission data.

City Council members balked, however, at entering into an agreement with so many unanswered questions about financing and the science.

The issue of the experts was another factor for some.

Councilman Steve Cohn got into a heated exchange with Rinehart, and said it was a red flag when the city couldn't perform due diligence without a binding agreement.

Last year, the city manager's office solicited "requests for qualifications" seeking companies interested in providing waste-to-energy plans. U.S. Science & Technology submitted its plan in October 2007, and the council recommended entering exclusive negotiations.

Cohn said the city made that decision without taking a close look at alternate plans.

"You're trying to box us in where we only have one choice," he said.

Call The Bee's Terri Hardy, (916) 321-1073.