



LOS ANGELES COUNTY SOLID WASTE MANAGEMENT COMMITTEE/
INTEGRATED WASTE MANAGEMENT TASK FORCE
900 SOUTH FREMONT AVENUE, ALHAMBRA, CALIFORNIA 91803-1331
P.O. BOX 1460, ALHAMBRA, CALIFORNIA 91802-1460
www.lacountyiswmtf.org

GAIL FARBER, CHAIR
MARGARET CLARK, VICE-CHAIR

March 31, 2014

Mr. John Skinner, Executive Director/CEO
Solid Waste Association of North America (SWANA)
1100 Wayne Avenue Suite 700
Silver Spring, MD 20910

Dear Mr. Skinner:

**COMMENTS REGARDING THE VOTING DRAFT SWANA TECHNICAL POLICY
T-11 - "CONVERSION TECHNOLOGIES" AS PART OF INTEGRATED SOLID
WASTE MANAGEMENT**

The Los Angeles County Integrated Waste Management Task Force (Task Force) is writing you to express our serious concerns regarding the enclosed "Voting Draft" of SWANA's Technical Policy T-11, "Conversion Technologies," which was recently circulated to the SWANA International Board (IB) for approval.

On numerous occasions we have expressed concerns regarding Technical Policy T-11 prior to preparation of the Voting Draft and its circulation to the SWANA IB. While some of our comments on the working draft policy were incorporated into the Voting Draft, others were either misrepresented or simply ignored. To date, we have not received any communication from SWANA responding to our comments or giving reasons for SWANA's decisions. Further, as a matter of courtesy, the Task Force should have been provided with a copy of the Voting Draft by SWANA.

We continue to believe that the Voting Draft of the SWANA Technical Policy T-11 is seriously flawed and needs to be corrected, for the reasons detailed below.

1. **Lack of balance and objectivity.** Technical Policy T-11 treats the subject of conversion technologies in a manner that lacks balance and objectivity and is inconsistent with the way other technical policy papers handle similar subjects. For example, Technical Policy T-11 indicates that the Policy does not include the "in-vessel composting" in the definition of conversion technologies because in-vessel composting is considered in Technical Policy T-7. However, we find no discussion on the viability of an anaerobic digestion (AD) technology to manage municipal solid waste, the risk factors analysis, the economic impact consideration, and other factors that in most cases are similar or at higher risk as compared to conversion technologies (emphasis added). The Voting Draft also states that "some CT proponents have been aggressive in approaching public sector waste management professionals...." However, the same can be said

about any other type of solid waste management technology vendors (i.e. landfill, waste-to-energy, composting, etc.). Again, we were not able to find similar language in the other SWANA adopted Technical Policies. Based on the foregoing, one can conclude that the Voting Draft is also written in a format and style inconsistent with other SWANA technical policy papers.

2. ***Inaccurate representation of the state of conversion technologies.***

Technical Policy T-11 fails to mention commercially operating conversion technology facilities in 28 countries including Australia, Japan, South Korea, South Africa, as well as numerous countries in Europe. Many facilities have been operating commercially for well over a decade using various types of MSW as a feedstock while fully complying with all environmental and regulatory mandates. In North America, several projects are in various stages of planning and development. The INEOS Bio facility in Vero Beach, Florida, has been making advanced biofuels and power since 2012 with a feedstock blend of yard, vegetative, and agricultural waste. We have provided additional examples in our January 15, 2014, letter including a link to the County of Los Angeles' conversion technology vendor database, which is made up of international companies with operating facilities.

3. ***Lack of proportion in assessing risks of conversion technologies when compared to other waste management facilities.***

The nature of Technical Policy T-11 appears to be focused on highlighting potential risks, providing warnings to communities that may be interested in conversion technologies, and strongly encouraging an extensive list of prerequisites to the development of conversion technology facilities. As noted in our previous letters, this is a major departure from the approach and structure of other Technical Policies adopted by SWANA to date, even though many of the risks and concerns identified in Technical Policy T-11 apply equally or more so to other solid waste management infrastructure and policies. The potential issues associated with conversion technologies, as listed in Technical Policy T-11, should be considered as part of a jurisdiction's due diligence process; however, these potential issues do not have a place in SWANA's policy position unless uniformly addressed and incorporated in all SWANA's adopted Technical Policies, which unfortunately is not the current case. For example, in the Technical Policies T-9, T-9.1, and T-9.2 (Sanitary Landfills), SWANA, as a part of its risk analysis, states that it would "work to ensure that landfill owners and operators receive fair and equitable treatment in all regulations and regulatory activity." Shouldn't the same be applicable in the case of conversion technologies? Further, while Technical Policy T-11 greatly warns jurisdictions that may be interested in conversion technologies with potential risks, the Technical Policies T-9, T-9.1, and T-9.2 fail to make jurisdictions aware of the possibility that in a case of an environmental contamination caused by a privately owned/operated sanitary landfill, jurisdictions that have used the said landfill for disposal of solid waste generated by their residents and businesses may be subject to joint and severe liability

("deep pocket") for the cleanup cost of the environmental contamination, potentially in perpetuity. Risks involving exposure to such a financial burden to a jurisdiction may be significantly higher than those compared to conversion technologies.

Based on the foregoing, the Task Force believes that technical policies should be developed with a goal to maintain uniformity among all technical policies to be technologically correct and unbiased regarding any type of technology.

4. ***The need for a more thorough peer review.*** We request that SWANA rescind the Voting Draft of the Technical Policy T-11 and reconvene a working group that includes solid waste professionals familiar with some of the hundreds of operating, commercial-scale conversion technology facilities from around the world, including several facilities now operating in North America, so that a new and accurate policy related to conversion technologies can be drafted based on real world experience and the most up-to-date information on the viability and operation of these technologies.

Thank you for considering the Task Force's comments. We appreciate the work SWANA has done to expand awareness and understanding of a variety of solid waste topics including conversion technologies. As a highly respected professional organization that is international in scope and reach, we feel it is very important for issue documents such as the Technical Policy T-11 be objective and accurately reflect the reality of the topic at hand (emphasis added). This issue is of particular importance to many jurisdictions in North America who look to conversion technology as an important tool to meet the waste management needs of their residents and businesses. The inaccuracies in the Voting Draft Technical Policy T-11 can have a serious negative effect on these jurisdictions as well as SWANA as the lead organization in promoting an integrated waste management system that is protective of our citizens' health and safety, our natural resources, as well as the economic well-being of our communities.

Pursuant to Chapter 3.67 of the Los Angeles County Code and the California Integrated Waste Management Act of 1989 (Assembly Bill 939 [AB 939], as amended), the Task Force is responsible for coordinating the development of all major solid waste planning documents prepared for the County of Los Angeles and the 88 cities in Los Angeles County with a combined population in excess of ten million. Consistent with these responsibilities and to ensure a coordinated, cost-effective, and environmentally sound solid waste management system in Los Angeles County, the Task Force also addresses issues impacting the system on a countywide basis. The Task Force membership includes representatives of the League of California Cities-Los Angeles County Division, County of Los Angeles Board of Supervisors, City of Los Angeles, the waste management industry, environmental groups, the public, and a number of other governmental agencies.

Mr. John Skinner
March 31, 2014
Page 4 of 4

We look forward to continuing to work with you on this important topic. If you have any questions, please contact Mr. Mike Mohajer of the Task Force at MikeMohajer@yahoo.com or at (909) 592-1147.

Sincerely,



Margaret Clark, Vice-Chair
Los Angeles County Solid Waste Management Committee/
Integrated Waste management Task Force and
Council Member, City of Rosemead

CS:ts

P:\eppub\EnvAff\ENVIRO. AFFAIRS\TASK FORCE\Task Force\Letters\2014\TF_SWANA_Technical_Paper_T-11_-_03-31-14.doc

Enc.

cc: Mr. Joe Murdoch, Senior Vice President HDR Inc./SWANA Board of Directors
Each Member of the Los Angeles County Integrated Waste Management Task Force
Each Member of the Alternative Technology Advisory Subcommittee

SWANA TECHNICAL POLICY
T-11 - “CONVERSION TECHNOLOGIES”
AS PART OF
INTEGRATED SOLID WASTE MANAGEMENT

Policy

SWANA supports the development of “Conversion Technologies” as an element of an integrated solid waste management system. “Conversion Technology” (CT) is a general term to represent a waste management technology that processes municipal solid waste into fuels, chemical products, energy sources, organic soil conditioners or other useful products. The technology may utilize thermal, chemical, mechanical or biological methods to process the municipal solid waste. For the purposes of this policy, SWANA has not included traditional waste to energy technologies, such as mass-burn and refuse derived fuel or conventional windrow or in-vessel composting in the definition of CT’s because those technologies are in wide-scale, commercial operation and are considered in other technical policies.

CT’s offer the potential of managing a portion of the waste stream for recovery of marketable materials or energy, however it is important to carefully evaluate the technology to determine if it will be able to successfully complement the local integrated solid waste management system.

Many of these technologies, while demonstrated to operate on select portions of the waste stream, have not, for the most part, been successfully operated on a commercial scale, on traditional municipal solid waste feedstock, for an extended period of time in North America. The lack of operating experience on a traditional solid waste feedstock creates an inherent risk to communities who are developing waste processing and disposal capabilities. Risks can include the following:

- that the regulatory agencies may not be familiar with the technology, leading to a lengthy permitting and approval process;
- that the technology may not process waste on a long- term and consistent basis;
- that the technology may not be able to process mixed municipal waste;
- that the environmental performance of the technology may not meet required standards;
- that the product(s) produced by the technology may not be marketable;
- that the technology may not be able to operate on the basis of the economic pro forma provided and
- that the company promoting and/or operating the facility may not remain solvent and committed to the technology.

These risks and others may be present to varying degrees and may be able to be managed with appropriate planning.

It should be noted that SWANA supports various methods of waste prevention, reuse, recycling, processing, energy recovery and disposal as part of an integrated waste management system. SWANA has developed technical policies to provide assistance to our members in making decisions regarding the components of their systems. These include the following Technical Policies:

- Policy T 2- Solid Waste Reduction;
- Policy T 6- Recycling as Part of Integrated Solid Waste Management;
- Policy T 7-Composting as Part of Integrated Solid Waste Management;
- Policy T 8- Waste to Energy as part of Integrated Solid Waste Management;
- Policy T 9-Landfilling as Part of Integrated Solid Waste Management.

The use of a CT should be consistent with the USEPA Waste Management Hierarchy (<http://www.epa.gov/wastes/nonhaz/municipal/hierarchy.htm>), and with the state and local government's integrated solid waste management plan, including existing and planned waste prevention, reduction and recycling programs. Permitting of conversion technology facilities, as with other waste management facilities, should be consistent with the established and long term capacity needs of local government and their integrated solid waste management plans. CT projects require significant upfront capital, and the economic feasibility of these projects should be reviewed by financial specialists. The full costs for the siting, design, construction and operation should be included in the costs assigned to a facility within an integrated solid waste management system, including residue management and disposal of waste that cannot be processed by the CT. Expected revenues from sales of electricity, steam/heat, fuels or other products, as well as potential revenues related to renewable energy credits and carbon credits should be considered as part of the full cost accounting. The selection of a CT, similar to other waste management options, should be consistent with best practices regarding engineering, economics, environmental and public health issues. The use of CT's should be based on the assurances that during siting, design, construction and operation, the facility will comply with all federal, state/provincial and local government rules, regulations and permits.

During the past five years there has been a significant increase, (particularly in Europe and Asia), in the number and type of technologies that have been proposed in a pilot or experimental basis for management of a portion of the waste stream. Communities considering CT's as part of their integrated solid waste management system should pay particular attention to the commercial viability of the technology, and look for companies/technologies with a successful track record. A primary question should be, "Has this technology demonstrated the ability to consistently, (without interruption, during a prescribed period of time, under the specific performance requirements of the community), operate on

a waste feedstock (quality and quantity) consistent with the adopted solid waste management plan of the community, in an environmentally sound manner?”

Position/Recommendations

The following are considered to be best practices in the planning, siting, design and operation of CT facilities as a part of an integrated solid waste management:

1. Planning for CT facilities should consider the following factors:
 - evaluation of need for the technology based on current and projected waste volumes and characteristics,
 - evaluation of compatibility with recycling, composting, waste-to-energy and source reduction efforts in the community’s integrated solid waste plan,
 - evaluation of the risk posture of the community,
 - evaluation of the potential delivery process and business model (Design/Build, Design Build Operate, Design Build Own Operate, etc.)

The use of experienced consultants and attorneys for development of dependable feasibility, procurement and contract documents is recommended. Consideration of CT’s should include the following evaluations and verifications prior to commitment to a technology: (a check list could also be provided):

- a. Independent engineering evaluation of comprehensive Mass and Energy balance.
- b. Site visit to operating facility(s) to verify viability of the technology.
- c. Verification of operations, availability and capacity, on mixed municipal waste feed stock and/or on residuals remaining after other recycling, reuse and recovery activities (i.e. post diversion MSW residuals) for an extended, continuous period of time.

- d. Identification of pre-processing and other feedstock requirements.
 - e. Verification of environmental performance.
 - f. Determination of scale-up requirements and restrictions. Verification of the quality and quantity of facility products (electrical production, fuel, recyclables etc.) and byproducts (residue)
 - g. Comments from local users and regulators on the viability of any reference facility (ies).
2. Sites for CT facilities should be selected based on the following principles:
- consistency with local land use conditions and zoning codes,
 - consideration of projected waste availability and energy demand for the immediate surrounding area to minimize transportation and transmission costs, and
 - siting in proximity to existing infrastructure such as roads, rail access, utilities, transmission lines, steam loops/customers, collection/transfer systems, material processing and recovery facilities, and residue reuse or disposal sites,
 - consideration of and adherence to environmental justice principles.
3. Facilities should be designed by registered professional engineers and other licensed professionals with clearly demonstrated knowledge in CT facility design, and shall be designed in accordance with the following principles:
- designed for long term operation at high availability levels,
 - designed for environmental excellence in operations, including use of energy efficient equipment, minimizing use of chemicals and water, reuse of resources within operations, zero discharge of wastewater,
 - designed in a manner to maximize recovery of energy and other useable products
 - designed with a means for the measurement of incoming solid waste and out-shipped residue energy and products,

- designed with a means for the screening of incoming solid waste,
 - designed to include or be a part of a system that includes household hazardous waste and electronic waste recovery programs when appropriate,
 - designed to control run-on and run-off to minimize or prevent surface water contamination,
 - designed with a means to minimize generation of and control emissions of green house gases and other air quality contaminants to ensure compliance with applicable regulations,
 - designed to incorporate continuous emissions monitoring systems,
 - designed to support the beneficial use of residue,
 - designed for maximum recovery of reusable materials from residue,
 - designed to allow for the safe transport and disposal of unusable residue in permitted disposal areas, and
 - designed to allow observation of the facility and facilitate education of the public on the facility process.
4. Construction of CT facilities shall be conducted by licensed contractors familiar with industrial level energy generating facilities with appropriate construction management, monitoring and certification experience.
5. CT facilities should be properly commissioned and tested to ensure achievement of performance guarantees.
6. Operation of CT facilities shall aspire to the following principles:
- operated under the management of a provincial/state certified manager/operator in those provinces/states where certification is required,
 - operated by a manager with certification by ASME in the appropriate category of management and operation,

- operated using an asset management program, as well as preventive and predictive maintenance programs performed to minimize outages and down time,
- operated using real-time operational and emissions data to enable operation at highest standards,
- operated by providing training of all on-site personnel appropriate to assigned area of responsibility,
- operated with high standard safety programs (such as OSHA) focused on worker health and safety as well as the safety of customers and contractors at the facility,
- operated with a provision for controlled access to facility and use by only authorized users,

Because some CT proponents have been aggressive in approaching public sector waste management professionals, several communities have developed a “Check List” of questions that are required to be answered before the waste professionals will entertain additional discussion of the proposed technology. A sample “Check List” can be provided upon request.

Approved by the International Board on XXX, 2014.

_____, International Secretary

Dated _____, 2014