COMMENTS ON THE DRAFT "CONVERSION TECHNOLOGIES REPORT TO THE LEGISLATURE"

The "Conversion Technologies Report to the Legislature" is based on an extensive investigation by the California Integrated Waste Management Board (CIWMB). The investigation has been done carefully and objectively.

It is clear that the two most important results of the studies are:

1. Conversion technologies appear to be environmentally superior to the current practice of land filling MSW; and

2. The scope of the investigation did not allow collection of enough information to reach firm conclusions about individual conversion technologies.

In light of these overall results we make the observations below regarding the report to the legislature.

The Cleanest Technology

The report to the legislature is derived in part from the "Life Cycle and Market Impact Assessment of Noncombustion Waste Conversion Technologies" report to the CIWMB. Life cycle evaluations of environmental impact are the most valid form of evaluation because they recognize that viewing single components of an environmental system in isolation can be misleading. The life cycle report states that if landfill fires are included in the environmental evaluation, then conversion technologies have lower emissions of dioxins and furans than landfills. This results from destruction of dioxins and furans by thermal conversion processes. Thus, from a complete life cycle perspective it may be that thermal conversion technologies reduce dioxin and furans emissions from the levels that prevail with current MSW practices, while anaerobic digestion can not achieve this result. The life cycle study notes that its results are not definitive due to limitations in data that are currently available. The one thing that is perfectly clear at this point is that it is too early to identify any one conversion technology, or set of conversion technologies, as cleaner than others.

The report to the legislature notes technologies such as anaerobic digestion avoid dealing with dioxins and furans by operating at low temperatures. It goes on to state that this makes these technologies less controversial and they may be the cleanest and least polluting technologies. The CIWMB was asked to investigate scientific facts. Its report to the legislature, therefore, should not attempt to evaluate political statements intended to incite controversy. The CIWMB is correct in stating that anaerobic digestion may be cleaner than thermal technologies. But the statement is made in a context that implies knowledge that this is the case. As described above, the opposite may also be true when evaluated in an environmentally proper fashion. The report to the legislature should answer the legislature's question about which conversion technologies are the cleanest by

noting the lack of data at this point in time to make such a determination on a valid life cycle basis.

Data for California

The report recommends further investigation of conversion technologies to confirm their superiority over current MSW practices and to better understand emissions from each technology. The report cites 130 existing conversion facilities worldwide, none of which are in the United States (let alone California). This leads to a recommendation to collect information on emissions from facilities in other countries. While this could be a useful step, it is unlikely to be definitive, and the results could even be misleading. Most countries have less stringent emission standards than those of California, so emissions from existing facilities in other countries may reflect emission standards in the countries where the facilities are located, rather than the ability of conversion technologies to meet California standards.

Advanced Energy Strategies recommends that California permit facilities in the state that are designed to meet California emission standards. Measurements taken at these facilities will be the most indicative of the capabilities of the conversion technologies to improve California's environment. The first recommendation in the report, modifying statutory definitions, will facilitate this step.

California as an Environmental Leader

In the past California has taken pride in its leadership position in environmental matters and California has been a leader in recycling of MSW. Unfortunately, recycling has only been managed to hold the tonnage of landfill per capita constant over the last decade. Meanwhile, California is being surpassed by Europe and Asia in dealing with the portion of MSW that is not recycled. We recommend that California reclaim its leadership role by promoting development of technologies that are environmentally superior to landfills.