



TO: Honorable Mayors and City Council Members of Bloomington, Illinois and Normal, Illinois

FROM: Illinois Recycling Association
President, Board of Directors Wynne Coplea

DATE: October 21, 2014

RE: Concerns RE: Development and Host Agreement Plans for Paradigm BioAviation, LLC

The Illinois Recycling Association (IRA), a 34-year old non-profit trade organization representing the collective voice of 200+ professional recycling members, has monitored with interest the news regarding your communities' plans to allow ongoing development for Paradigm BioAviation, LLC jet fuel operations. We understand that your cities will also be considering commitments to long-term contracts guaranteeing minimum Tons per Day levels of "waste" materials and accompanying municipal Host Fee Agreements that may produce a pay-back to cities for every ton of waste delivered.

IRA herein expresses its concern regarding possible siting/permitting of such a facility in central Illinois and would, in fact, register concern over this type of alternative technology regardless of its planned geographic location in our state. IRA is concerned that operations such as Paradigm BioAviation represent a technology and materials management approach that does not fit in well nor accommodate the already significant achievements made in Bloomington and Normal on the way to becoming Zero Waste communities. IRA has publicly committed to Zero Waste as a guiding principle in its strategic educational/policy efforts, recognizing that Zero Waste materials management makes sound economic, as well as, environmental sense. Also attached is the National Recycling Coalition's very recent updated, official policy and definition of recycling; note that materials pyrolysis is not a form of recycling.

Please consider data and information gleaned from research, recent studies and educational presentations:

- Pyrolysis technology as proposed by Paradigm BioAviation, LLC has not been proven or tested anywhere in the US or Europe at levels approaching the materials throughput needs of your area
- Such facilities generally require major inputs of Municipal Solid Waste (garbage) ranging up to 200-300 Tons Per Day at a minimum to viably operate, and thus, are usually located near very large urban centers where 200-300 TPD can represent the dregs, the estimated 10% of non-recoverable mixed materials left over after all useful Zero Waste recovery has been conducted. (See City of Fort Collins presentation: <http://www.youtube.com/watch?v=DXriDty7k0o>)
- Is there truly a proven need for this facility? What does your County and/or City Solid Waste Plan say? Bloomington-Normal has shrinking landfill space but ample alternatives in the form of vigorous reuse, recycling and composting programs, as well as a waste transfer station for disposal of discards; 200-300 TPD would require more than the trash left over after these more environmentally and economically friendly programs get their usual materials
- A recent IL study shows that combining the 3Rs: Reduce, Reuse, Recycle/Compost, consistently creates more jobs than disposal: <http://www.illinois.gov/dceo/whyillinois/KeyIndustries/Energy/Recycling/Pages/REI.aspx>
- When municipalities choose to dedicate many future years' worth of "waste" to a technology such as pyrolysis (closely related to waste-to-energy/incineration), officials are gambling that the amount of garbage/waste will remain steady or increase, that the technology they are investing in will remain competitive for the long time it takes to repay the major capital involved. Consider again: how much energy will it really take to turn a huge pile of raw garbage into a substance pure enough to be viable jet fuel? Quite possibly, more energy than the end product will be worth, especially with the new fuel sources being developed that are not actually demonstrably shrinking over time, as the last several years' landfill tonnage has done nationwide (see Waste Management: <http://istc.illinois.edu/about/SustainabilitySeminar20141002.cfm> and USEPA pounds per person per day trend: http://www.epa.gov/epawaste/nonhaz/municipal/pubs/2012_msw_fs.pdf)

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IRA Letter of Concern continued

The proposed operation will eventually fall into IL EPA's category of Pollution Control Facilities, and such facilities require both siting and permitting that mandate extensive public notices, hearings, reviews and opportunities for public comment. Illinois Recycling Association suggests that the honorable elected officials of Bloomington and Normal consider all implications and aspects of signing such proposed municipal Host Agreements/development plans, *before* committing so very many tons of material for so very many years to come. Remember, two generations of people will be born during the time period that you are considering contractually committing to, and the technology and industry are both changing very, very quickly.

A low-tech Zero Waste materials management approach is viable, has consistently proven to create more jobs and to some extent, is already happening in your area. IRA respectfully requests that you again review the long-term costs along with the perceived benefits of this proposed development before proceeding. Thank you for your consideration, we look forward to your replies.