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SOLID WASTE ASSOCIATION
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Briefing for Elected Officials

Effective Responses to Emerging Waste Management Technology Proposals

As an Elected Official, we know it is important to you that decisions made on behalf of your taxpayers improve the reputation and sustainability of your community. That is why the Solid Waste Association of North America (SWANA) and the National Waste & Recycling Association (NWRA) wrote this brief on responding to unsolicited proposals to implement facilities based on emerging or locally unfamiliar waste-related technologies. Our goal is to provide you with a process and to recommend resources to help you make an informed decision that will create a win for you, the voters, and your community.

SWANA and NWRA support the development of new facilities and new technologies for managing municipal solid waste, especially when those technologies return a resource. These efforts offer the potential for increased waste diversion, revenue and jobs. However, the implementation of such projects is complex and can also be risky. By leveraging the lessons learned from both successful and unsuccessful projects across North America, we hope to help you respond to unexpected or unsolicited opportunities in ways that minimize the potential for a failed project and/or negative press.

Read below for the first, easy steps you can take to protect your interests and where you can go for more help.

Starting with an understanding of the technology being proposed is appropriate and will set parameters around this guidance.

Your community is already familiar with many practices and technologies currently used to manage solid waste - everything from recycling to composting to landfilling. The depth of experience in your area and across North America makes these tried and true systems appealing in many ways. Even when you are familiar with a proposed waste-related technology, project development, siting, permitting and implementation remain complex and will require you to be diligent in reviewing unexpected or unsolicited proposals for the elements of a solid business relationship.

New technologies or new applications of long-existing technologies for managing portions of the solid waste stream are being developed all the time. These technologies, which we sometimes call “emerging” because they don’t yet have the same level of North American experience behind them, are seeking ways to use solid waste as a feedstock to create useful outputs like energy, fuels, chemical, and building products. You may hear some of these processes called “conversion technologies” because they seek to convert portions of the waste stream into useful products through thermal, chemical, mechanical and/or biological processes.

Among the processing systems receiving heightened attention in the industry are anaerobic digestion, mixed waste processing, transesterification, gasification, and pyrolysis with outputs like syngas (synthesis gas), Renewable Natural Gas (RNG), biochar, and a variety of liquid fuels such as ethanol and biodiesel. Regardless of familiarity, these production processes – like other approaches to managing solid waste – are complex and require a large capital investment. As the systems become complex, they may also need increasingly specific inputs and require the development of new markets to provide the projected economic returns.

NWRA and SWANA support the development of technologies, consistent with the US EPA Waste Management Hierarchy and similar requirements in other countries, intended to minimize the final disposal of solid waste. Many of the technologies cited above advance that goal and offer environmental and economic opportunities for your community. However, the accompanying risk should not be disregarded. Because solid waste is regulated and because some technologies are not widely used in the United States and Canada, it is important to ask thoughtful questions and to complete a thorough evaluation of the proposed business deal and processing systems. Following the due diligence steps outlined in this document and the accompanying checklist will help you identify and understand the associated risks and challenges.

Initial steps to consider when presented with an unsolicited proposal or an unfamiliar waste management technology:

1. Require the company or developer to provide reference projects for the proposed technology that process municipal solid waste at a commercial scale in a similar environment. Scale is important in identifying a technology that will operate with the consistent throughput necessary to handle the amount of waste provided by a city or county. References with feedstocks other than municipal solid waste and projects in other countries may be less valid because of variations in waste characterization and regulatory requirements. For example, although Europe is using more waste conversion technologies, their permitting and air emissions requirements differ from those in North America, which makes seemingly similar projects have different levels of viability. Please refer to the attached checklist for further questions.
2. Direct the company or developer offering the unsolicited proposal to meet with your solid waste agency or contracted waste service provider. If necessary organize a meeting between the solid waste agency and the company or developer. The agency/vendor will be able to exchange insights about local conditions, the proposed systems, and provide value in project conversations.

3. Ask the company or developer about their interactions with regulatory agencies and their understanding of the approval/permitting requirements for the proposed technology. Ask if they will assume the permitting and regulatory risks as part of their role in project development. Have municipal, waste agency, and regulatory representatives offer similar feedback on approval/permitting requirements. Be skeptical of claims of accelerated timeframes or simplified approval processes. In general, solid waste processing technologies – especially those that are unfamiliar to regulators or considered emerging -- make it more likely for an approval process to be extended rather than shortened.

4. Perform an online search on the company name, the names of the principals, and the technology. Elected Officials should request the solid waste agency perform research as well. This will result in one of three outcomes:

- The company or developer will have a history of successful projects and relationships with the proposed technology solution. With new and emerging technologies, it is obviously difficult to have a long history of success.
- There is very little information, which typically indicates that the company is new and your municipality will be on the leading edge of an emerging technology; or,
- The company or developer may be identified in conjunction with one or more projects with a seemingly questionable track record. Experiences of previous projects and partners in developing those projects provide good indications about issues to be addressed, and may be a sign to proceed with caution.

5. If the company or developer is promising revenue and new jobs for your municipality, it is well worth the cost to hire an independent consultant to evaluate the proposed technology, the financial pro formas and review the underlying assumptions related to feedstocks. Waste processing technologies are at various levels of technical maturity and municipalities should understand and be comfortable with their level of financial exposure to the underlying risks. In particular, the questions and risks may be heightened with first or second-of-a-kind implementations in North America. Here too, your solid waste agency/vendor can help with the evaluation.

There are several recent examples of municipalities that have accepted risk and/or issued bonds for waste processing projects that later failed. Their experiences offer useful insights.

Montgomery, Alabama IREP MRF

<http://www.montgomeryadvertiser.com/story/news/local/community/2016/07/20/cost-doing-business-irep/87348250/>

Ottawa, Ontario - Plasma Gasification

<http://ottawacitizen.com/news/local-news/plasco-energy-group-files-for-creditor-protection>

Glendale, Arizona - Gasification

<http://www.azcentral.com/story/news/local/glendale/2015/09/18/glendale-million-trash-war-energy-firm/72398882/>

6. Experiences from other cities have shown that waste processing projects require significant support and resources from various divisions within the municipality. As an example, the City of Houston's One-Bin-For-All program took three years of analysis and evaluations and, as of early 2017, has not yet moved forward. It is important to determine whether your municipality has the sustained financial resources, technology expertise, political will and community support to move forward with a new waste processing project.

Houston OBFA –

<https://www.houstonpublicmedia.org/articles/news/2016/01/18/134410/what-happened-to-houstons-one-bin-for-all-program/>

Summary

Whenever and wherever management of solid waste is proposed, there are likely to be concerns and objections. If opposition develops, it may be very local (objecting to siting facilities very near a community is called Not In My Backyard or NIMBY) or for a variety of other reasons. With an unsolicited proposal or the use of new or less established technology, these objections may be even greater as the public may lack trust in some essential aspect of project development, including the vendors, the regulations or the proposed technology itself.

Therefore, we again encourage you as an Elected Official to conduct the due diligence necessary to fully establish the feasibility and suitability of a waste-related proposal for your community. Understand the challenges that face your municipality or county as you move through the approval and implementation process. Asking the right initial questions when a project is proposed is a critical first step.

Case studies and other information as of 2016:

1. Portland Metro - <http://www.oregonmetro.gov/sites/default/files/Phase%203%20Final%20Report%20March%202015.pdf>
2. LA County – http://ladpw.org/epd/tf/conv_tech.cfm
3. NYC EDC/DOS – http://www.nyc.gov/html/dsny/downloads/pdf/swmp_implement/otherinit/wmtech/phase2.pdf
4. King County, WA – <http://your.kingcounty.gov/solidwaste/about/planning/documents-planning.asp>
5. City/County of Santa Barbara, CA – <http://www.conversiontechnologystudy.com>
6. CalRecycle – <http://www.calrecycle.ca.gov/Organics/Conversion>
7. Global Alliance for Incinerator Alternatives – <http://www.no-burn.org/article.php?id=731>
8. Waste to Energy Article (GBB Waste Advantage Magazine): http://www.gbbinc.com/media_publications/WasteAdvantage-Dec2010-Gershman.pdf