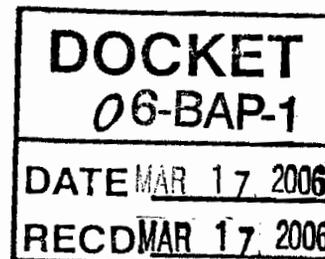


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March 17, 2006



California Energy Commission
Dockets Unit
Attn: Docket No. 06-BAP-1
1516 Ninth Street, MS-4
Sacramento, CA 95714-5512
Submitted via email to docket@energy.state.ca.us

Dear California Energy Commission,

Thank you for the opportunity to give input to the Draft Bioenergy Action Plan. We are strongly committed to reducing dependence on fossil fuel sources. However, thermal disposal of mixed municipal solid waste (MSW) is simply not an acceptable alternative fuel or power source. In terms of MSW, we recommend that this Action Plan specifically limit itself to separated organics from the municipal waste stream using biological processes such as anaerobic digestion.

There are numerous concerns about mixed MSW gasification, pyrolysis and plasma, compounded by misleading claims by the industry that these technologies have no emissions and are "non-combustion". It is clear that air emissions and solid and liquid releases are indeed problematic for MSW gasification, pyrolysis, and plasma technologies. Furthermore, claims of "non-combustion" are misleading and to our knowledge, combustion has been included in every proposal in the state. Indeed, these technologies are classified as "incineration" by the European Union Parliament, a jurisdiction that hosts some MSW facilities using these technologies:

"[I]ncineration plant' means any stationary or mobile technical unit and equipment dedicated to the thermal treatment of wastes with or without recovery of the combustion heat generated. **This includes the incineration by oxidation of waste as well as other thermal treatment processes such as pyrolysis, gasification or plasma processes in so far as the substances resulting from the treatment are subsequently incinerated.**"¹
(emphasis added)

Due to public health and environmental concerns some communities in California and other states have already decided not to pursue these kinds of facilities.

¹ The European Union Parliament's Directive on Incineration of Waste:
http://europa.eu.int/eur-lex/en/consleg/pdf/2000/en_2000L0076_do_001.pdf

We would like to recommend the following amendments to the Draft Action Plan.

A) It is unclear whether the Draft Action Plan recommendations pertain to mixed municipal wastes, or source separated organics only. Due to concerns around thermal disposal of mixed MSW, **we strongly recommend that the Working Group *not* promote thermal disposal of mixed MSW.**

- Mixed MSW includes plastics with additives like brominated flame retardants and lead which are especially problematic when disposed thermally. Incineration is simply not the appropriate or smart way to deal with mixed MSW.
- Incineration of mixed municipal wastes has public health and environmental impacts. Existing facilities have emissions of dioxins, heavy metals, volatile organic compounds, NOx, sulfuric acid, and particulates.
- Due to the unpredictable nature of mixed MSW, emissions vary greatly. Ironically many emissions technologies transfer pollutants from one medium to another, for example from air to water or air to solid wastes, thus leaving facilities with even more contaminated wastes and effluents.
- Mixed MSW contains many non-biomass components sourced from non-renewable fossil fuels and minerals, such as plastics and metals. California is better served by recycling or reducing the use of these products and materials in order to reduce dependence on non-renewable resources.
- Unlike incineration, anaerobic digestion of source separated organics is a form of composting, which has lower emissions than other methods of handling organics. This biological process can produce compost, a valuable soil amendment that appropriately returns organic matter to California's soils.

B) The recommendation that an executive order should encourage a “favorable regulatory environment for ... waste management industry...” contradicts the statement on page 25 that “the environmental impacts of converting biomass into energy... all need to be considered, evaluated and mitigated” in order to adequately address environmental justice concerns. **We strongly urge that the Action Plan remove the preference given to the “waste management industry” from this recommendation, and prioritize protecting community health by requiring the most rigorous permit and siting requirements for MSW facilities, including incinerators such as gasification, pyrolysis and plasma.**

- Gasification, pyrolysis and plasma are known to create and release dioxins, and to create toxic gases which experience has shown can escape during accidents and threaten the community.
- As the Action Plan discusses, the siting of incinerators is often an environmental justice issue. Strong regulations of the waste management industry are required to protect communities from exploitive situations, such as those recommended in the 1984 Cerrell Report for the California Waste Management Board titled “Political Difficulties Facing Waste-To-Energy Conversion Plant Siting.” The report recommended locating incinerators in politically vulnerable communities, and suggested that “middle and higher socioeconomic strata neighborhoods should not fall at least within (five miles) of the proposed site.”²

² Powell, J. Stephen, Political Difficulties Facing Waste-to-Energy Conversion Plant Siting, Cerrell Associates for California Waste Management Board, 1984.

C) **We urge that the first recommendation to the Energy Commission be changed to remove the funding of demonstration and pilot projects using incineration of mixed MSW.** The financial risks are simply too great to justify a using taxpayer funds to subsidize these risky schemes.

- Experiences of companies attempting mixed MSW gasification, like the Thermosteel technology in Germany, show that there is tremendous financial and environmental risk. The company that owned a Thermosteel facility in Karlsruhe, Germany lost over 400 million Euros (\$500million)³ and is now suing Thermosteel over the construction of a new facility in Ansbach that was never completed⁴. The Karlsruhe incinerator closed in Nov 2004. This same facility used 17 million cubic meters of natural gas to heat waste during 2002, and during that year, no electricity or heat was delivered to the grid.⁵ Thermosteel technology is currently being aggressively marketed in the Los Angeles area.
- Another company, Brightstar, attempted mixed MSW gasification in Wollongong, Australia. The parent company EDL lost its investments of over \$130 million⁶ and unsuccessfully tried to sell Brightstar and has since dropped this technology completely.⁷ Brightstar marketed itself aggressively in California in the early 2000s.

D) **We urge the Working Group to remove the recommendation that an executive order recommend changing existing law to give unproven technologies diversion credits.** It would be irrational state policy to reward “back end” waste disposal approaches, like landfills and incinerators, with “diversion” credits, which should be reserved for true diversion from disposal, like waste prevention, recycling and composting.

- Because no technology can actually make matter disappear, gasification, pyrolysis and plasma incinerators dispose mixed MSW primarily to air, similar to existing incinerators. On the other hand, **recycling materials offsets new virgin extraction to replaces disposed materials, and thus is part of a materials efficient paradigm.**
- Diversion credit for disposal technologies are also inappropriate because these approaches conflict with recycling and waste natural resources, and would undermine California’s commitment to waste prevention, recycling and composting.
- This approach would fail to recognize the critical energy-conservation benefits of recycling. Current national recycling conserves the equivalent of 11.9 billion gallons of gas annually.⁸

³ Süddeutsche Zeitung [Munich, Germany], “The End for Thermosteel [Aus für Thermosteel],” 5 Mar. 2004; Frankfurter Allgemeine Zeitung [Frankfurt, Germany], “No Future for Thermosteel [Keine Zukunft für Thermosteel],” 3 Mar. 2004.

⁴ Andreas Müller, “The Story of the ‘Garbage Miracle’ Ends in the Courts” [Die Geschichte des ‘Müllwunders’ ended vor Gericht], Stuttgarter Zeitung [Stuttgart, Germany] 20 Oct. 2005.

⁵ Fränkische Landeszeitung, “Natural Gas Use Should Be Halved This Year [Erdgas-Verbrauch soll dieses Jahr halbiert werden],” 29 Jan. 2003.

⁶ Rod Myer, “EDL Prepared to Give Up on Recycling Project,” The Age [Australia] 23 July 2003.

⁷ Phil Stubbs, “SWERF recycling plan is binned,” Derby Evening Telegraph [UK] 4 Mar. 2005.

⁸ Ferland, Henry. Choate, Ann. “Waste Management and Energy Savings: Benefits by the Numbers,” US EPA, 2001.

Please don't make it easier to build new incinerators in California by advocating for state handouts, waste diversion credits, loosened regulations, or other incentives.

Thank you again for this opportunity to provide input to this process. Please feel free to contact us for further information.

Sincerely,

**Monica Wilson
Global Alliance for Incinerator Alternatives
510-883-9490 ext. 103**