

## **COUNTY OF LOS ANGELES**

#### DEPARTMENT OF PUBLIC WORKS

"To Enrich Lives Through Effective and Caring Service"

900 SOUTH FREMONT AVENUE ALHAMBRA, CALIFORNIA 91803-1331 Telephone: (626) 458-5100 http://dpw.lacounty.gov

ADDRESS ALL CORRESPONDENCE TO: P.O. BOX 1460 ALHAMBRA, CALIFORNIA 91802-1460

April 20, 2010

The Honorable Board of Supervisors County of Los Angeles 383 Kenneth Hahn Hall of Administration 500 West Temple Street Los Angeles, California 90012

**Dear Supervisors:** 

AUTHORIZATION TO APPROVE MEMORANDUMS OF UNDERSTANDING FOR SOLID WASTE CONVERSION TECHNOLOGY DEMONSTRATION PROJECTS

AND AWARD OF CONTRACT FOR CONSULTANT SERVICES FOR PHASE III AND PHASE IV OF THE SOUTHERN CALIFORNIA SOLID WASTE CONVERSION TECHNOLOGY DEMONSTRATION PROJECT

(ALL SUPERVISORIAL DISTRICTS)

(3 VOTES)

#### **SUBJECT**

The recommended actions will approve three Memorandums of Understanding for three conversion technology demonstration projects and award a contract for consultant services for Phase III and Phase IV of the Southern California Conversion Technology Demonstration Project for the purpose of developing solid waste alternatives to landfills.

#### IT IS RECOMMENDED THAT YOUR BOARD:

- 1. Approve Memorandums of Understanding for the development of three conversion technology demonstration projects and instruct the Director of Public Works or her designee to implement the Memorandums of Understanding with CR&R Incorporated, International Environmental Solutions, and Rainbow Disposal Company, Incorporated.
- 2. Award a four-year contract for consultant services for the Southern California Conversion Technology Demonstration Project: Phase III and Phase IV in a sum not to exceed \$1,290,600 to Alternative Resources, Inc.
- 3. Authorize the Director of Public Works or her designee to execute the contract with Alternative

Resources, Incorporated; and to suspend work if, in the opinion of the Director of Public Works or her designee, it is in the best interest of the County to do so.

#### PURPOSE/JUSTIFICATION OF RECOMMENDED ACTION

The purposes of the recommended actions are to: 1) develop three conversion technology demonstration facilities in Southern California with CR&R Incorporated, International Environmental Solutions, and Rainbow Disposal Company, Incorporated (see Phase III discussion under Facts and Provisions); and 2) utilize the services of Alternative Resources, Incorporated (ARI) to facilitate the development of conversion technology demonstration facilities (Phase III) and commercial-scale conversion technology facilities in Los Angeles County (see Phase IV discussion under Facts and Provisions) that will serve as alternatives to landfills. These facilities will be the first of their kind in Southern California and, as such, are important in establishing a process for State and local environmental permitting standards to be established by agencies such as the South Coast Air Quality Management District. Additionally, these demonstration projects will provide critical operating data, which will facilitate future commercial conversion technology projects within Los Angeles County.

The consultant contract with ARI will be utilized for implementation of both Phase III and Phase IV. For Phase III, the consultant will assist each demonstration project with permitting and CEQA compliance, grant and loan procurement, energy and product marketing, and additional design and construction assistance as needed. For Phase IV, the consultant will work collaboratively with the Department of Public Works (DPW) and partner cities to develop commercial projects by evaluating and recommending technology suppliers and suitable project sites within Los Angeles County.

Conversion technologies are thermal, chemical, mechanical, and biological non-combustion processes capable of converting post-recycled residual solid waste into useful products and chemicals, green fuels like ethanol and biodiesel, and clean, renewable energy. These technologies provide an opportunity to reduce the amount of solid waste sent to landfills, create local green jobs, and produce resources such as energy. Managing waste through conversion technologies would preserve landfill capacity in the County and reduce the need for waste exportation.

Consistent with your Board's directives and other key milestones detailed in Exhibit 1A, DPW has collaborated with neighboring counties, state universities, the California Integrated Waste Management Board (now Department of Resources Recycling and Recovery or CalRecycle), and the Alternative Technology Advisory Subcommittee of the Countywide Integrated Waste Management Task Force (Subcommittee) to evaluate the viability of conversion technologies to manage solid waste. The Subcommittee is comprised of a diverse group of expert professionals including representatives from CalRecycle, local government, the solid waste industry, consultants, and other experts in the field of conversion technologies.

The three selected demonstration projects listed below will be co-located at existing materials recovery facilities and transfer stations (MRF/TS) that could partner with a technology company to develop a conversion technology facility. Exhibit 1B further describes each project.

#### Selected Demonstration Projects:

1. Arrow Ecology and Engineering & CR&R Incorporated (project developers) - Proposing a 150 tons per day anaerobic digestion process (can be expanded up to 1,000 tons per day) in the City of Perris (Riverside County), to be located at the MRF/TS owned and operated by CR&R Incorporated.

- 2. International Environmental Solutions & Burrtec Waste Industries, Inc. (project developers) Proposing a 184 tons per day pyrolysis process (can be expanded up to 1,000 tons per day) in Unincorporated Riverside County, to be located at the MRF/TS owned and operated by Burrtec Waste Industries, Inc.
- 3. Entech Renewable Energy Solutions & Rainbow Disposal Company (project developers) Proposing a 360 tons per day gasification process (can be expanded up to 1,000 tons per day) in the City of Huntington Beach (Orange County), to be located at the MRF/TS owned and operated by Rainbow Disposal Company.

The County evaluated MRF/TS facilities both in and out of the County of Los Angeles that were open to partnering with the County and a technology company for development of a conversion technology demonstration facility. The criteria for MRF/TS selection included space availability, adequacy of utilities, feedstock quantity/quality, land use, regulatory and environmental issues. Colocating a conversion technology facility with MRF/TS offers numerous economic and environmental benefits including reduced truck traffic and emissions.

#### <u>Implementation of Strategic Plan Goals</u>

The recommended actions are consistent with the County Strategic Plan Goal 3, Community and Municipal Services, Strategy 2a, by contributing toward the development of the solid waste management infrastructure needed to meet the long-term disposal needs of County residents and businesses.

#### FISCAL IMPACT/FINANCING

The requested actions will have no impact on the County General Fund. The consultant contract with ARI is for a total not-to-exceed amount of \$1,290,600. Funds for the first year of services are included in the Fiscal Year 2009-10 Solid Waste Management Fund Final Budget. Funding for the remaining contract term will be requested through the annual budget process.

Each of the three demonstration projects will be financed by the respective project developer. Upon execution of the MOUs, for a term of 16 months, each project developer and the County will jointly attempt to obtain grants and/or loans in the following minimum amounts, to be applied against the cost of constructing and completing the project:

- CR&R, Incorporated, must obtain \$7,500,000 in grants and/or loans.
- International Environmental Solutions must obtain \$700,000 in grants and/or loans, with a total amount of \$1,500,000 needed in grants and/or loans.
- Rainbow Disposal Company must obtain \$10,000,000 in grants and/or loans as well as secure a guaranteed wastestream delivered to the MRF of no less than 1,000 tons per day at a tipping fee of \$75 per ton, for 180 months in order to provide the necessary feedstock for the conversion facility.

Should any of the demonstration projects be unable to secure the stated amount of grants and/or loans within 16 months from the date of this MOU, either the County or project developer will have the option to terminate the MOU giving thirty days notice to the other party without further obligation.

Upon approval by your Board, the County will provide technical assistance to the conversion technology demonstration project development teams (Phase III) and commercial-scale conversion technology projects (Phase IV) through the consultant contract with ARI. Consultant and in-kind assistance to each of the three conversion technology demonstration facility projects, which account for approximately \$500,000 of the \$1,290,600 ARI contract, will consist of grant and/or loan procurement, technical support as needed, permitting assistance, and public outreach. Prior to pursuing any grants that the County will participate in directly, DPW will return to your Board for approval of the specific grant application.

The consultant contract with ARI is funded with fees paid by operators of the Puente Hills Landfill and Sunshine Canyon Landfill, which are specifically dedicated to this purpose. Through provisions in their respective Conditional Use Permits, as approved by the County Regional Planning Commission and your Board, each landfill provides dedicated funding to the County's Solid Waste Management Fund in order to evaluate and promote the development of conversion technologies.

#### FACTS AND PROVISIONS/LEGAL REQUIREMENTS

Following your Board's approval of the environmental consultant contract with URS Corporation on July 1, 2004, to provide technical assistance, DPW commenced Phase I of the project, which included a preliminary evaluation, screening, and ranking of a range of conversion technology companies, and initiated efforts to identify MRF/TS in Southern California that could potentially host a conversion technology facility. In 2005, DPW released the Conversion Technology Evaluation Report, which identified a preliminary short list of technology suppliers and MRF/TS sites, along with a framework for development of a conversion technology demonstration facility at one or more of these sites.

Phase II commenced on July 15, 2006, upon your Board's approval of an environmental consultant contract with ARI, which involved evaluating the short-listed conversion technologies and locations identified in Phase I. As a result of DPW's technical analysis, four conversion technology companies were recommended for development, in partnership with the County, at three MRF/TS locations. In 2007, DPW released the Phase II Evaluation Report and proceeded with a formal Request for Offers (RFO) process with the recommended companies.

Phase III of the project will involve development of relatively small-scale conversion technology demonstration facilities at the MRF/TS sites located in adjacent counties. Phase IV will focus on the development of commercial-scale conversion technology projects within Los Angeles County. While Phase III will begin upon contract award, Phase IV is projected to begin six to nine months later, and will be implemented in parallel to Phase III but on a staggered schedule, in order to apply lessons learned from the conversion technology demonstration projects to the development of the commercial-scale facilities. Any County partnerships resulting from Phase IV will require approval from your Board.

Upon approval by your Board, the consultant, ARI, intends to establish a new office in the County of Los Angeles. This decision is based on the significant growth in interest in conversion technologies in the region, including interest from cities and businesses within the County of Los Angeles. The cities of Calabasas, Glendale, Lancaster, and Long Beach have already adopted resolutions of support (Exhibits 5-8) for the County's program and have expressed a desire to partner with the County in developing commercial scale facilities. The County's efforts have sparked interest in other jurisdictions across the Country, and we have seen a number of municipalities and businesses moving forward with plans to develop their own conversion technology projects.

The County will continue its efforts at the State level to have conversion technologies statutorily recognized as a more beneficial way to manage solid waste than disposal, and as an in-State renewable electricity generation source and eligible for consideration under the State's Renewable Portfolio Standard. The Renewable Portfolio Standard is a statewide program which requires electric corporations to purchase a certain percentage of their energy from eligible renewable energy resources.

#### **ENVIRONMENTAL DOCUMENTATION**

The proposed MOUs and contract do not constitute projects under the California Environmental Quality Act (CEQA) because they constitute activities excluded from the definition of a project by Section 15378(b) of the State CEQA Guidelines. The MOUs require the developers to fully comply with all CEQA requirements, including the completion of the appropriate environmental documents. The CEQA documents must be prepared and submitted to the appropriate agencies prior to the acceptance by the County of any grants or loans related to the projects.

#### **CONTRACTING PROCESS**

On January 17, 2008, following a screening process, DPW issued a RFO (Exhibit 1) to the short-listed conversion technology companies. On August 15, 2008, four conversion technology companies and three MRF/TS companies submitted offers in response to the request. An evaluation committee, consisting of DPW staff and members of the Subcommittee, evaluated these four offers. Evaluation of the conversion technology companies was based on the quality and responsiveness of the overall offer, qualifications and experience, services and work plan, and deliverables schedule and cost. Based on the review and evaluation of these offers, the evaluation committee recommended CR&R Incorporated, International Environmental Solutions, and Rainbow Disposal Company, Incorporated, as the most qualified companies to develop conversion technology demonstration facilities in Southern California. Interstate Waste Technologies, a pyrolysis/gasification company, was also a finalist in this process, but because they were not able to secure a site for Phase III, the evaluation committee recommended that they be considered for Phase IV. The resulting MOUs are enclosed as Exhibits 2-4.

On November 17, 2008, DPW placed a notice of the Request for Proposals (RFP) for an environmental consultant on the County's website, and a notice was placed on the County's conversion technology website, www.SoCalConversion.org. On February 3, 2009, four proposals were received. Proposals determined to meet the minimum RFP requirements were then evaluated by an evaluation committee consisting of DPW staff and members of the Subcommittee using an informed averaging methodology. The evaluation committee selected ARI as the best qualified firm to provide these services based upon their proposed organizational structure, resources, technical expertise, experience, and work plan.

The recommended contract with ARI was solicited in accordance with applicable Federal, State, and County requirements, and the contractor is in compliance with your Board's requirements. The consultant contract, in a form substantially similar to the enclosed, will be subsequently approved as to form by County Counsel prior to execution by the Director of Public Works or her designee.

#### **IMPACT ON CURRENT SERVICES (OR PROJECTS)**

There will be no negative impact on current County services or projects as a result of these MOUs or the consultant contract.

#### **CONCLUSION**

Please return four approved copies of this letter to DPW, Environmental Programs Division.

Respectfully submitted,

GAIL FARBER

Director

PP:td

c: Chief Executive Office (Lari Sheehan)

Hail Farher

County Counsel Executive Office

# REQUEST FOR OFFERS FOR LOS ANGELES COUNTY CONVERSION TECHNOLOGY DEMONSTRATION FACILITY

Issued by:

The County of Los Angeles
Department of Public Works
and
Los Angeles County Solid Waste Management Committee/
Integrated Waste Management Task Force's
Alternative Technology Advisory Subcommittee

**January 17, 2008** 







Prepared by:



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#### 1.0 INTRODUCTION

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#### 1.1 Background

For nearly a decade, the County has been a consistent supporter of conversion technologies for their ability to manage post-recycled residual waste materials in an environmentally preferable manner and their potential to assist jurisdictions in meeting the State's waste diversion mandate. This support has included sponsoring legislation and working with State and local governments and other key stakeholders to advance research and development of conversion technologies.

As part of its continuing effort to evaluate and promote the development of conversion technologies, the County of Los Angeles Department of Public Works is working collaboratively with the Los Angeles County Integrated Waste Management Task Force and its Alternative Technology Advisory Subcommittee (Subcommittee) to facilitate and participate in development of a fully operational conversion technology demonstration facility. The goal is to demonstrate technical, environmental and economic benefits of conversion technologies through design, construction and operation of a facility in Southern California, in order to forge permitting and legislative pathways for conversion technologies and promote development of future projects.

In 2004, the County initiated an evaluation of conversion technologies and technology suppliers, along with efforts to identify material recovery facilities (MRFs) and transfer stations (TSs) in Southern California that could potentially host a conversion technology demonstration facility (Phase I). The Department of Public Works and the Subcommittee purposefully pursued the integration of a conversion technology facility at a MRF/TS site in order to further divert post-recycled residual waste from landfilling and to take advantage of a number of beneficial synergies from co-location. In addition, a regional area beyond Los Angeles County was considered for potential host locations, since the development of a conversion technology demonstration facility would have many regional benefits. The result of Phase I included the identification of a preliminary short list of technology suppliers and MRF/TS sites, along with the development of a long-term strategy for implementation of a conversion technology demonstration facility at one or more of these sites.

In 2006, the County initiated Phase II to further advance its efforts to facilitate the development of a conversion technology demonstration project. Key activities conducted in Phase II included a comprehensive evaluation of short-listed technologies, and an in-depth evaluation of candidate MRF/TS sites to determine suitability for integration, installation and operation of the short-listed technologies. The County also initiated efforts to develop and implement a public outreach program in 2007.

In October 2007, the County released the Phase II Conversion Technology Evaluation Report. The findings of the report included the determination that four of the technology suppliers evaluated have demonstrated the technical capabilities of their conversion technologies with municipal solid waste (including consideration of reliability, processing capability, energy efficiency, diversion potential, etc.) and are "ready" for application as part

of a conversion technology demonstration project in Southern California. These acceptable technology suppliers are listed alphabetically below:

- Arrow Ecology and Engineering (anaerobic digestion)
- International Environmental Solutions (pyrolysis)
- Interstate Waste Technologies (pyrolysis / high temperature gasification)
- NTech Environmental (low temperature gasification)

The Phase II Report also concluded that four of the sites evaluated are suitable for colocation with a conversion technology project. These acceptable sites are listed alphabetically below:

- Del Norte Regional Recycling and Transfer Station (Ventura County Oxnard)
- Perris MRF/Transfer Station (Riverside County Perris)
- Rainbow Disposal Company, Inc. MRF (Orange County Huntington Beach)
- Robert A. Nelson Transfer Station and MRF (Riverside County Unincorporated)

## 1.2 Intent of Request for Offers

The next step of Phase II consists of a competition to solicit formal, site-specific offers (Offers) from the acceptable technology suppliers in partnership with the acceptable MRF/TS sites. The competition is being initiated with this Request for Offers (RFO), which is open only to the technology suppliers and sites recommended in the Phase II Report and identified above. Through this RFO, the County is seeking to encourage the development of one or more site-specific demonstration facilities, as a key element in its goal of advancing the development of conversion technologies and increasing the diversion of waste from landfill disposal.

The County encourages the development of partnerships between the recommended technology suppliers and the recommended MRF/TS owner/operators for mutual development of project offers. Specifically, the County is working to foster an integration of the conversion technology with the MRF, to achieve the benefits of co-location and substantiate the technical, economic and environmental viability of the technology. This integrated project should showcase innovative design and operation, taking into consideration what can be achieved as a first step as well as a forward-looking prospectus of what eventual design and operation may become.

The RFO requires that the participating technology suppliers and sites, in partnership, prepare a response that provides clear project definition and commitments on the part of the team making the offer, including a tipping fee and project guarantees. It also requires that the proposed project substantially meet the standards defined within this RFO. In return, the Department of Public Works in conjunction with the Subcommittee contemplates selecting one or more projects to be endorsed by the County and offered County support, subject to negotiation with the Department and approval by the Board of Supervisors. Potential options for County support are described in Section 4 of this RFO. In response to the RFO, Project Developers (as defined in Section 2.1) may request one or more of these options or propose other support options for consideration by the County.

#### 1.3 RFO Schedule

The schedule anticipated for this process is as follows:

Implementation Step	Duration	Date
Issue RFO		January 17, 2008
Mandatory Pre-Offer Meeting		February 13, 2008
Last Date for Questions, Requests for Clarification	(approx. 1 month prior to submittal date)	April 15, 2008
Submit Offers	(4 months)	May 15, 2008
Review, Evaluate Offers	(approx. 3 months)	July 31, 2008
Negotiate Support Activities, Other Agreements	(approx. 3 months)	October 31, 2008
Provide Recommendation to County Board of Supervisors and, Subject to the Board's Approval, Begin Project Development	(within 1 month of completing negotiations)	November 30, 2008

#### 1.4 RFO Process

Through the issuance of this RFO, the County is inviting Project Developers to submit formal Offers consistent with the intent of and information requirements set forth in this RFO. All of the Offers received will be evaluated according to the process and criteria described in this RFO. The County expects that the outcome of this process will be the selection of one or more Project Developers for negotiations and, subsequently, the implementation of one or more demonstration facilities that will benefit by the application of County endorsement and certain County support activities and incentives, subject to approval by the Los Angeles County Board of Supervisors.

#### 1.4.1 Distribution of RFO

This RFO is being issued to the short list of technology suppliers and MRF/TS owner/operators recommended in the October 2007 Phase II Conversion Technology Evaluation Report for consideration of County support for a conversion technology demonstration facility.

#### 1.4.2 Pre-Offer Meeting

A mandatory, pre-offer meeting will be held at the County of Los Angeles Department of Public Works offices, 900 South Fremont Avenue, Alhambra, California, starting at 10:00 AM Pacific Standard Time on Wednesday, February 13, 2008. To facilitate participation, the County will make a call-in number available for those who are unable to attend. Participation by telephone is acceptable to establish attendance.

#### 1.4.3 Offer Submission

Offers are to be received by the County by 4:00 PM Pacific Standard Time on May 15, 2008. Offers are to be submitted in hard copy and electronic format. Electronic copies will be distributed to the County participants and its agents, and the Subcommittee. Four (4) printed copies and four (4) CD's should be submitted as follows:

Two (2) copies to:
County of Los Angeles Department of Public Works
Attention: Coby J. Skye, P.E.
Environmental Programs Division
900 South Fremont Avenue
Annex 3rd Floor
Alhambra, CA 91803-1331

Two (2) copies to:
Alternative Resources, Inc.
Attention: Susan Higgins
1732 Main Street
Concord, MA 01742

#### 1.4.4 Contact Person

The Contact Person for this RFO is Mr. Coby Skye, County of Los Angeles Department of Public Works:

Telephone number: 626-458-5163

Email address: cskye@dpw.lacounty.gov

Subject to the requirements of Section 1.4.5, respondents are allowed to contact Mr. Skye throughout the RFO process, and similarly, the County reserves the right to conduct discussions with any one or more of the respondents at any time.

# 1.4.5 Additional Information/Questions

Requests for additional information or clarifications to the RFO should be requested from Mr. Skye in writing, and are to be made no later than April 15, 2008. The County will provide a summary of all such requests along with a written response, to all who have attended the pre-offer meeting. Only written responses from the County shall be considered official responses concerning the meaning or interpretation of information in the RFO.

Requests for additional information or clarifications shall be addressed to:

County of Los Angeles Department of Public Works Attention: Coby J. Skye, P.E. Environmental Programs Division 900 South Fremont Avenue Annex 3rd Floor Alhambra, CA 91803-1331

Tel: (626) 458-5163 Fax: (626) 458-3593

Email: CSkye@dpw.lacounty.gov

Copies of such requests should also be sent to:

Alternative Resources, Inc. Attention: Susan Higgins 1732 Main Street Concord, MA 01742 Tel: (978) 371-2054

Tel: (978) 371-2054 Fax: (978) 371-7269

Email: SHiggins@alt-res.com

#### 1.4.6 Oral Presentation/Interview

The County may request that any or all Project Developers make oral presentations in support of their Offers, if such presentations are necessary or beneficial to demonstrate the information contained therein.

#### 1.4.7 RFO Postponement/Cancellation

The County may, at its sole and absolute discretion, reject any and all, or parts of any and all, Offers; postpone or cancel at any time, this RFO process, or waive any minor irregularities in this RFO or in the responses received as a result of this RFO.

#### 1.4.8 Withdrawal from Procurement Process

A Project Developer may withdraw an Offer prior to the Offer due date provided that a written request to withdraw the Offer is hand-delivered to the County, by or on behalf of an authorized representative of the Project Developer, or the request is delivered by certified mail.

#### 1.4.9 Record of Offers

Once submitted, Offers will not be returned.

# 1.4.10 Period of Acceptance and Bid Bonds

All Offers are to remain valid for a period of one year after the Offer due date, during which time the Department of Public Works and the Subcommittee expects to complete its review and evaluation, including negotiations, and make a recommendation to the County Board of Supervisors. Offers may not be modified or withdrawn by the Project Developer during this period of time unless prior written permission is granted by the County.

A Bid Bond in the amount of \$100,000 (or a cashier's check or certified check in that amount payable to the County) shall accompany the Offer. Unapproved withdrawal of an Offer or from subsequent negotiations will result in forfeiture of the Bid Bond or alternative security.

## 1.4.11 County Rights and Options

The County reserves, holds and may exercise, at is sole discretion, the following rights and conditions with regard to this RFO. By responding to this RFO, respondents acknowledge and consent to the following conditions relative to the procurement process and the selection of a conversion technology demonstration facility(ies) to receive County endorsement and support, subject to approval of the Board of Supervisors:

- This RFO does not obligate the County to procure or contract for any services.
- This RFO does not commit the County to enter into a contract(s), nor does
  it obligate the County to provide any Project Developer with any of the
  potential County support activities identified in this RFO.
- The County reserves the right to change the schedule for any events associated with this RFO upon notice to the RFO recipients.
- All costs incurred by a respondent in connection with responding to this RFO, the evaluation and selection process undertaken in connection with this RFO, and any negotiations entered into in connection with developing a contract, will be borne by the Respondent.
- The County reserves the right to reject, for any reason, any and all offers and components thereof.
- The County may conduct clarification discussions or negotiations, at any time, with one or more respondents.
- The County reserves the right to discontinue negotiations with any respondent.

 The County reserves the right to receive questions concerning this RFO from respondents and to provide such questions, and the County's responses, if any, to all respondents.

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- The County reserves the right to supplement, amend, or otherwise modify this RFO, or otherwise request additional information.
- All activities related to the project shall be subject to applicable law, including but not limited to all applicable permitting requirements.
- Neither the County, its staff, their representatives, the Subcommittee, or any of their consultants or agents will be liable for any claims or damages resulting from the solicitation, collection, review or evaluation of responses to this RFO.
- The County reserves the right to conduct due diligence upon all aspects of the respondents and their offers and to request additional evidence to support the information included in any such offer.
- The County reserves the right to contact references and parties knowledgeable of the respondent and its performance.
- The County reserves all rights with respect to the evaluation, clarification, selection, and negotiation process set forth in this RFO.

#### 1.5 Content of RFO

As described above, this RFO is being issued to a pre-determined list of technology suppliers and site owner/operators recommended in the Phase II Report, all of which have been actively involved in the County's process leading up to this RFO. Therefore, this RFO is streamlined in its content. Similarly, this RFO is streamlined in the extent of information requested in the response, in recognition of the level of information that has already been submitted and the review and evaluation that has already been completed.

Included in this RFO are the following:

- a description of project roles and responsibilities (Section 2.0);
- a description of project standards (Section 3.0);
- a listing of potential county support activities (Section 4.0);
- a description of the evaluation process (Section 5.0), and
- a summary of RFO submittal requirements (Section 6.0).

# 2.0 ROLES AND RESPONSIBILITIES OF PARTICIPANTS

The project is to include one of the recommended conversion technologies co-located at one of the recommended MRF/TS sites. More than one project may be selected by the County. The key participants in the project(s) will be the Project Developer and the County.

## 2.1 Project Developer

The Project Developer is expected to be the technology supplier, the MRF/TS owner/operator, or a legally binding partnership of these entities. Other key team members or project roles are expected to include: an environmental permitting consultant; an engineering, procurement and construction (EPC) contractor; a facility operator; a guarantor, and an investment banker. The role of the Project Developer will be to lead the development team, select the team members, and be the single point of responsibility for delivery of services. The Project Developer will be responsible for all actions necessary to design, permit, finance, own, construct, start-up, acceptance test, and operate and maintain the facility, all in accordance with the requirements of this RFO and any Agreement(s) to be negotiated with the County; Federal, State and local laws, regulations, codes, standards and policies; good engineering practice; good and accepted construction practice, and industry practice in Southern California. The Project Developer will be responsible for marketing all energy, fuels, and other materials recovered for beneficial reuse, and will be responsible for disposal of any residual waste from the process. The Project Developer will be expected to disclose non-proprietary project information to the County for public release, including technical, environmental and economic information, to promote the development of future projects.

#### 2.2 County

The County will act as a facilitator by endorsing the project and assisting in project development. Additionally, as discussed in the October 2007 Phase II Conversion Technology Evaluation Report and in this RFO, several potential County support activities and incentives have been identified and could be negotiated with the successful Project Developer(s).

The County's role will also include public dissemination of non-proprietary information provided by the Project Developer to promote the development of future conversion technology projects.

# 2.3 Form of Agreement(s) with County

It is anticipated that any projects developed as a result of this RFO process will be financed, owned, developed and operated by the Project Developer. The form of any potential agreement(s) between the County and the successful Project Developer(s) will reflect the basic structure of this RFO, including the general roles and responsibilities of the participants, the project standards, and the negotiated support activities. Any agreement(s) with the County, as approved by the Board of Supervisors, will also encompass the specifics of the Offer as made by the Project Developer and negotiated with the County in response to the RFO.

#### 3.0 PROJECT STANDARDS

The County has established project standards that are conducive to development of a successful conversion technology demonstration project. The project standards are listed in Table 1, and encompass the following categories:

- Project Structure
- Project Design and Performance Requirements
- Marketability of Products
- Environmental Permitting Requirements
- Economics
- Financing
- Financial Security
- Schedule

Any Offer considered by the County under this RFO for County support must substantially comply with the project standards. Following Table 1, the project standards are addressed in more detail by category, including specification of the information, descriptions, commitments and certifications that are to be made with the Offer.

## Table 1. Project Standards

#### **Project Structure**

- The project is to have a complete and clearly defined structure for the participating parties with qualified participants committed to participating in the project and assuring its success.
- 2. The project is to be structured to provide for disclosure of non-proprietary project information to the County for public release, including technical, environmental and economic information, to promote the development of future projects. The project shall provide the County full access to the facility for pre-arranged public tours, for third-party monitoring and records inspection of non-proprietary information, and for other aspects of technology validation.

# Project Design and Performance Requirements

- The project is to be designed to process at least 100 tons per day (tpd), but initially no more than 1,000 tpd, of MRF residuals and/or post-recycled municipal solid waste.
- 4. The project is to be modular in design to facilitate possible expansion in future years to the extent site space allows. The project offer may include staged development, sequenced by modular units.
- The project is to include integration with the host MRF/TS, to take advantage of the beneficial synergies of co-location.
- 6. The project is to provide for redundancy of key system components to assure at least 85% annual availability when fully operational on a commercial level.
- 7. The project should be capable of diverting at least 75% (by weight) of the MRF residuals and/or post-recycled municipal solid waste used as feedstock from landfill disposal.
- 8. The project is to have the capability to access, characterize, and, as necessary, clean or otherwise modify the intermediate gas that is produced, and to generate electricity or produce a fuel product (e.g., biogas, synthesis gas, oil) from the intermediate gas. The project must identify a defined use for the electricity and/or fuel product.
- 9. The Project Developer is to offer a commitment to develop a "flagship facility", by maximizing the use of sustainable construction and operation practices such as onsite recycling/reuse, energy conservation, LEED certification, and other similar practices. The project will also be designed to facilitate public tours and public education programs.

# Marketability of Products

10. The project is to produce marketable products as demonstrated by a viable product marketing plan.

#### **Environmental Permitting Requirements**

11. The project is to be capable of being permitted as demonstrated by a viable permitting plan.

#### **Economics**

12. The project must be capable of sustained operation at a tip fee competitive with local market conditions, if not initially, over the term of operation.

#### **Financing**

13. The project must be capable of being financed by the Project Developer.

#### **Financial Security**

14. The Project Developer must be able to demonstrate financial security using customary financial security measures and be willing to provide a corporate guarantee and a performance bond (construction and operation), or equivalent financial security.

#### **Schedule**

15. The project is to be operational within 36 months of the receipt of all required permits and approvals.

## 3.1 Project Structure

The information, descriptions, commitments and certifications that are to be provided regarding standards for project structure are set forth below. Information that was previously submitted as part of the Phase II RFI, which remains unchanged, can be resubmitted. Updated and/or supplemental information is to be provided, as requested.

# 3.1.1 Ownership and Participants

- 3.1(A). Complete Form 1 (Appendix A) identifying the principal participants in the project.
- 3.1(B). Describe the legal structure for the Project Developer and the participating entities.
- 3.1(C). Describe the ownership structure/entity for the project, including all members and their equity participations (by percent).
- 3.1(D). Provide an organization chart and narrative description of the roles of each major participant and the management, control and operational relationships among all of the major participants.
- 3.1(E). Provide any updated financial or business information (e.g., material changes in financial condition, new projects contracted for, strategic alliances or partnerships established, recent adverse events, etc.) considered pertinent, that may have occurred since the submission provided during the Phase II RFI process.
- 3.1(F). If the project team includes major participants that were not included or identified in the submission provided during the Phase II RFI process, fully complete Form 2 (Appendix A) for such participants. Otherwise, update Form 2 for previously-identified participants by providing information for 2006 and, if available, 2007.
- 3.1(G). Provide letters of commitment or other indicators of commitment to the project from the key participants identified above documenting their agreement to participate in the financing, development and/or operation of the project according to the roles and relationships described above. Such letters of commitment may include conditions precedent to commitment and participation.

## 3.1.2 Information Disclosure

3.1(H). Provide a certification in the Offer Transmittal Letter (Form 3, Appendix A) that the participant agrees that the County may publicly disclose or release non-proprietary project information (including technical, environmental, economic and business information) in order to promote and generate support for the development of the project or to promote the development of future projects. Provide a certification that County access to the facility will be

assured for pre-arranged public tours, third-party monitoring and records inspection for non-proprietary information, and other aspects of technology validation.

#### 3.2 Project Design and Performance Requirements

The information that is to be provided regarding standards for project design and performance requirements is set forth below. As part of each RFO response, the County is interested in the potential integration of the conversion technology with the MRF, including information showing the potential benefits from co-location. Please provide such information, as applicable, in conjunction with the information requested below.

- 3.2(A). Describe, in narrative form, the design and construction approach for the proposed project. The approach should describe the proposed technical concept for the project, including a description of how the facility will work from receipt of waste to processing of waste through the facility and production of products. The narrative description of the design and construction approach, together with more specific information requested below, should be sufficient to demonstrate that the project will substantially comply with the project standards.
- 3.2(B). Describe, in narrative form, the overall approach to performing operation and maintenance activities for the proposed project. The approach should include the following elements, along with other information necessary or beneficial to provide an understanding of proposed operations:
  - · approach to performing operations;
  - preventative, corrective and predictive maintenance programs;
  - monitoring of process operations and environmental data;
  - reporting and recordkeeping activities;
  - estimates for annual usage of electricity, fuel, water, chemicals and other consumables;
  - proposed approach for residuals management, including handling, testing, transportation and disposal; and,
  - proposed staffing plan identifying job title, function and number of personnel.
- 3.2(C). A description of the project is to be provided, including the following (as applicable):
  - the facility design capacity (tons per year and tons per day);
  - the number and capacity of units or modules;
  - an equipment list of key project components;

- the guaranteed and (if different) planned annual availability of the facility;
- if applicable, the plan for staged (i.e., sequenced) development;
- if applicable, the approach by which the facility could be expanded in the future;
- the quantity (% by weight of material received at the facility) that will be diverted from landfill disposal;
- the method by which process residue will be managed, including expected quantity and disposal location; and,
- a description of how the project is beneficially integrated with the host MRF/TS.
- 3.2(D). Provide a facility site layout, elevation drawings, artist's rendering, equipment general arrangement, and schematic process flow diagram(s) of the proposed facility to facilitate understanding of site suitability, equipment use, and system integration. Describe the benefits of site layout to mitigate impacts on neighbors, such as use of buffer areas and placement of buildings to reduce exposure to operations. Describe traffic flow on site, with provisions for adequate truck queuing on site.
- 3.2(E). Provide an updated mass and energy balance (or balances), as applicable to reflect changes, that supports the project concept, with sufficient detail to facilitate understanding of subsystem integration, resources consumption, products and residuals generation, landfill diversion capability, and on-site integration efficiencies.
- 3.2(F). Provide an updated water balance, as applicable, including evaporative losses and internal recycle streams.
- 3.2(G). The waste characterization used as the design basis for the project is to be disclosed in sufficient detail to facilitate understanding of the mass and energy balance(s), the greenhouse gas compliance demonstration requested under Section 3.3, and the definition of project discharges requested under Section 3.4.
- 3.2(H). Describe the commitment that will be made to develop a "flagship facility" (e.g. recycling/reuse, energy conservation, LEED certification, etc.) and to facilitate public tours and public education programs.

# 3.3 Marketability of Products

Provide confirming, updated or supplemental information, as applicable, to demonstrate that the project will produce marketable products:

- 3.3(A). Fuels and/or Energy. Identify the type and quantity of fuels and/or energy to be produced and sold (e.g., electricity, steam, diesel), and the expected sale prices. If available, provide a copy of the energy purchase agreement(s) that will be executed or the term sheets indicating principal delivery and purchase terms and conditions, and price(s). To the extent that electricity production must meet California greenhouse gas emission standards (see CA Public Utilities Code, commencing with Section 8340), provide a quantitative demonstration that the facility will be able to meet those standards.
- 3.3(B). Materials. Identify the type and quantity of other materials to be produced and sold, including recovered recyclables as applicable, and the expected sale prices. Provide a brief plan regarding the marketing of non-energy products, including prospective customers, principal product delivery and purchase terms and conditions, and price(s). The plan should discuss marketing strategies and activities, as well as the factors that will influence the marketability and sales of materials over time. If practicable, include copies of product purchase agreements or letters of intent. Include a discussion of contingency measures that would be taken in the event that products could not be sold in the quantities or for the prices expected, including any potential cost impacts.

#### 3.4 Environmental Permitting Requirements

Provide confirming, updated or supplemental information, as applicable, to demonstrate that standards established regarding environmental permitting will be met:

- 3.4(A). To demonstrate permitability, quantitatively define all significant project discharges of regulatory interest (including, but not limited to, criteria and toxic air pollutants, wastewater quantity and characteristics, and residue quantity and characteristics) and provide a preliminary permitting plan. The preliminary permitting plan is to itemize all potentially applicable regulatory programs (at a minimum as defined in the October 2007 Phase II Conversion Technology Evaluation Report, including new source performance standards for municipal waste combustors), and the means by which the project will comply with the requirements of those programs or avoid applicability. If engineering or operational controls are required to alter discharges of regulatory interest, such as air pollution controls to meet regulatory applicability thresholds, describe such controls along with their associated control efficiencies.
- 3.4(B). Describe design and operational means for dust control, odor control, noise mitigation, traffic mitigation, stormwater management, minimization of water consumption, and reduction or elimination of process wastewater discharge.
- 3.4(C). Provide a description of the method by which the intermediate gas could be captured and pre-cleaned (if proven necessary to meet permit requirements for the proposed final usage).

#### 3.5 Economics

Provide the following information to demonstrate the project is capable of sustained operation at a market-competitive tip fee, if not initially, over the term of operation.

- 3.5(A). A firm, first year tipping fee(s) that will be charged by the project, including the key assumptions, bases and conditions related to or affecting those fees (including a capital cost breakdown for permitting, finance, project management, design, construction and operation).
- 3.5(B). The bases (e.g., inflationary escalation/index, change-in-law, uncontrollable circumstances) under which the first year tipping fee(s) will be subject to adjustment following the commencement of operations.
- A discussion of any tipping fee stabilization, ramp-up or analogous concepts proposed to or requested of the County.
- 3.5(D). A discussion of any contingencies or conditions, whether prior to project implementation, during implementation or during operations, that may affect the tipping fee(s) offered to the extent that an adjustment in the tipping fee(s) would be requested.
- 3.5(E). A non-binding 20-year proforma analysis that reflects the basic financial and economic assumptions made under the Offer, along with a brief discussion of such assumptions and bases. The proforma should assume a 3.00% annual rate of inflation.

#### 3.6 Financing

Provide the following information to demonstrate the project is capable of being privately financed.

- 3.6(A). Provide a financing plan that addresses the following elements:
  - The identification of equity/owner participants and their percentage shares of the financing.
  - The identification of other participants, if any, such as MRFs, equipment suppliers, etc., which may provide financing but not participate in project ownership.
  - The project's approach to debt financing, including:
    - source of debt (e.g., via direct commercial lending, via bond issue, etc.);
    - use of tax-exempt private activity bonds (if any such use is contemplated);

- basic credit and security requirements, terms and conditions, whether set by specific identified lender(s) or determined in response to debt or bond market conditions;
- indications of commitments to provide debt financing (with conditions, if necessary).
- Plans or intentions, if any, for accessing state and/or federal financing assistance such as grants or loan guarantees, with the identification of specific assistance program(s) to be accessed and associated program requirements.
- A discussion of the specific support activities that are desired or required in order to implement the project, including the relative importance of each to the financial success of the project, considering the options identified in Section 4 or otherwise proposed by the Project Developer.

#### 3.7 Financial Security

Provide the following information to demonstrate financial security:

- 3.7(A). Provide a description of the security package for the project (i.e., bonds, insurance, letters of credit, corporate guarantees, etc.), including a discussion of which parties will provide which elements of the overall security package and, if applicable, the manner in which individual elements will relate to one another or in other ways will assure the County that adequate security measures will be put and will remain in place. Specifically:
  - 1. identify providers of any corporate guarantees from the principal participants named above;
  - 2. identify guarantees and/or warranties from other participants if not covered in item 1;
  - 3. discuss measures that will be put in place to protect the County and/or municipal participants from the consequences of project upsets/failures.
- 3.7(B). Provide letters of commitment or other indicators of commitment from prospective providers of bonds, insurance, letters of credit, corporate and other guarantees and warranties, indicating;
  - 1. the type of coverage to be provided;
  - 2. any material conditions placed upon the provision of such security instruments;
  - 3. summary financial information on prospective providers (see Form 2, Appendix A);

## 3.8 Schedule

3.8(A). Provide a project development schedule, showing key dates for activities such as permitting, financing, design, construction, and startup. Include a discussion of the areas of uncertainty in the project schedule and the potential impact on the project startup date.

#### 4.0 COUNTY SUPPORT ACTIVITIES

This Section identifies potential options for County support. In preparing the financing plan required under Section 3.6, Project Developers are encouraged to review and consider this list of potential support activities. All support activities will be negotiated with the Department, and must be subsequently approved by the Board of Supervisors of the County of Los Angeles.

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#### Facilitate Permitting

- Assist the project in permitting efforts by making staff available to help in identifying
  permits needed, obtaining information needed for permit applications, helping the project
  get priority at agencies in scheduling for permit review and receiving reasonable
  consideration concerning applicability/interpretation of regulatory requirements.
- Assist with environmental assessments and data development as are determined necessary pursuant to the California Environmental Quality Act (CEQA).
- Fund all or some of services necessary for permitting efforts.

#### Facilitate Design/Construction

- During facility design, assist the project by helping to obtain design related information available at the County and support the payment of architect/engineer services to encourage energy efficient building design.
- During facility construction, assist the project in obtaining information on local suppliers
  of materials and services. Extend the County's sales tax exemptions to the facility
  developers for purchase of materials and services.

#### Foster Project Support with Municipal Leaders and General Public – Public Outreach

- Sponsor meetings and forums to encourage information exchange between technology suppliers, site owners/operators, municipal officials in which sites are located, State and Federal agencies, environmental and other advocacy groups and the general public to gain support for the project.
- Provide and reinforce public education efforts regarding the project, including publicizing the project, maintaining web and e-communications regarding the project, and seeking additional media coverage as appropriate.
- Provide County "endorsement" of the project(s) to add credibility for purposes of public acceptance, permitting, financing, and publicity.

# Promote Beneficial Use of Products, Product Sales

- Assist site owner/operators and technology suppliers in identifying markets for products and in negotiating power or fuel sales agreements.
- Promote the use of more difficult-to-market products, such as compost and aggregate, by educating County and State departments that may use such products and integrating incentives or requirements for purchasing and use of such products into procurement practices for County and State projects. Support payment for testing services to develop engineering specifications for products and establish quality of products.

# Support Operations and Commercialization of Technology

- Once the facility is operational, participate in and provide funding for facility testing and data exchange for engineering performance and environmental data.
- Extend the County's sales tax exemptions to the facility operator for purchase of goods and services.
- Continue County promotional support during facility operation to promote facility
  attributes and enhance public awareness. Serve as a "reference", if requested by the
  facility developer, to expand the demonstration facility or to enhance the developer's
  efforts to develop other facilities in or outside of the area.

#### Legislative Efforts

- Continue State legislative efforts to foster change in the solid waste management hierarchy in order to place all conversion technologies within the context of beneficial uses rather than disposal.
- Continue State legislative efforts to ensure all conversion technologies that generate electricity are eligible to receive renewable energy credit.

## **Funding Opportunities**

Continue identification of potential funding sources (e.g., funding, grants, low interest loans, etc.) on a County, State and Federal basis to assist in payment of project development costs, construction costs and operating costs. Seek County funding. Apply for and secure available State and Federal grants and low interest loans. Assist the facility developer in applying for and obtaining grants and low interest loans available from the State or Federal Government.

## Financing Support

 If private activity tax-exempt bond financing is sought, lend County support to qualify for "volume cap" for such financing.

#### **Economic Incentive**

 Provide economic incentives in the form of a "bridge" that closes the gap, if any, between needed conversion technology tipping fees and market waste disposal fees, until such time as market waste disposal fees are sufficient to support a conversion technology project.

#### Waste Supply

 Provide for or facilitate a public waste supply agreement, or provide a "back stop" to guarantee private waste supply agreements for the term of financing.

# 5.0 EVALUATION PROCESS AND EVALUATION CRITERIA

# 5.1 Evaluation Process and Participants

The purpose of the evaluation process is to determine which projects should be selected to receive active County endorsement, support and participation. The Offers received will be evaluated by the Los Angeles County Department of Public Works and the Subcommittee, with the assistance of its technical advisors. Offers will be evaluated to determine which meet the evaluation criteria listed below, and to determine which are deemed "advantageous" or "highly advantageous" as further defined in Table 2 (provided at the end of Section 5.0). Interviews may be held with those making Offers to help clarify offers and allow for direct questioning. Following the evaluation, the Department of Public Works and the Subcommittee will select one or more projects to be endorsed by the County and offered County support, subject to negotiation with the Department and approval by the Board of Supervisors.

#### 5.2 Evaluation Criteria

Evaluation criteria are provided below:

# Criterion 1: Project Structure

Completeness and clarity of the description of the project's ownership structure and of all principal participants.

Completeness and clarity of the description of the roles of each principal participant; the management, control and operational relationships among all of the major participants; and the effectiveness of such roles and relationships.

The relative strength of the project development team, in terms of project experience and financial and management capabilities, when compared to other teams.

# Criterion 2: Project Commitments

Level and strength of commitment of the major participants to their identified roles and relationships in the financing, development and/or operation of the project, and their willingness to bear project risks along with the Project Developer.

The favorableness of the offered risk profile in terms of risks to the County and its citizens.

# Criterion 3: Information Disclosure

Conformance with the County's request for disclosure or release of non-propriety project information.

#### Criterion 4: Project Design and Performance Requirements

Compliance with the County's design and performance requirements.

Completeness and clarity of design, construction and startup plan; operations and maintenance plan; waste characterization; mass and energy balance, and other technical information (internally consistent and sufficiently detailed to present a coherent representation of the project technical and environmental characteristics).

Sec. 4 (4) Sec. 2

#### Criterion 5: Product Marketability and Sales

Viability of product marketing plan and, as applicable, associated purchase commitments, considering principal terms and conditions, including price(s), for both the energy product(s) and materials products that will be recovered, recycled and/or generated by the project.

Compliance with California greenhouse gas emission requirements, as it relates to the ability to sell electricity (see CA Public Utilities Code, commencing with Section 8340).

Viability of contingency measures that will be taken in the event that products cannot be sold as expected, assuring the minimum potential cost or performance impacts to the County and/or participating municipalities.

#### Criterion 6: Environmental Impacts and Environmental Permitting

Completeness and viability of permitting plan demonstrating that the project is capable of being permitted.

Completeness and viability of design and operational means for dust control, odor control, noise mitigation, traffic mitigation, stormwater management, minimization of consumptive water use, and reduction/elimination of process wastewater discharge.

Demonstration that the intermediate gas produced by the technology can be captured and pre-cleaned, if necessary. If permitting requires capture and pre-cleaning, further demonstration of the integration of such into the project design.

The potential environmental impact of the project, including net environmental benefit, or specifically: the potential to reduce greenhouse gas emissions, criteria and toxic air pollutant emissions, and the use of fossil fuels. All calculations must show all assumptions used.

#### Criterion 7: Economics

Competitiveness of the first year tipping fee(s) and life cycle economics. Viability of cost and revenue assumptions. Reasonableness of price escalation and mechanism for price adjustment over time.

### Criterion 8: Financing

Completeness and viability of the financing plan considering:

- The identification of equity/owner participants and their percentage shares of ownership and the project financing.
- The identification of other participants, if any, such as MRFs, equipment suppliers, etc., which may provide financing but not participate in project ownership.
- The project's approach to debt financing, including:
  - source of debt:
  - use of tax-exempt private activity bonds (if any such use is contemplated);
  - basic credit and security requirements, terms and conditions;
  - indications of commitments to provide debt financing.
- Specific strategies, if any, for accessing specific state and/or federal financing assistance.
- The magnitude and difficulty of the specific County support activities requested in order to implement the project, with an indication of which activities are necessary in order to achieve the economics projected and which, while desirable, are not necessary to achieve the projected economics.

## Criterion 9: Financial Security

Comparative strength and enforceability of the financial security structure for the project, considering indications of commitments by the identified and involved parties, that will provide:

- adequate assurance to the County as to the implementability and long-term operability of the project, as offered, addressing risks listed below:
  - permitting for construction and operation;
  - project construction cost and schedule, including start-up;
  - long-term operations cost and performance, including capital repairs and replacements over time;
  - product marketing and sales (both energy and materials);
  - contingencies to protect the County's interests in the event of project upsets or temporary or permanent failure.

 assurance to the County that any limits imposed in terms of dollar values or terms and conditions of security instruments and measures are reasonable given the construction requirements, operational characteristics and economics of the project.

#### Criterion 10: Schedule

Reasonableness of project schedule for key milestones and ability to achieve operation no later than 36 months following the receipt of all required permits and approvals.

#### 5.3 Acceptance for County Development Support

The Department of Public Works and the Subcommittee will recommend to the County Board of Supervisors, County endorsement and support of the project that, in the opinion of the Department and the Subcommittee, best meets the evaluation criteria and has the greatest potential for timely, successful development and performance. The Department and Subcommittee may recommend, and the County may select, more than one Offer.

Table 2. Evaluation Criteria

Criteria	Acceptable	Advantageous	Highly Advantageous
Project Structure  - Project ownership structure	Ownership structure is clearly defined and is appropriate and viable for a privately owned and operated MSW facility	Not Applicable	Not Applicable
Roles and relationships of principal participants	Roles and relationships are clearly defined and understandable, and appropriately reflect the purviews, capabilities and experience of principal participants	Not Applicable	Not Applicable
Strength of project development team	Resources and capabilities of key team members are appropriate and adequate for the project offered, and each key team member has worked on at least one comparable project	Same as Acceptable, plus key team members have worked as a team on the development of at least one comparable project in North America	Same as Acceptable, plus key team members have worked as a team on the development of a least one comparable project in California
Project Commitments  - Level and strength of commitment of key participants and willingness to bear risks	All key participants indicate commitment to project development and to bear risks contingent on the availability of direct County financial support that they identify	All key participants indicate commitment to project development and willingness to bear risks, with less need for direct County financial support than other Offers	All key participants indicate commitment to project development and willingness to bear risks, without the need for direct County financial support
Favorableness of risk profile	Risk profile reflects customary US MSW industry practices for public/private partnerships (e.g., public sector risk on waste characteristics and supply, uncontrollable circumstances, regulatory requirements)	Risk profile limits County risk to uncontrollable circumstances	Risk profile precludes any economic or financial risk to the County

Criteria	Acceptable	Advantageous	Highly Advantageous
Information Disclosure  - Willingness to disclose project information	Project developer and all major participants agree to disclose pertinent non-proprietary/confidential technical and financial information and provide the County access to the facility for pre-arranged public tours, third-party monitoring, and non-proprietary records inspection	Not Applicable	Not Applicable
Project Design and			·
Performance Requirements  - Compliance with project standards	Offer substantially complies with project standards	Offer exceeds project standards	Not Applicable
Completeness and clarity of information	Information, as provided, is internally consistent and sufficiently detailed to present a reasonable and coherent representation of technical aspects of the project	Presentation of information in multiple formats; details presented visually or otherwise in a manner easily accessible to layperson	Not Applicable
Annual availability	The project provides redundancy of key system components to assure 85% annual availability when fully operational on a commercial level	The project provides redundancy of key system components to assure 90% or greater annual availability when fully operational on a commercial level	Not Applicable
Diversion potential	The project is capable of diverting at least 75% by weight of MRF residuals and/or post-recycled MSW from landfill disposal	The project is capable of diverting at least 85% by weight of MRF residuals and/or post-recycled MSW from landfill disposal	The project is capable of diverting more than 95% by weight of MRF residuals and/or post-recycled MSW from landfill disposal
Eligibility for Diversion     Credits	Technology may qualify for diversion credits in the future, but not currently	Technology currently qualifies for diversion credits	Not applicable

Criteria	Acceptable	Advantageous	Highly Advantageous	
- Commitment to develop a "flagship facility"			Commitment to develop a facility that exceeds minimum levels for LEED certification, <u>and</u> , inclusion of unique aspects to facilitate public tours and public education programs	
Product Marketability and				
Sales  - Viability of product marketing plan	Marketing plan demonstrates understanding of energy and materials markets and outlines general sales/marketing strategies	Marketing plan includes detailed sales/marketing, resources, strategies, targets, milestones and contingencies, along with letters of intent to purchase energy and/or products	Marketing plan includes established commitments for energy and product purchase	
Marketability of electricity	Marketing plan includes quantitative demonstration showing that the facility can meet California greenhouse gas emission standards as required for electricity marketability	Not Applicable	Not Applicable	
Eligibility for Renewable     Energy Credits	Technology may qualify for renewable energy credits in the future, but not currently	Technology currently qualifies for renewable energy credits	Not Applicable	
Viability of contingency measures	Marketing plan identifies areas of risk and volatility and presents alternative response strategies for County consideration	Contingency plans are in- place regarding loss, volatility or change in markets over time	Contingency plans are in- place regarding loss, volatility or change in markets over time, and County is completely shielded from risks regarding loss, volatility or change in markets over time	
Environmental Impacts and Environmental Permitting  - Completeness and viability of permitting plan	Permitting plan reflects understanding of state and local permitting regimes, requirements and schedules	Same as Acceptable, plus responsible team member has relevant experience in state and local permitting	Not Applicable	

Criteria	Acceptable	Advantageous	Highly Advantageous
Completeness and viability of design and operational control measures	Applicable design and operational control measures are sufficiently incorporated and described	Design and operational control measures result in comparatively less consumptive water use and/or comparatively less process wastewater discharge	Design and operational control measures result in zero process wastewater discharge
Demonstration of capability to capture and pre-clean intermediate gas	Offer demonstrates capability to access, characterize and, as necessary, clean or otherwise modify the intermediate gas	Offer incorporates capture and cleanup of the intermediate gas	Not Applicable
Minimization of greenhouse gas emissions	Generates greenhouse gas emissions that are equal to or less than a modern natural gas combined cycled power plant (estimated here to be 1,100 pounds of CO <sub>2</sub> equivalents per MWh), as supported by quantitative estimate	Does not generate greenhouse gas emissions from fossil fuel inputs to the process	Does not generate greenhouse gas emissions from fossil fuel inputs to the process or from conversion of fossilderived sources in MSW (e.g., plastics, synthetic rubber, synthetic carpeting)
Minimization of criteria and toxic air pollutant emissions	Applicable regulations have been addressed and associated limits appear to be correctly and fully identified in the permit plan provided; air emissions are well defined and meet identified applicable limits	Same as Acceptable, and the offer demonstrates the project would likely pass the SCAQMD Rule 1401 Table 1A screening level thresholds for toxic air emissions	Not Applicable
Economics  - Viability of cost/revenue assumptions	Reasonable cost/revenue assumptions are provided, but require confirmation	Project economics are based on firm cost and revenue values, with provisions for cost/revenue contingencies	Not Applicable
Competitiveness of first year tipping fee	Project economics require some degree of County support (such as tipping fee "ramp-up" or "bridging") for a period of 4 years or more	Project economics require some degree of County support (such as tipping fee "ramp-up" or "bridging") over a period of less than 4 years	Project economics require no County support such as tipping fee "ramp-up" or "bridging" concepts in order for the Year 1 tipping fee(s) to be competitive

Criteria	Acceptable	Advantageous	Highly Advantageous
Competitiveness of life- cycle costs	Project economics estimate life-cycle costs that are locally market- competitive	Project economics estimate life-cycle costs that are 10% less than locally available alternatives	Project economics estimate life-cycle costs that are 20% less than locally available alternatives
Reasonableness of price adjustments over time	Price adjustments over time reflect customary industry practice (i.e., adjustments are based upon independent, objective indices such as CPI)	Not Applicable	Not Applicable
Financing  - Completeness and viability of financing plan	Financing plan reflects prevailing industry practices and generally describes customary project financing aspects. Financing plan includes general letters of interest from prospective investors and bankers/lenders and identifies appropriate potential state/federal loan or grant sources	Letters of interest from prospective investors and bankers/lenders have principal terms and conditions enumerated, and, as applicable, the financing plan includes a reasonable strategy for pursuing potential state/federal loan or grant sources	Financing plan includes and describes firm financing commitments (equity and debt) from investors and lenders
Financial Security  - Strength and enforceability of financial security structure	Security structure includes corporate guarantee from project developer and construction/performance bonds (or letters of credit)	In addition to meeting the Acceptable criterion, security structure includes corporate guarantee from project developer that aggregates individual guarantees from major participants	In addition to meeting the Acceptable criterion, security structure includes joint and several guarantees by all major participants
Schedule  - Reasonableness of project schedule	Facility start-up and commercial operation within 36 months of the receipt of all required permits and approvals, based on practicable schedule milestones.	Facility start-up and commercial operation within 30 months of the receipt of all required permits and approvals, based on practicable schedule milestones.	Facility start-up and commercial operation within 24 months of the receipt of all required permits and approvals, based on practicable schedule milestones.

## 6.0 CONTENT OF OFFERS AND SUBMISSION REQUIREMENTS

#### 6.1 Confidentiality Notice

In preparing Offers for submittal, Project Developers should assume that information contained in an offer is public information. Any information which is intended to be treated as proprietary or confidential must be submitted under separate cover and must be clearly designated as "CONFIDENTIAL." The distribution of such information will be limited to the County of Los Angeles and its agents, and the Subcommittee. To the extent allowed under law, County will not release or distribute such information to other parties unless such release or distribution is acceptable to the Project Developer.

## 6.2 Offer Organization and Content

In preparing their Offers, Project Developers should adhere to the following:

- 1. Include a transmittal letter (Form 3, Appendix A) signed by a party who is fully authorized to bind and commit the Project Developer to submit the Offer, to negotiate with the County, and to develop the project as presented in the Offer (including any amendments resulting from negotiations with the County).
- 2. Include an Executive Summary that provides a clear and concise introduction and overview of the Offer. The Executive Summary should be written in a non-technical style and present general information sufficient to familiarize reviewers and other interested stakeholders with the highlights of the Project Developer's Offer.
- 3. The body of the Offer is to address each of the project standards, and provide the information requested, as set forth in Section 3. Project Developers should use the sequential organization of that Section as the outline for the Offer. Each project standard is to be addressed to the fullest extent practicable. Submissions may include references to appendices or exhibits that the Project Developer believes are either integral or supplementary to discussions provided in the body of the Offer regarding each project standard.
- 4. The body of the Offer is to include a clear discussion of County support that is desired or required in order to implement the project, considering potential support options identified in Section 4 or other County support activities proposed by the Project Developer as part of the Offer.
- 5. The forms referenced in Section 3, or otherwise provided for in Appendix A of this RFO, are to be completed in the form and with the information or content indicated, and included in a separate appendix to the Offer.
- 6. Letters of commitment and similar documentation (other than the forms provided in this RFO) should be included in a separate appendix to the Offer, not within the body of the Offer.

## **APPENDIX A**

## **FORMS**

Form 1 - Identification of Principal Project Participants Form 2 - Financial Resources Data Form 3 - Offer Transmittal Letter

Form 1 - Identification of Principal Project Participants

Position	Party(ies) <sup>(1)</sup>
Lead Developer	
Project Manager (if not Lead Developer)	
Owner(s)	
MRF Participant	
Investment Banker or Funder(s)	
EPC	
Operator	
Environmental Permitting Consultant	
Other Key Participants (e.g., Broker to market products, if necessary)	

(1) Provide company name, key contact person, and contact information

## Form 2 - Financial Resources Data

(To be completed separately for Project Developer, Guarantor and Major Participating Firms<sup>1</sup>)

Name of company completing form	Name of individual completing form
Signature	

## 1. Bond Information

Current credit ratings on two most recent senior debt issues.

	Issue Description	Moody's Rating	S&P's Rating
Issue 1			
Issue 2			

## 2. Financial Indicators<sup>2</sup>

Fiscal Year End (Month): \_\_\_\_\_

	1 1	2	3	4	5
	2002	2003	2004	2005	2006
Total Revenues	\$	\$	\$	\$	\$
	\$	\$	\$	\$	\$
		\$	\$	\$	\$
		\$	\$	\$	\$
			\$	\$	\$
	'		\$	\$	\$
<u> </u>			\$	\$	\$
_	Total Revenues  Net Income  Total Assets  Current Assets  Total Liabilities  Current Liabilities  Equity (C-E)	Total Revenues \$  Net Income \$  Total Assets \$  Current Assets \$  Total Liabilities \$  Current Liabilities \$	Total Revenues \$ \$  Net Income \$ \$  Total Assets \$ \$  Current Assets \$ \$  Total Liabilities \$ \$  Current Liabilities \$ \$	Total Revenues \$ \$ \$ \$ Net Income \$ \$ \$ \$ Total Assets \$ \$ \$ Current Assets \$ \$ \$ Total Liabilities \$ \$ \$ Current Liabilities \$ \$	Total Revenues       \$       \$       \$       \$         Net Income       \$       \$       \$       \$         Total Assets       \$       \$       \$         Current Assets       \$       \$       \$         Total Liabilities       \$       \$       \$         Current Liabilities       \$       \$       \$

- Major Participating Firms include those whose participation amounts for 15% or more of either or both of the construction value of the project or of the annual value of operations and maintenance. Information previously submitted is to be updated for 2006. Information for all years (2002-2006) is to be provided for Major Participating Firms not previously identified.
- If 2007 data is available by the submission data, adjust the table and the calculations that follow the table to show financial indicators for 2003 through 2007.

Using the information provided in the table, calculate:

ing the state of t

US	ing the	illioilliation provide	ed in the table, can
A.	Rever	nue Growth Percent	ages.
	2004: 2005:	(A2-A1)/A1 (A3-A2)/A2 (A4-A3)/A3 (A5-A4)/A4	% %
В.	Profita	ability Percentages	
RE	TURN	ON REVENUE	
	2003: 2004: 2005:	B1/A1 B2/A2 B3/A3 B4/A4 B5/A5	
RE	TURN	ON ASSETS	
	2003: 2004: 2005:	B1/A1 B2/C2 B3/C3 B4/C4 B5/C5	
C.	Lever	age Ratio	
	2003: 2004: 2005:	E1/G1 E2/G2 E3/G3 E4/G4 E5/G5	
D.	Net W	orth/	
	2003: 2004: 2005:	C1-E1 C2-E2 C3-E3 C4-E4 C5-E5	\$ \$ \$ \$ \$ \$
Ε.	Liquid	ity Ratio	
		D1/F1	

2004: D3/F3 2005: D4/F4 2006: D5/F5

## Form 3 - Offer Transmittal Letter

(To be typed on Project Developer's Letterhead)

Mr. Coby J. Skye, P.E. County of Los Angeles Department of Public Works Environmental Programs Division 900 South Fremont Avenue Annex 3<sup>rd</sup> Floor Alhambra, CA 91803-1331

Mar Clares

Dear Mr. Skye.				
response to the Req Conversion Technol (the "County") on Ja	ogy Project (the "RF	sian Build Own	and Operate a	Solid vvaste
this County / on oa	,			

As a duly authorized representative of the Project Developer, I hereby certify, represent and warrant as follows in connection with the Offer:

- The submittal of the Offer has been duly authorized by, and in all respects is binding upon, the Project Developer and members of the Project Developer's team, as identified and described in the Offer, and as the commitments made and obligations specified in the Offer are more fully set forth in appended letters of commitment and other certifications provided.
- 2. The Project Developer's obligations, as described in the Offer, will be secured by the financial and other security instruments referenced in the Offer, including, as described in the Offer, construction and performance bonds, insurance coverage, letters of credit, guarantees and warranties provided by individual team members, and/or guarantees provided by the Project Developer.
- 3. The Project Developer has carefully examined all documents comprising the RFO and any addenda thereto and, being familiar with the work and the conditions affecting the work contemplated by the RFO and such addenda, offers to furnish all plant, labor, materials, supplies, equipment, facilities and services which are necessary, proper or incidental to carry out such work as required by the RFO and the Offer, all for the price(s) set forth in the Offer.
- 4. All information and statements contained in the Offer are current, correct and complete, and are made with full knowledge that the County will rely on such information and statements in reviewing the Offer and in conducting any negotiations or executing any agreements with the Project Developer.

5.	The contact person who will serve as the interface Developer is:	ce between the County and the Project
	NAME: TITLE: ADDRESS: TELEPHONE: FAX: E-MAIL:	
6.	The Project Developer agrees that it will not issue releases, mailings, media events or other similar the prior consent of the County, and further agrees such materials produced or activities undertaken	r activities regarding the Offer without ees to cooperate with the County in any
7.	Project Developer agrees to provide non-propriet technical, environmental, economic and business disclosure or release, in order to promote and gethe project and to promote the development of fine project and the	es information) to the County for public enerate support for the development of
8.	The Project Developer agrees to provide the Co arranged public tours, third-party monitoring and and other aspects of external technology validate	d non-proprietary records inspection,
	Ī	Name of Project Developer
٠		Name of Designated Signatory
		Signature
		Title

## Summary of Board of Supervisors' Directives and Other Key Milestones in County's Efforts to Develop Conversion Technologies

Year	Action
07-27-99	Board of Supervisors (Board) adopts recommendations from LA County Integrated Waste Management Task Force (Task Force) to promote alternatives to landfills. LA County Department of Public Works (Public Works) begins studying and exploring the most advanced conversion technologies from around the world.
02-15-00	County sponsors AB 1939 to advance conversion technologies, among other measures.
12-18-02	LA County Regional Planning Commission approves Puente Hills Landfill Conditional Use Permit (CUP) that includes annual funding to evaluate and promote the development of conversion technology development. CUP takes effect Nov. 2003.
01-15-04	County establishes the Alternative Technology Advisory Subcommittee, a group of technical experts in the field of conversion technologies with the mission of evaluating and promoting their development.
07-01-04	Board awards a contract to URS to screen and rank conversion technology companies from around the world and to identify local Material Recovery Facilities and Transfer Stations (MRF/TS). This is referred to as Phase I.
08-18-05	Public Works completes Phase I of the project. The Task Force adopts the comprehensive Phase I Report that identifies six promising conversion technologies and six MRF/TS sites in Southern California.
03-30-05	Board sends five-signature letter supporting AB 1090 – a strong conversion technology bill.
06-15-06	Board awards contract to Alternative Resources, Inc. to evaluate and verify qualifications of selected technologies and candidate sites. This is referred to as Phase II.
01-30-07	Board awards contract to Cerrell Associates, Inc. to develop and employ a conversion technology public outreach implementation plan.
02-06-07	Board approves Sunshine Canyon Landfill CUP that includes annual funding to conversion technology development.
10-18-07	The Task Force adopts the comprehensive Phase II Report that shortlists four conversion technology companies and four MRF/TS sites.
01-17-08	Public Works sends a Request for Offers to the technology companies and candidate sites.
08-15-08	All four technology companies and three of four MRF/TS sites submit project offers – completion of Phase II.
11-17-08	Public Works issues RFP for environmental services consultant for Phases III and IV.
Throughout 2009	Public Works receives and reviews four responses to RFP, develops recommendations; works with technology companies to establish agreements.
11-30-09	Public Works completes negotiations with all technology companies and candidate MRF/TS sites.

Technology Provider	Technology Description	MRF/TS Partner Project Location	Material Recovery Facility/Transfer Station (MRF/TS) Description	Project Description	Diversion of Municipal Solid Waste (MSW)	Beneficial Uses	Project Timeline (from date of MOU)	Regulatory Agencies
Arrow Ecology and Engineering	Anaerobic Digestion 1) Recyclables removed 2) Organic post-MRF MSW is processed in 2-stage bioreactor process 3) Biogas and digestate are produced	CR&R Incorporated (Lead Project Developer) Perris Material Recovery and Transfer Station 1706 Goetz Road Perris, CA 92572	Permitted MRF/TS capacity 3,000 tons per day (tpd)	Process minimum 150 tpd of post-MRF MSW. This tonnage represents a single-line system. CR&R is considering expanding to 2-line system at 300 tpd, with possible expansion to 1,000 tpd.	82 percent by weight of post MRF MSW	Biogas to be used in a fuel cell and/or microturbine to create electricity and/or upgrade to pipeline quality biomethane     Digestate, a compost-like material produced through the anaerobic digestion process (suitable as a soil amendment)	Grants/loans- 16 months, permitting- 24 months, operational - 48 months	City of Perris SCAQMD Santa Ana RWQCB Riverside County Health Dept Cal Recycle
International Environmental Solutions (Lead Project Developer)	Pyrolysis 1) Recyclables removed 2) Post-MRF MSW is dried and shredded 3) Post-MRF MSW is fed into pyrolytic gasifier 4) Syngas is produced, then combusted in a thermal oxidizer that is regulated with air emissions control equipment	Burrtec Waste Industries, Inc Robert A Nelson Transfer Station and Material Recovery Facility 1830 Agua Mansa Road Rubidoux, CA 92509	Permitted MRF/TS capacity 4,000 tpd	Process initial amount of 184 tpd post-MRF MSW, with possible expansion to 1,000 tpd.	93 percent by weight of post MRF MSW	Syngas to be used in a fuel cell and/or microturbine to create electricity and/or transportation-grade biofuels	Grants/loans- 16 months, permitting- 24 months, operational - 48 months	County of Riverside SCAQMD Santa Ana RWQCB Riverside County Dept of Health Cal Recycle
Entech Renewable Energy Solutions	Pyrolysis/Gasification 1) Recyclables removed 2) Post-MRF MSW is dried 3) Post-MRF MSW is gasified and injected with air for production of syngas 4) Syngas is produced, then used to fuel a boiler, which powers a steam turbine for electricity generation. Air emissions control equipment is used.	Rainbow Disposal Company, Inc (Lead Project Developer) Rainbow Disposal 17121 Nichols St Huntington Beach, CA 92647	Permitted MRF/TS capacity 4,000 tpd	Process 360 tpd of post- MRF MSW, with possible expansion to 1,000 tpd.	94 percent by weight post- MRF MSW	Syngas to be used in a fuel cell and/or microturbine to create electricity and/or transportation-grade biofuels	Grants/loans- 16 months, permitting- 24 months, operational - 48 months	City of Huntington Beach SCAQMD Santa Ana RWQCB Orange County Health Care Agency Cal Recycle

# MEMORANDUM OF UNDERSTANDING FOR A CONVERSION TECHNOLOGY DEMONSTRATION FACILITY BY THE COUNTY OF LOS ANGELES AND RAINBOW DISPOSAL COMPANY, INC

This Memorandum of Understanding for a Conversion Technology Demonstration Facility ("Memorandum of Understanding") is entered into by and between Rainbow Disposal Company, Inc., a California corporation ("Rainbow") and the County of Los Angeles, a subdivision of the State of California ("County") on this \_\_\_\_day of \_\_\_\_, 2010.

## **RECITALS**

WHEREAS, conversion technologies include thermal (non-incineration), biological and chemical processes capable of converting waste into renewable energy, biofuels and other products,

WHEREAS, the County and Rainbow favor conversion technologies for their ability to reduce dependence on landfilling and waste exportation beyond jurisdictional boundaries, create green-collar jobs, produce renewable energy, biofuels, and useful products, and reduce emissions including greenhouse gases;

WHEREAS, the County and Rainbow desire the development of a demonstration facility to display the technical, environmental, and economic benefits of conversion technologies in a local setting and to provide an impetus for future projects,

WHEREAS, in 1999 the Los Angeles County Board of Supervisors ("Board of Supervisors") adopted recommendations from the Los Angeles County Solid Waste Committee/Integrated Waste Management Task Force ("Task Force") to implement additional waste diversion programs, support efforts to enhance in-County disposal capacity, and promote alternatives to disposal at landfills. At the direction of the Board of Supervisors, the Los Angeles County Department of Public Works is taking steps to implement those recommendations,

WHEREAS, in 2004 the Board of Supervisors created the Alternative Technology Advisory Subcommittee ("Subcommittee") as a subcommittee of the Task Force;

WHEREAS, in 2004, the County, in concert with the Subcommittee, commenced a four-phase process ("Process"), of which Phase I of the Process consisted of assessing conversion technology companies around the world and identifying potential host sites in Southern California capable of and willing to host waste conversion demonstration facilities,

WHEREAS, in 2006, the County, in concert with the Subcommittee, commenced Phase II of the Process by identifying technology companies and host sites in Southern California capable and willing to host waste conversion demonstration facilities,

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WHEREAS, on January 17, 2008, the County solicited, also a part of Phase II, written offers from various parties, including Rainbow, through a Request for Offers ("RFO"), a copy of which is attached as Exhibit 1 and incorporated herein by this reference, for the development of one or more conversion technology demonstration facilities to be constructed in Southern California and each to be located at or adjacent to a material recovery facility ("MRF"),

WHEREAS, Rainbow is an employee-owned company with over 50 years experience in the solid waste collection, processing, recycling, and transfer industry;

WHEREAS, Rainbow owns and operates a fully permitted MRF and Transfer Station ("TS") located in Huntington Beach, California (the "Huntington Beach MRF/TS"),

WHEREAS, on August 15, 2008 Rainbow responded to the RFO by submitting to the County that certain "Offer for Los Angeles County Conversion Technology Demonstration Facility" (the "Offer"), a copy of which is attached here as Exhibit 2B and incorporated herein by this reference ("the Offer"),

WHEREAS, the Offer states that Rainbow will develop and install a project (the "Project") that employs the *Entech Pyrolytic Gasifier* and related equipment designed to process waste residuals and/or post-recycled municipal solid waste that would otherwise be landfilled from the Huntington Beach MRF/TS (the "Feedstock") at a minimum rate of 360 tons per day ("tpd"), but no more than 1,000 tpd,

WHEREAS, the County desires to accept the Offer and commence Phase III of the Process and the Parties desire to develop the Project pursuant to the terms and conditions of this Memorandum of Understanding,

NOW, THEREFORE, for full and adequate consideration, hereby acknowledged by the Parties, the Parties agree as follows

#### 1. Project Description

## It is agreed by the parties that the Project will:

- 1 1 process a minimum of 360 tpd of Feedstock, but no more than 1,000 tpd, once operational,
- 1.2 utilize the Entech Waste to Gas Renewable Energy System ("WtGS"), consisting of Feedstock pre-processing systems, an Entech Pyrolytic Gasifier for production of syngas, a syngas fueled boiler for combustion of the syngas, a waste heat recovery for operation of a steam turbine, and air pollution control technologies for the reduction of emissions from combustion of syngas,
- 1 3 be located at the Huntington Beach MRF/TS,



- 1.4 be integrated with the Huntington Beach MRF/TS to take advantage of the beneficial synergies of co-location;
- 1 5 be modular in design to facilitate possible expansion in future years to the extent site space allows,
- 16 be operational at least eighty-five percent (85%) of the time on an average annual basis,
- 1.7 be capable of diverting from landfill disposal a minimum of ninety-four percent (94%) by weight of MRF residuals and/or post-recycled municipal solid waste feedstock;
- 1 8 be a "flagship facility" by maximizing the use of sustainable construction and operation practices such as onsite recycling/reuse, energy conservation, LEED certification, and other similar practices; and the Project must also be designed to facilitate public tours and education programs, and
- 1 9 operate continuously by processing at minimum 360 tpd of Feedstock for a minimum of five (5) years.

## 2. Financing For Project

Rainbow shall be responsible for financing one hundred percent (100%) of the cost of designing, constructing and operating the Project. Notwithstanding the foregoing, for a period of sixteen (16) calendar months following the date of this Memorandum of Understanding, the County and Rainbow will jointly attempt to obtain Grants and/or Loans for the Project (the "Grants and/or Loans") from third parties in the total amount of at least \$10,000,000 to be applied against the cost of construction and completing the Project, provided that the County does not in any way promise or represent that the said efforts will be successful or yield any result

In applying for the Grants and/or Loans, the Parties will seek to obtain amounts to reimburse the County's costs associated with the Project Any funds remaining from Grants and/or Loans beyond the costs associated with consultant services for the Project. Any funds remaining from Grants and/or Loans beyond the costs associated with constructing the project shall be applied to reimburse the County's costs incurred in connection with the Project and this Memorandum of Understanding, to the maximum feasible

Notwithstanding the foregoing, should the County or Rainbow be unable to obtain Grants and/or Loans in the amount of at minimum \$ 10,000,000 within sixteen (16) calendar months following the date of this Memorandum of Understanding, each party shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written



notice to the other Party, without any further obligation to either party except as expressly provided herein. The County recognizes that financial institutions funding this Project may require Rainbow to secure a guaranteed wastestream of no less than 1,000 tons per day delivered at a tipping fee of \$75 per ton, for no less than one hundred and eighty (180) months beginning on the first day of operation of the Project. Should Rainbow be unable to meet this requirement or secure alternate financing that does not require a guaranteed wastestream, within sixteen (16) months from the date of this Memorandum of Understanding, each Party shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written notice to the other Party, without any further obligation to any Party.

- 2.2 Acceptance of any Grants and/or Loan funds by the County under this Memorandum of Understanding shall remain subject to approval by the Board of Supervisors.
- 2.3. Rainbow will use all monies received as Grants and/or Loans for the Project, including, without limitation, funds from the State and Federal governments, exclusively to cover the costs of constructing and completing the Project and for no other purpose. Upon completion of the Project, Rainbow shall provide the County with a complete written accounting of all expenditures relating to the Project, including an accounting of any and all Grants and/or Loans received for the Project.
- 2.4 Under no circumstances shall the County be held responsible for any repayment or any other obligation relating to any Grants and/or Loans, for which Rainbow shall be solely and completely responsible for said repayment and obligations at all times.

#### 3. Obligations of Rainbow

In addition to all of Rainbow's other obligations stated elsewhere in this Memorandum of Understanding, Rainbow shall, at its sole cost and expense

- 3 1 be responsible for owning, developing, operating, and maintaining the Project, strictly as described in Section 1 above, subject to provisions in this Memorandum of Understanding and the terms of the Offer and under no circumstances shall the County be deemed responsible as owner or operator of the Project;
- 3 2 design, develop and complete all activities relating to the Project in full compliance with all requirements in the RFO, all statements in the Offer that do not contradict or are inconsistent with the RFO or this Memorandum of Understanding, and all Federal, State, County, and local laws and regulations;
- 3.3 secure all necessary Feedstock for the Project.

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- 3.4 use best efforts to minimize the amount of materials sent to landfills from the Project;
- work, to maximize energy efficiency of the Project and Huntington Beach MRF/TS and pursue funding to enhance energy efficiency features of the Project and Huntington Beach MRF/TS,
- 3.6 use all syngas produced by the Project for beneficial purposes, which may include use in a fuel cell and/or microturbine to create electricity and or transportation grade biofuels, and/or for any other beneficial use as approved by the County;
- 3 7 operate a "flagship facility" as defined in Section 1.8 of this Memorandum of Understanding,
- 3.8 obtain all permits and approvals that are necessary to allow the Project to become and remain fully operational as contemplated in this Memorandum of Understanding within twenty-four (24) months of the date of this Memorandum of Understanding, (Permits to include, but not be limited to, the Conditional Use Permit from the City of Huntington Beach, Non Disposal Facility Element determination by the City of Huntington Beach, and Solid Waste Facilities Permit modification from the local enforcement agency with the concurrence of the California Department of Resources Recycling and Recovery),
- 3.9 fully comply with all requirements of the California Environmental Quality Act (CEQA), including the completion of the appropriate environmental documents, and prepare and submit to the appropriate agencies the appropriate environmental documentation as required under CEQA prior to the acceptance by the County of any Grants or Loans related to the Project,
- 3 10 maintain all permits for the development and operation of the Project in good standing, including, without limitation, all permits,
- 3 11.use best efforts to ensure that the Project becomes operational, as defined in Section 1 1, within forty-eight (48) months of the date of this Memorandum of Understanding;
- 3.12 provide the County and its agents with access to the Project for the purpose of conducting public tours upon mutual agreement, at a minimum of four (4) tours per year, for the term of this Memorandum of Understanding, provided that all participants in public tours shall abide by rules of conduct specified by Rainbow and when on the Project premises sign a reasonable release of liability form as agreed upon by the Parties, and



3 13 provide the County with a written annual Project report, in a form acceptable to the County that includes a summary of permitting efforts, CEQA efforts and facility performance data. Facility performance data shall include at a minimum emissions, total facility throughput, diversion from disposal, and net and gross energy output.

## 4. Obligations of County

In addition to all other obligations stated elsewhere in this Memorandum of Understanding, during the design and construction of the Project, the County shall:

- 4 1. provide consultant and in-kind assistance to Rainbow in obtaining Grants and/or Loans, to be secured only to fund the Project, such assistance to include, but be not limited to, identification of potential Grants and/or Loans on a County (as deemed reasonable by the County, including but not limited to assistance from the newly formed Los Angeles County Office of Sustainability), State and Federal basis to assist in payment of project development costs, construction costs and operating costs; application preparation for available State and Federal Grants and/or Loans; and assistance in obtaining Grants and/or Loans,
- 4.2 provide consultant service and in-kind technical assistance to Rainbow as deemed necessary by both parties,
- 4.3. provide a public statement, acceptable to all parties, if requested by Rainbow, to the extent that the County has reviewed the Entech technology and deems it an effective alternative to landfilling and transformation,
- 4.4 provide consultant and in-kind services to educate the public about the Project in an amount of up to \$100,000, including publicizing the Project, developing web and e-communications regarding the Project, and seeking additional media coverage, as appropriate with all public education and promotional efforts to be coordinated between the County and Rainbow and require mutual agreement;
- 4 5. continue its efforts at the State level to have conversion technology facilities statutorily recognized as an "In-state renewable electricity generation facility" pursuant to the Public Resource Code Section 25741 and eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to Public Utilities Code Sections 399 11-399.20, provided that, notwithstanding the forgoing, the County does not in any way promise or represent that said efforts will be successful or yield any result; and
- 4 6 continue its efforts at the State level to have conversion technologies statutorily recognized as beneficial use rather than disposal, for the purposes of compliance with the California Integrated Waste Management Act of 1989



- ("AB 939"), provided that, notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result.
- Notwithstanding the RFO or any other statements or communications by the County or its employees and agents, all obligations of the County relating to the Project are contained in the above Section 2 and in this Section 4 of this Memorandum of Understanding

## 5. Term of Memorandum of Understanding

- This Memorandum of Understanding shall remain valid for the time period that the Project remains operational Rainbow shall maintain the Project in operation pursuant to the terms of this Memorandum of Understanding for at minimum five (5) years from the date the Project commences processing at a minimum capacity of 360 tpd of Feedstock.
- 5.2. In addition to other remedies available to the County in law, equity, or under this Memorandum of Understanding, the County shall have the option, at its sole and absolute discretion, to terminate this Memorandum of Understanding and end the County's participation or affiliation with the Project if Rainbow breaches this Memorandum of Understanding and fails to cure the breach within thirty (30) calendar days from the date the County notifies Rainbow of the breach. Furthermore, if such a breach occurs, the County reserves the right to demand reimbursement for all costs incurred by the County relating to the Project from the date this Memorandum of Understanding is signed, in which event Rainbow will be responsible to reimburse the County for said costs within 90 days of the County's demand for reimbursement. Failure of the County to provide notice of a breach shall not constitute a waiver of any rights of County under this Memorandum of Understanding, under law, or in equity.
- 5.3. The Parties recognize that certain emission reduction credits (ERCs) issued by the South Coast Air Quality Management District ("District") may be required in order to receive necessary permits to operate the Project. Within sixty (60) days of the signing of this Memorandum of Understanding, Rainbow will notify the County in writing if the Project requires ERCs, and if so, indicating how the Project will procure the necessary ERCs and the estimated cost to obtain the ERCs for the Project Each Party shall have the option to terminate this Memorandum of Understanding by providing 30 days' prior written notice to the other Party, without any further obligation to any Party if the Project is unable to secure ERCs within twenty-four (24) months of the date of this Memorandum of Understanding
- 5.4. This Memorandum of Understanding supersedes the Offer Notwithstanding the foregoing, without excusing Rainbow from any obligation in this

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Memorandum of Understanding, Rainbow shall make a best effort to fulfill the terms of the Offer

- 5.5. Should the Project be unable to qualify as an "In-state renewable electricity generation facility" pursuant to the Public Resource Code Section 25741 and eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to Public Utilities Code Sections 399 11-399.20 and if eligibility under RPS is a condition imposed by the third party lender as a condition for the Project's financing, each of the County or Rainbow shall have the option to terminate this Memorandum of Understanding providing thirty (30) days' prior written notice to the all Parties, without further obligation to any Party
- The County shall have the right to use the Project name, the Southern California Conversion Technology Demonstration Project, non-proprietary data, and information for educational and outreach purposes following any termination of this Memorandum of Understanding or following termination of the Project.

### 6. Indemnification of County

- 6 1. Rainbow will indemnify, defend and hold harmless the County, its elected officials, employees, and agents from any and all actual or alleged claims, demands, causes of action, liability, loss, damage, or injury to property or persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental agency. relating to, arising out of, or incident to the Project, including, without limitation, relating to any Grants or Loans, failure or alleged failure to obtain from third parties any necessary Permits or necessary intellectual or other property rights for the Project, failure to comply with any Permit or with CEQA, in connection with the design, operation and/or maintenance of the Project, or relating to any acts, omissions, negligence, or willful misconduct of Rainbow or its employees, contractors, or agents in connection with the Project, including, without limitation, relating to its design, operation and/or maintenance, for which Rainbow shall remain fully responsible, and including under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and pursuant to the California Carpenter-Presley-Tanner Hazardous Substance Account Act.
- 6.2. This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorney's fees, and related costs or expenses, and the reimbursement of County, its elected officials, employees, and/or agents for all legal expenses and costs incurred by each of them and shall survive the expiration or termination of this Memorandum of Understanding.



## 7. Representations and Warranties

- 7 1 Rainbow hereby represents and warrants to the County that Rainbow has, or will have at the time of entering into the Memorandum of Understanding, all sufficient and requisite intellectual property or other requisite rights to the technologies it will employ for the Project, including, without limitation, in connection with the WtGS
- Nothing in this Memorandum of Understanding causes Rainbow to breach any agreement between Rainbow and any third party Nothing in this Memorandum of Understanding would, upon mutual consent of Rainbow and the County, preclude a third party from participating in the Project, including but not limited to other jurisdictions within Los Angeles County and other public agencies, for the purpose of the advancing the successful development of the Project.

#### 8. Confidential Information

- 8.1 For purposes of this Memorandum of Understanding, "Confidential Information" shall mean information designated as confidential in writing by Rainbow, at the time such information is disclosed by Rainbow to the County, and that satisfies all of the following criteria
  - 8.1 1 Rainbow's following proprietary information trade secrets, customer lists, business plans, written strategy statements, written forecasts, proprietary technology to which Rainbow holds exclusive intellectual property rights (including computer software and hardware products, data bases, data processing and communications networking systems), and
  - 8.1.2 information is in writing and is marked and designated as confidential' in writing by Rainbow, whether by letter, proprietary stamp or legend, prior to or at the time such information is provided by Rainbow to the County; and
  - 8 1 3 information is not subject to disclosure by law, order or legal mandate, including under the California Public Records Act; and
  - 8 1.2 information is not provided, available or accessible to third parties, the public, or the County from sources other than Rainbow
- 8.2. Unless otherwise acceptable to Rainbow, the County shall restrict distribution of Confidential Information to third-parties outside of the County for needs only in furtherance of this Memorandum of Understanding and related purposes and who have been apprised of the confidential nature of such information in accordance with the terms of this Memorandum of Understanding



- 8.3 Notwithstanding any other provision in this Agreement, the obligations of the County in this Section 8 shall not apply to the extent that such information meets *any* of the following conditions
  - 8.3 1 is part of the public domain or becomes generally known to third parties on a non-confidential basis, through no breach by the County of this Memorandum of Understanding,
  - 8.3.2 was known by or disclosed to the County prior to receipt from Rainbow without any obligation to keep it confidential;
  - 8.3.3 was independently developed by or on behalf of the County; or
  - 8.3.4 Rainbow consents to the disclosure of such Confidential Information by the County on a non-confidential basis.
- 8.4. If the County or any of its agents shall be under a legal obligation in any administrative or judicial circumstance to disclose any Confidential Information, the County shall make a reasonable attempt to give Rainbow prompt notice thereof (unless there is a legal obligation to the contrary) so that Rainbow may seek a protective order or other appropriate remedy, at Rainbow's sole cost and expense In the event that such protective order is not obtained prior to the date the County may be obligated to disclose the information, the County shall furnish only that portion of the information that is required under said administrative or judicial circumstance

#### 9. General Provisions

9 1 Governing Law, Venue. This Memorandum of Understanding shall be governed by the laws of the State of California, without regard to the conflicts of laws principles thereof Each of the Parties hereby irrevocable and unconditionally consents to submit to the exclusive jurisdiction of the courts of the State of California for any actions, suits or proceedings arising out of or relating to this Memorandum of Understanding (and each of the Parties agree not to commence any action, suit or proceeding relating thereto except in such courts), and further agrees that service of any process, summons, notice or document by U S registered mail to the other party's address set forth in the first paragraph of this Memorandum of Understanding shall be effective service of process for any action, suit or proceeding brought in any such court. Each of the Parties hereby irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Memorandum of Understanding in the courts of the State of California or the United States America located in the State of California and hereby further irrevocably and unconditional waives and agrees not to plead or claim in any such



- court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum
- 9.2 Each Party to this Memorandum of Understanding shall do all things and execute and deliver all instructions and documents necessary to fulfill and effect the provisions of this Memorandum of Understanding and protect the respective rights of the Parties to this Memorandum of Understanding
- 9.3. No waiver by any Party of any breach of any term or provision of this Memorandum of Understanding shall be construed to be, nor be a waiver of any preceding, concurrent or succeeding breach of the same, or any other term or provision hereof No waiver shall be binding unless in writing and signed by the Party to be charged or held bound In cases purporting to charge or hold bound the County, the signature must be obtained from the Board of Supervisors.
- 9.4 This Memorandum of Understanding shall be deemed as drafted by all of the Parties acting together, so as not to be construed against any of them.
- 9.5 This Memorandum of Understanding and its Exhibits contain all the terms and conditions agreed upon by the Parties to this Memorandum of Understanding regarding the subject matter of this Memorandum of Understanding Any prior or contemporaneous agreements, promises, negotiations, or representations, either oral or written, relating to the subject matter of this Memorandum of Understanding, not expressly set forth in this Memorandum of Understanding, are of no force or effect.
- 9 6. Should any of the provisions herein be determined to be invalid by a court or government agency of competent jurisdiction, it is agreed that such determination shall not affect the enforceability of other provisions herein.
- 97. This Memorandum of Understanding shall be governed by the laws of the State of California.
- 9 8. This Memorandum of Understanding may be executed in counterpart originals with the same force and affect as if a single original had been executed by all of the Parties. Each counterpart signature shall be deemed as an integral part of the original Memorandum of Understanding This Memorandum of Understanding may be executed via telefacsimile, followed immediately with executed original signatures to all Parties
- 9 9 Rainbow shall be prohibited from assigning this Memorandum of Understanding or any portion hereof without the County's prior express written consent executed by the Board of Supervisors or its designee



- 9.10 Each provision of this Memorandum of Understanding is contractual in nature and not merely a recital
- 9 11 Time is of essence with respect to each of the provisions of this Memorandum of Understanding.
- 9 12 This Memorandum of Understanding shall bind the County only upon the approval and upon it being duly executed by the Board of Supervisors
- 9 13. Any notice required or permitted to be given under this Memorandum of Understanding shall be in writing and shall be deemed to have been given when deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows

If to Rainbow.

MR. BRUCE SHUMAN
PRESIDENT/CEO
RAINBOW DISPOSAL COMPANY, INC.
P.O. BOX 1026
HUNTINGTON BEACH, CA 92647

If to the COUNTY

MR. COBY SKYE, PE CIVIL ENGINEER LOS ANGELES COUNTY DEPT. OF PUBLIC WORKS, ENVIRONMENTAL PROGRAMS DIVISION 900 SOUTH FREMONT AVE, ANNEX 3RD FLOOR ALHAMBRA, CA 91803

or such other address as either party may from time to time specify in writing to the other. Duly mailed notices as aforesaid shall be effective upon the earlier of actual receipt or seventy-two (72) hours after deposit in the mail

- 9 14 This Memorandum of Understanding shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors, heirs, administrators, and assigns.
- 9 15 The Parties hereby mutually agree that this Memorandum of Understanding shall not operate to create the relationship of partnership, joint venture, or agency between the COUNTY, Rainbow Rainbow contractors for the Project are exclusively and solely under the control and dominion of Rainbow Nothing herein shall be deemed to make Rainbow or its contractors an agent or contractor of the County



- In the event that provisions of any attached appendices or exhibits conflict in any way with the provisions set forth in this Memorandum of Understanding, the language, terms and conditions contained in this Memorandum of Understanding shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the obligations and liabilities of Rainbow
- 9 17 Each Part acknowledges to have either consulted with legal counsel regarding the Party's rights and obligations contained in this Memorandum of Understanding or to fully understand the terms herein and to have determined to have to need to consult with legal counsel.
- 9 18 Nothing in this Memorandum of Understanding shall deem the Parties to be partners, joint venturers or agents with or of each other
- 9 19 Each person executing this Memorandum of Understanding on behalf of Rainbow represents and warrants to have the requisite authority to execute this Memorandum of Understanding and to bind Rainbow

IN WITNESS WHEREOF, the parties hereto have Understanding to be executed by their representative COUNTY OF LOS ANGELES onand by	e officers, duly authorized by the
	COUNTY OF LOS ANGELES
	By Director of Public Works
APPROVED AS TO FORM	
County Counsel	
By: Deputy	RAINBOW DISPOSAL CO, INC
	A California Corporation  By: Bruce Shuman
	Its: President By: Jerry Moffatt Its: Secretary



Note: Exhibit 2B is on file with the Department of Public Works

## MEMORANDUM OF UNDERSTANDING FOR A CONVERSION TECHNOLOGY DEMONSTRATION FACILITY BY THE COUNTY OF LOS ANGELES AND CR&R INCORPORATED

This Memorandum of Understanding for a Conversion Technology Demonstration Facility ("Memorandum of Understanding") is entered into by and between CR&R Incorporated, a California corporation ("CR&R") and the County of Los Angeles, a subdivision of the State of California ("County") on this \_\_\_\_\_day of \_\_\_\_\_, 2010

## **RECITALS**

WHEREAS, conversion technologies include thermal (non-incineration), biological, and chemical processes capable of converting waste into renewable energy, biofuels, and other products,

WHEREAS, the County and CR&R favor conversion technologies for their ability to reduce dependence on landfilling and waste exportation beyond jurisdictional boundaries, create green-collar jobs, produce renewable energy, biofuels, and useful products, and reduce emissions including greenhouse gases,

WHEREAS, the County and CR&R desire to develop a demonstration facility to display the technical, environmental, and economic benefits of conversion technologies in a local setting, and to provide an impetus for future projects,

WHEREAS, in 1999 the Los Angeles County Board of Supervisors ("Board of Supervisors") adopted recommendations from the Los Angeles County Solid Waste Committee/Integrated Waste Management Task Force ("Task Force") to implement additional waste diversion programs, support efforts to enhance in-County disposal capacity, and promote alternatives to disposal at landfills and, at the direction of the Board of Supervisors, the Los Angeles County Department of Public Works implemented those recommendations,

WHEREAS, in 2004 the Board of Supervisors created the Alternative Technology Advisory Subcommittee ("Subcommittee") as a subcommittee of the Task Force,

WHEREAS, in 2004 the County, in concert with the Subcommittee, commenced a four-phase process ("the Process"), of which Phase I of the Process consisted of assessing conversion technology companies around the world and identifying potential host sites in Southern California capable of and willing to host waste conversion demonstration facilities.

WHEREAS, in 2006 the County, in concert with the Subcommittee, commenced Phase II of the Process identifying technology companies and host sites in Southern California capable and willing to host waste conversion demonstration facilities,

WHEREAS, on January 17, 2008, the County solicited, also as part of Phase II, written offers from various parties, including CR&R, through a Request for Offers

("RFO"), a copy of which is attached as Exhibit 1 and incorporated herein by this reference, for the development of one or more conversion technology demonstration facilities to be constructed in Southern California each to be located at or adjacent to a material recovery facility ("MRF");

Robert Library Country & Little Country

WHEREAS, CR&R is a private solid waste management and recycling firm asserting the exclusive rights for Southern California to that certain conversion technology called the Arrowbio wet MRF and digester system technology (the "Arrowbio Technology"),

WHEREAS, CR&R owns and operates a fully permitted MRF and Transfer Station ("TS") located in Perris, California;

WHEREAS, Arrow Ecology developed the Arrowbio Technology and related equipment;

WHEREAS, on August 14, 2008 CR&R responded to the RFO by submitting to the County that certain "Response to Los Angeles County Request for Offers for Conversion Technology Demonstration Facility" (the "Offer"), a copy of which is attached here as Exhibit 3B and incorporated herein by this reference ("the Offer"),

WHEREAS, the Offer states that CR&R will develop and install a project that employs the Arrowbio Technology designed to process waste residuals from CR&R's MRF and/or Transfer Station ("TS") and/or post-recycled municipal solid waste that would otherwise be landfilled (the "Feedstock") at a minimum rate of 150 tons per day ("tpd"), with a goal of 300 tpd, but no more than 1000 tpd (the "Project"),

WHEREAS, the County desires to accept the Offer and commence Phase III of the Process, and both the County and CR&R desire to develop the Project pursuant to the terms and conditions of this Memorandum of Understanding,

NOW, THEREFORE, for full and adequate consideration, hereby acknowledged by the Parties, the Parties agree as follows.

### 1. Project Description

It is agreed by the parties that the Project will:

- 1.1 process a minimum of 150 tpd of Feedstock with a goal of eventual operation at 300 tpd but no more than 1000 tpd, once operational;
- 1.2 utilize the ArrowBio Technology specially designed for CR&R, consisting of an integration of a water-based separation/preparation and advanced anaerobic digestion process,
- 1 3 be located at CR&R's MRF/TS in Perris, California, a fully permitted solid waste facility;

1.4. be integrated with CR&R's Stanton and Perris MRF/TS, including using feedstock from said facilities and to take advantage of the beneficial synergies of co-location,

- 1.5 be modular in design to facilitate possible expansion in future years to the extent site space allows,
- 1 6 be operational at least eighty-five percent (85%) of the time on an average annual basis,
- 1 7 be capable of diverting from landfill disposal a minimum of eighty-two percent (82%) by weight of MRF residuals and/or post-recycled municipal solid waste used as feedstock;
- 1 8 be a "flagship facility", by maximizing the use of sustainable construction and operation practices such as onsite recycling/reuse, energy conservation, LEED certification, and other similar practices, and the Project must also be designed to facilitate public tours upon operation of the Project; and
- 1.9 operate continuously by processing at a minimum of 150 tpd for a minimum of five (5) years

## 2. Financing for the Project

CR&R shall be responsible for financing one hundred percent (100%) of the cost of designing, constructing, and operating the Project. Notwithstanding the foregoing, for a period of sixteen (16) calendar months following the date of this Memorandum of Understanding, the County and CR&R will jointly attempt to obtain Grants and/or Loans from third parties (the "Grants and/or Loans") for the Project in the total amount of at least \$7,500,000, to be applied against the cost of construction and completing the Project, provided that the County does not in any way promise or represent that said efforts will be successful or yield any result.

In applying for the Grants and/or Loans, the County and CR&R will seek to obtain amounts to reimburse the County's costs associated with consultant services for the Project. Any funds remaining from Grants and/or Loans beyond the costs associated with constructing the Project shall be applied to reimburse the County's costs incurred in connection with the Project and this Memorandum of Understanding to the maximum extent feasible

2 1 Notwithstanding the foregoing, should the County and CR&R be unable to obtain Grants and/or Loans in the amount of \$7,500,000 within sixteen (16) months from the date of this Memorandum of Understanding, each party shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written notice to the other Party, without any further obligation to either party except as expressly provided herein

2.2 Acceptance of any Grant and/or Loans funds by the County under this Memorandum of Understanding shall remain subject to approval by the Board of Supervisors.

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- 2.3 CR&R will use all monies it receives as Grants and/or Loans for the Project, including, without limitation, funds from the State and Federal governments, exclusively to cover the costs of completing the Project and for no other purpose Upon completion of the Project, CR&R shall provide the County with a complete written accounting of all expenditures relating to the Project, including an accounting of any and all Grants and/or Loans received for the Project.
- 2.4 Under no circumstances shall the County be held responsible for any repayment or any other obligation relating to any Grants and/or Loans CR&R shall be solely and completely responsible for said repayment and obligations at all times
- 2.5 Notwithstanding any other provision, if either the County or CR&R terminates this Memorandum of Understanding under Sections 2 1, 5 3, or 5 5, the County reserves the right to demand reimbursement from CR&R for all costs incurred by the County relating to the Project or this Memorandum of Understanding from the date this Memorandum of Understanding is signed, in which event CR&R will be responsible to reimburse the County for said costs within 90 days of the County's demand for reimbursement

## 3. Obligations of CR&R:

In addition to all of CR&R's other obligations stated elsewhere in this Memorandum of Understanding it is intended by the parties that CR&R shall, at its sole cost and expense:

- 3.1 be responsible for owning, developing, operating, and maintaining the Project, strictly as described in Section 1 above, subject to provisions in this Memorandum of Understanding and the terms of the Offer and under no circumstances shall the County be deemed responsible as owner or operator of the Project;
- 3.2. design, develop and complete all activities relating to the Project in full compliance with all requirements in the RFO, all statements in the Offer that do not contradict or are inconsistent with the RFO or this Memorandum of Understanding, and all Federal, State, County, and local laws and regulations,
- 3.3. secure all necessary Feedstock for the Project;
- 3 4 use best efforts to minimize the amount of materials sent to landfills from the Project;

3 5 ensure products and byproducts of this Project, other than the residual materials, are used for beneficial purposes such as soil amendment or similar use;

- 3 6 work to maximize the energy efficiency of the Project and Perris MRF/TS and pursue funding to enhance energy efficiency features of the Project and Perris MRF/TS,
- 3 7 use all biogas produced by the Project for beneficial use, which may include use in a fuel cell and/or microturbine to create electricity and/or a biogas upgrade system to upgrade the methane rich biogas produced in the anaerobic digestion process to produce pipeline quality biomethane and/or transportation grade biofuels, and/or for any other beneficial use of approved by the County;
- 3 8 use best efforts to market byproducts from the Project such as *digestate*, a compost-like material produced through the anaerobic digestion process,
- 3.9 use best efforts to recycle or reuse all water produced through the Project for beneficial purposes, and avoid disposing of said water via the public sewer system;
- 3 10 operate the Project as a "flagship facility" as defined in Section 1.8 of this Memorandum of Understanding,
- 3.11 obtain all permits and approvals that are necessary to allow the Project to become and remain fully operational as contemplated in this Memorandum of Understanding within twenty-four (24) months of the date of this Memorandum of Understanding, (Permits to include, but not be limited to, the Conditional Use Permit from the City of Perris, Non Disposal Facility Element determination by the City of Perris, and Solid Waste Facilities Permit modification from the local enforcement agency with the concurrence of the California Department of Resources Recycling and Recovery),
- 3.12. fully comply with all requirements of the California Environmental Quality Act (CEQA), including the completion of the appropriate environmental documents, and prepare and submit to the appropriate agencies the appropriate environmental documentation as required under CEQA prior to the acceptance by the County of any Grants and/or Loans related to the project,
- 3 13. maintain all permits for the development and operation of the Project in good standing, including, without limitation, all permits,

......

- 3.14. use best efforts to ensure that the Project becomes operational, as defined in Section 1.1, within forty-eight (48) months of the date of this Memorandum of Understanding;
- 3 15 provide the County and its agents with access to the Project for the purpose of conducting public tours, upon mutual agreement, at a minimum of four (4) tours per year, for the term the Memorandum of Understanding, provided that all participants in public tours shall abide by rules of conduct specified by CR&R and when on the Project premises sign a reasonable release of liability form as agreed upon by the Parties, and
- 3 16 provide the County with a written annual Project report in a form acceptable to the County that includes a summary of permitting efforts, CEQA efforts, and facility performance data. Facility performance data shall include at a minimum, facility emissions, total facility throughput, diversion from disposal, and net and gross energy output.

## 4. Obligations of County

In addition to all other obligations stated elsewhere in this Memorandum of Understanding, during the design and construction of the Project, the County shall

- 4 1 provide consultant services and in-kind assistance to CR&R in obtaining Grants and/or Loans, to be secured only to fund the Project, such assistance to include, but be not limited to, identification of potential Grants and/or Loans on a County (as deemed reasonable by the County, including but not limited to assistance from the newly formed Los Angeles County Office of Sustainability), State, and Federal basis to assist in payment of project development costs, construction costs and operating costs, application preparation for available State and Federal Grants and/or Loans, and assistance in obtaining Grants or Loans,
- 4.2 provide consultant services and in-kind technical assistance to CR&R as deemed necessary by both parties, such technical assistance to include, but be not limited to, development costs for a portion of the design drawings or other related engineering services, provided that the County shall expend no more than \$200,000 for in-kind design assistance to CR&R,
- 4.3. provide a public statement acceptable to both parties, if requested by CR&R, expressing that the County has reviewed the ArrowBio Technology and deems it an effective alternative to landfilling and transformation;
- 4.4 provide consultant and in-kind services to educate the public about the Project in an amount of up to \$100,000, including publicizing the Project, developing web and e-communications regarding the project, and seeking additional media coverage, as appropriate, with all public education and

promotional efforts to be coordinated between the County and CR&R and require mutual agreement;

- 4.5 continue its efforts at the State level to have conversion technology facilities statutorily recognized as an "in-state renewable electricity generation source pursuant to the Public Resources Code Section 25741 and eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to Public Utilities Code Section 399 11-399.20, provided that, notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result;
- 4.6. continue its efforts at the State level to have conversion technologies statutorily recognized as beneficial use rather than disposal, for the purposes of compliance with the California Integrated Waste Management Act of 1989 ("AB 939"), provided that, notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result, and
- 4 7 continue its efforts at the State and Federal levels to seek from the State of California and the United States of America tax credits and/or other incentives for projects such as the Project that utilize biogas produced for beneficial use, provided that, notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result.
- 4 8 Notwithstanding the RFO or any other statements or communications by the County or its employees and agents, all obligations of the County relating to the Project are contained in the above Section 2 and in this Section 4 of this Memorandum of Understanding

## 5. Term of Memorandum of Understanding

- 5.1. This Memorandum of Understanding shall remain valid for the time period that the Project remains operational CR&R shall maintain the Project in operation pursuant to the terms of this Memorandum of Understanding for at minimum five (5) years from the date CR&R commences operation of the Project, processing at a minimum of 150 tpd of Feedstock for the operation of the Project.
- 5 2 In addition to other remedies available to the County in law, equity, or under this Memorandum of Understanding, the County shall have the option, at its sole and absolute discretion, to terminate this Memorandum of Understanding and end the County's participation or affiliation with the Project if CR&R breaches this Memorandum of Understanding and fails to cure the breach within thirty (30) calendar days from the date the County notifies CR&R of the breach. Furthermore, if such a breach occurs, the County reserves the right to demand reimbursement for all costs incurred by

the County relating to the Project from the date this Memorandum of Understanding is signed, in which event CR&R will be responsible to reimburse the County for said costs within 90 days of the County's demand for reimbursement. Failure of the County to provide notice of a breach shall not constitute a waiver of any rights of County under this Memorandum of Understanding, under law, or in equity

- 5 3 The Parties recognize that certain emission reduction credits (ERCs) issued by the South Coast Air Quality Management District ("District") may be required in order to receive necessary permits to operate the Project. Within sixty (60) days of the signing of this Memorandum of Understanding, CR&R will notify the County in writing if the Project requires ERCs, and if so, indicating how the Project will procure the necessary ERCs and the estimated cost to obtain the ERCs for the Project. Each Party shall have the option to terminate this Memorandum of Understanding by providing 30 days' prior written notice to the other Party, without any further obligation to any Party if the Project is unable to secure ERCs within twenty four (24) months of the date of this Memorandum of Understanding.
- 5 4 This Memorandum of Understanding supersedes the Offer Notwithstanding the foregoing, without excusing CR&R from any obligation in this Memorandum of Understanding, CR&R shall make a best effort to fulfill the terms of the Offer.
- 5.5 Should the Project be unable to qualify as an "In-state renewable electricity generation facility" pursuant to the Public Resources Code Section 25741 and therefore not be eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to Public Utilities Code Sections 399 11-399.20 and if eligibility under RPS is a condition imposed by the third party lender as a condition for the Project's financing, each of the County or CR&R shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written notice to the all Parties, without further obligation to any Party except for reimbursement obligations set forth in Section 2.5
- 5.6. The County shall have the right to use the Project name, "The Southern California Conversion Technology Demonstration Project", and nonproprietary data, and information for educational and outreach purposes following any termination of this Memorandum of Understanding or following termination of the Project

## 6. Indemnification of County

6 1 CR&R will indemnify, defend and hold harmless the County, its elected officials, employees, and agents from any and all actual or alleged claims, demands, causes of action, liability, loss, damage, or injury to property or

1

persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental agency, relating to, arising out of, or incident to the Project, including, without limitation, relating to any Grants or Loans, failure or alleged failure to obtain from third parties any necessary Permits or necessary intellectual or other property rights for the Project, failure to comply with any Permit or with CEQA, in connection with the design, operation and/or maintenance of the Project, or relating to any acts, omissions, negligence, or willful misconduct of CR&R or its employees, contractors, or agents in connection with the Project, including, without limitation, relating to its design, operation and/or maintenance, for which CR&R shall remain fully responsible, and including under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and pursuant to the California Carpenter-Presley-Tanner Hazardous Substance Account Act

6.2 This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorneys' fees, and related costs or expenses, and the reimbursement of the County, its elected officials, employees, and/or agents for all legal expenses and costs incurred by each of them and shall survive the expiration or termination of this Memorandum of Understanding

## 7. Representations and Warranties

- 7 1 CR&R hereby represents and warrants to the County that CR&R has, or will have at the time of entering into the Memorandum of Understanding, all sufficient and requisite intellectual property or other requisite rights to the technologies it will employ for the Project, including without limitation in connection with the Arrowbio Technology
- 7.2. Nothing in this Memorandum of Understanding will cause CR&R to breach any agreement between CR&R and any third party Nothing in this Memorandum of Understanding would, upon mutual consent of CR&R and the County, preclude a third party from participating in the Project, including but not limited to other jurisdictions within Los Angeles County and other public agencies, for the purpose of advancing the successful development of the Project.

## 8. Confidential Information

8.1 For purposes of this Memorandum of Understanding, "Confidential Information" shall mean information designated as confidential in writing by CR&R, at the time such information is disclosed by CR&R to the County, and that satisfies all of the following criteria

8.1.1. CR&R's following proprietary information, trade secrets, customer lists, business plans, written strategy statements, written forecasts, proprietary technology to which CR&R holds exclusive intellectual property rights (including computer software and hardware products, data bases, data processing and communications networking systems), and

- 8 1.2 information is in writing and is marked and designated as 'confidential' in writing by CR&R, whether by letter, proprietary stamp or legend, prior to or at the time such information is provided by CR&R to the County; and
- 8.1.3. information is not subject to disclosure by law, order or legal mandate, including under the California Public Records Act; and
- 8 1.4 information is not provided, available or accessible to third parties, the public, or the County from sources other than CR&R.
- 8.2 Unless otherwise acceptable to CR&R, the County shall restrict distribution of Confidential Information to third-parties outside of the County for needs only in furtherance of this Memorandum of Understanding and related purposes and who have been apprised of the confidential nature of such information in accordance with the terms of this Memorandum of Understanding
- 8 3 Notwithstanding any other provision in this Agreement, the obligations of the County in this Section 8 shall not apply to the extent that such information meets *any* of the following conditions.
  - 8.3.1. is part of the public domain or becomes generally known to third parties on a non-confidential basis, through no breach by the County of this Memorandum of Understanding,
  - 8 3.2 was known by or disclosed to the County prior to receipt from CR&R without any obligation to keep it confidential,
  - 8.3.3. was independently developed by or on behalf of the County; or
  - 8.3.4 CR&R consents to the disclosure of such Confidential Information by the County on a non-confidential basis.
- If the County or any of its agents shall be under a legal obligation in any administrative or judicial circumstance to disclose any Confidential Information, the County shall make a reasonable attempt to give CR&R prompt notice thereof (unless there is a legal obligation to the contrary) so that CR&R may seek a protective order or other appropriate remedy, at CR&R's sole cost and expense In the event that such protective order is

not obtained prior to the date the County may be obligated to disclose the information, the County shall furnish only that portion of the information that is required under said administrative or judicial circumstance

#### 9. General Provisions

- 9 1 Governing Law, Venue. This Memorandum of Understanding shall be governed by the laws of the State of California, without regard to the conflicts of laws principles thereof Each of the Parties hereby irrevocable and unconditionally consents to submit to the exclusive jurisdiction of the courts of the State of California for any actions, suits or proceedings arising out of or relating to this Memorandum of Understanding (and each of the Parties agree not to commence any action, suit or proceeding relating thereto except in such courts), and further agrees that service of any process, summons, notice or document by U S registered mail to the other Party's address set forth in the first paragraph of this Memorandum of Understanding shall be effective service of process for any action, suit or proceeding brought in any such court Each of the Parties hereby irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Memorandum of Understanding in the courts of the State of California or the United States America located in the State of California and hereby further irrevocably and unconditional waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum
- 9.2 Each Party to this Memorandum of Understanding shall do all things and execute and deliver all instructions and documents necessary to fulfill and effect the provisions of this Memorandum of Understanding and protect the respective rights of the Parties to this Memorandum of Understanding
- 9 3 No waiver by any Party of any breach of any term or provision of this Memorandum of Understanding shall be construed to be, nor be a waiver of any preceding, concurrent or succeeding breach of the same, or any other term or provision hereof No waiver shall be binding unless in writing and signed by the Party to be charged or held bound. In cases purporting to charge or hold bound the County, the signature must be obtained from the Board of Supervisors.
- 9 4 This Memorandum of Understanding shall be deemed as drafted by all of the Parties acting together, so as not to be construed against any of them
- 9 5 This Memorandum of Understanding and its Exhibits contain all the terms and conditions agreed upon by the Parties to this Memorandum of Understanding regarding the subject matter of this Memorandum of Understanding. Any prior or contemporaneous agreements, promises, negotiations, or representations, either oral or written, relating to the subject

matter of this Memorandum of Understanding, not expressly set forth in this Memorandum of Understanding, are of no force or effect.

- 9.6 Should any of the provisions herein be determined to be invalid by a court or government agency of competent jurisdiction, it is agreed that such determination shall not affect the enforceability of other provisions herein.
- 9 7 This Memorandum of Understanding shall be governed by the laws of the State of California
- 9 8 This Memorandum of Understanding may be executed in counterpart originals with the same force and affect as if a single original had been executed by all of the Parties. Each counterpart signature shall be deemed as an integral part of the original Memorandum of Understanding. This Memorandum of Understanding may be executed via telefacsimile, followed immediately with executed original signatures to all Parties
- 9.9 CR&R shall be prohibited from assigning this Memorandum of Understanding or any portion hereof without the County's prior express written consent executed by the Board of Supervisors or its designee
- 9 10 Each provision of this Memorandum of Understanding is contractual in nature and not merely a recital.
- 9.11. Time is of essence with respect to each of the provisions of this Memorandum of Understanding.
- 9 12 This Memorandum of Understanding shall bind the County only upon the approval and upon it being duly executed by the Board of Supervisors.
- 9.13.Any notice required or permitted to be given under this Memorandum of Understanding shall be in writing and shall be deemed to have been given when deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows.

If to CR&R.

MR. PAUL RELIS SENIOR VICE PRESIDENT CR&R INCORPORATED 11292 WESTERN AVE STANTON, CA 90680 If to the COUNTY

MR. COBY SKYE, PE CIVIL ENGINEER LOS ANGELES COUNTY DEPT. OF PUBLIC WORKS, ENVIRONMENTAL PROGRAMS DIVISION 900 SOUTH FREMONT AVE, ANNEX 3RD FLOOR ALHAMBRA, CA 91803

or such other address as either party may from time to time specify in writing to the other Duly mailed notices as aforesaid shall be effective upon the earlier of actual receipt or seventy-two (72) hours after deposit in the mail.

- 9 14 This Memorandum of Understanding shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors, heirs, administrators, and assigns
- 9 15 The Parties hereby mutually agree that this Memorandum of Understanding shall not operate to create the relationship of partnership, joint venture, or agency between the County and CR&R. CR&R's contractors for the Project are exclusively and solely under the control and dominion of CR&R Nothing herein shall be deemed to make CR&R or its contractors an agent or contractor of the County.
- 9 16 In the event that provisions of any attached appendices or exhibits conflict in any way with the provisions set forth in this Memorandum of Understanding, the language, terms and conditions contained in this Memorandum of Understanding shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the obligations and liabilities of CR&R.
- 9 17 Each Party acknowledges to have either consulted with legal counsel regarding said Party's rights and obligations contained in this Memorandum of Understanding or to fully understand the terms herein and to have determined to have no need to consult with legal counsel.
- 9 18 Nothing in this Memorandum of Understanding shall deem the Parties to be partners, joint venturers or agents with or of each other
- 9 19 Each person executing this Memorandum of Understanding on behalf of CR&R represents and warrants having the requisite authority to execute this Memorandum of Understanding and to bind CR&R.

	ereto have caused this Memorandum of presentative officers, duly authorized by theand by CR&R on
	COUNTY OF LOS ANGELES
	By Director of Public Works
APPROVED AS TO FORM	
County Counsel	
By	
Deputy	CR&R INCORPORATED, A California corporation
	By: Its: President By Its: Secretary

Note: Exhibit 3B is on file with the Department of Public Works

# MEMORANDUM OF UNDERSTANDING FOR A CONVERSION TECHNOLOGY DEMONSTRATION FACILITY BY THE COUNTY OF LOS ANGELES AND INTERNATIONAL ENVIRONMENTAL SOLUTIONS

This	Memorandum	of	Understanding	for	а	Conversion	Techno	logy
<b>Demonstra</b>	tion Facility ("Me	mor	andum of Under	stan	ding	") is entered	into by	and
between In	ternational Envir	onm	ental Solutions,	a Ne	evad	a corporation	("IES")	and
the County	of Los Angeles,	a sul	bdivision of the S	tate	of C	alifornia ("Coเ	unty") on	this
day of	, 2010							

#### **RECITALS**

WHEREAS, conversion technologies include thermal (non-incineration), biological and chemical processes capable of converting waste into renewable energy, biofuels and other products,

WHEREAS, the County and IES favor conversion technologies for their ability to reduce dependence on landfilling and waste exportation beyond jurisdictional boundaries, create green-collar jobs, produce renewable energy, biofuels, and useful products, and reduce emissions including greenhouse gases,

WHEREAS, the County and IES desire the development of a demonstration facility to display the technical, environmental, and economic benefits of conversion technologies in a local setting and to provide an impetus for future projects,

WHEREAS in 1999 the Los Angeles County Board of Supervisors ("Board of Supervisors") adopted recommendations from the Los Angeles County Solid Waste Committee/ Integrated Waste Management Task Force ("Task Force") to implement additional waste diversion programs, support efforts to enhance in-County disposal capacity, and promote alternatives to disposal at landfills. At the direction of the Board of Supervisors, the Los Angeles County Department of Public Works is taking steps to implement those recommendations,

WHEREAS in 2004 the Board of Supervisors created the Alternative Technology Advisory Subcommittee ("Subcommittee") as a subcommittee of the Task Force:

WHEREAS, in 2004, the County, in concert with the Subcommittee, commenced a four-phase process ("the Process") of which Phase I of the Process consisted of assessing conversion technology companies around the world and identifying potential host sites in Southern California capable of and willing to host waste conversion demonstration facilities,

WHEREAS, in 2006, the County in concert with the Subcommittee commenced Phase II of the Process by identifying technology companies and host

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sites in Southern California capable and willing to host waste conversion demonstration facilities.

WHEREAS, on January 17, 2008, also as part of Phase II, the County solicited written offers from various parties, including IES, through a Request for Offers ("RFO"), a copy of which is attached as Exhibit 1 and incorporated herein by this reference, for the development of one or more conversion technology demonstration facilities to be constructed in Southern California and each to be located at or adjacent to a material recovery facility ("MRF"),

WHEREAS, IES is a privately-owned conversion technology company representing to have rights to proprietary advanced pyrolysis technology;

WHEREAS, the Robert A Nelson Transfer Station and MRF ("RAN"), located at 1830 Agua Mansa Road, Riverside CA, is operating on land owned by the County of Riverside ("Riverside County") under that certain *Eighth Amended and Restated Master Lease* for RAN, dated November 25, 2008, a true and correct copy of which is attached here as Exhibit 4C and incorporated herein by this reference (the "Lease").

WHEREAS, Riverside County desires to pursue the development of a conversion facility at RAN and included a provision (the "CT Lease Provision") in the Lease requiring the lessee under the Lease (the "Lessee") to develop a conversion or recycling/diversion facility at RAN;

WHEREAS, the Lease allows the Lessee to supply up to 35 tons per day ("tpd") of waste residuals and/or post-recycled municipal solid waste from RAN that would otherwise be landfilled (the "Feedstock") to be delivered to IES for processing by IES at an off-site existing facility that EIS owns and operates outside of the RAN in order to enable IES to test the ability of the IES advanced pyrolysis technology to utilize the Feedstock ("Testing Phase");

WHEREAS, on August 15, 2008 IES responded to the RFO by submitting to the County that certain "Offer for Los Angeles County Conversion Technology Demonstration Facility" (the "Offer"), a true and correct copy of which is attached here as Exhibit 4B and incorporated herein by this reference ("the Offer");

WHEREAS, the Offer states that following the successful completion of the Testing Phase, IES will develop and install at RAN a project that employs the advanced pyrolysis technology designed to process Feedstock at a minimum rate of 184 tpd, but no more than 1000 tpd (the "Project"),

WHEREAS the Project is consistent with and assists in meeting the goals of the CT Lease Provision, therefore facilitating the location of the Project at RAN,

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WHEREAS the County desires to accept the Offer and commence Phase III of the Process and the Parties desire for IES to develop the Project pursuant to the terms and conditions of this Memorandum of Understanding;

NOW, THEREFORE, for full and adequate consideration, hereby acknowledged by the County and IES, the parties agree as follows:

#### 1. Project Description

#### It is agreed by the Parties that the Project will:

- 1 1 process a minimum of 184 tpd of Feedstock, but no more than 1000 tpd, once operational;
- 1.2 utilize an advanced pyrolysis technology, consisting of Feedstock preprocessing systems (including a grinder and dryer), pyrolytic gasifier for production of syngas, a thermal oxidizer for combustion of the syngas, waste heat recovery for operation of a steam turbine, and air pollution control technologies for the reduction of emissions from combustion of the syngas,
- 1.3 be located at RAN in Unincorporated Riverside County, California, a fully permitted solid waste facility;
- 1.4 be integrated with RAN, to take advantage of the beneficial synergies of colocation,
- 1 5 be modular in design to facilitate possible expansion in future years to the extent site space allows,
- 1.6 be operational at least eighty-five percent (85%) of the time on an average annual basis.
- 1 7 use best efforts to market the solid residue produced by the Project, which is an inert carbon powder;
- 1 8 be capable of diverting from landfill disposal a minimum of ninety-three percent (93%) by weight and as received by RAN, of MRF residuals and/or post-recycled municipal solid waste feedstock,
- 1 9 be a "flagship facility" by maximizing the use of sustainable construction and operation practices such as onsite recycling/reuse, energy conservation, LEED certification, and other similar practices, and the Project must also be designed to facilitate public tours and education programs and;

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1 10 operate continuously by processing at minimum 184 tpd of Feedstock for a minimum of five (5) years.

#### 2. Financing For Project

IES shall be responsible for financing one hundred percent (100%) of the cost of designing, constructing and operating the Project. Notwithstanding the foregoing, for a period of sixteen (16) calendar months following the date of this Memorandum of Understanding, the County and IES will jointly attempt to obtain Grants or Loans from third parties (the "Grants and/or Loans") for the Project in the total amount of at least \$1,500,000 to be applied against the cost of constructing and completing the Project, provided that the County does not in any way promise or represent that the said efforts will be successful or yield any result.

In applying for the Grants and/or Loans, the Parties will seek to obtain amounts to reimburse the County's costs associated with the Project. Any funds remaining from Grants and/or Loans beyond the costs associated with constructing the Project shall be applied to reimburse the County's costs incurred in connection with the Project and this Memorandum of Understanding, to the maximum extent allowable under the terms and conditions of the Grants and/or Loans.

- 2 1 Notwithstanding the foregoing, should the County and IES be unable to obtain Grants and/or Loans in the amount of \$700,000 within sixteen (16) months from the date of this Memorandum of Understanding, the County and IES shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written notice to each Party, without any further obligation to the County or IES.
- 2.2 Acceptance of any Grants and/or Loan funds by the County under this Memorandum of Understanding shall remain subject to approval by the Board of Supervisors.
- 2 3 IES will use all monies received as Grants and/or Loans for the Project, including, without limitation, funds from the State and Federal governments, exclusively to cover the costs of constructing and completing the Project and for no other purpose. Upon completion of the Project, IES shall provide the County with a complete written accounting of all expenditures relating to the Project, including accounting for the use of any and all Grants and/or Loans received for the Project.
- 2.4 Under no circumstances shall the County be held responsible for any repayment or any other obligation relating to any Grants and/or Loans, obligations for which IES shall be solely and completely responsible for said repayment and all related obligations at all times

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#### 3. Obligations of IES

In addition to all of IES' other obligations stated elsewhere in this Memorandum of Understanding, IES shall, at its sole cost and expense

- 3 1 secure and obtain all necessary property and related rights for the Project, as a precondition to any of the County's obligations under this Memorandum of Understanding including, without limitation, under the Lease and/or from the Lessee, and provide evidence of said rights to the County, in the form satisfactory to the County, including working in conjunction or in cooperation with Riverside County, as may be necessary;
- 3 2 be responsible for owning, developing, operating, and maintaining the Project, strictly as described in Section 1 above, subject to provisions in this Memorandum of Understanding and the terms of the Offer and under no circumstances shall the County be deemed responsible as owner or operator of the Project;
- 3 3. design, develop and complete all activities relating to the Project in full compliance with all requirements in the RFO, all statements in the Offer that do not contradict or are inconsistent with the RFO or this Memorandum of Understanding, and all Federal, State, County, and local laws and regulations,
- 3 4 work collaboratively with Riverside County and the RAN operator and meet all conditions necessary to identify a location for the development of the Project at RAN, and to secure all necessary Feedstock for the Project,
- 3.5 use best efforts to minimize the amount of materials sent to landfills from the Project;
- 3 6 work, to maximize the energy efficiency of the Project and RAN and to pursue funding to enhance energy efficiency features of the Project and RAN including opportunities with relevant utilities,
- 3.7 use all syngas produced by the Project for beneficial purposes, which may include use in a fuel cell and/or microturbine to create electricity and or transportation grade biofuels, and/or for any other beneficial use as approved by the County;
- 3 8 operate a "flagship facility" as defined in Section 1 9 of this Memorandum of Understanding,
- 3.9 obtain all permits and approvals that are necessary to allow the Project to become and remain fully operational as contemplated in this Memorandum of Understanding within twenty-four (24) months of the date of this

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Memorandum of Understanding, (Permits include, but are not limited to, a Conditional Use Permit, Non Disposal Facility Element determination, and Solid Waste Facilities Permit modification from the local enforcement agency with the concurrence of the California Department of Resources Recycling and Recovery),

- 3.10 fully comply with all requirements of the California Environmental Quality Act (CEQA), including the completion of the appropriate environmental documents. IES will prepare and submit to the appropriate agencies the appropriate environmental documentation as required under CEQA prior to the acceptance by the County of any Grants and/or Loans related to the project;
- 3.11 maintain all permits for the development and operation of the Project in good standing, including, without limitation, all permits,
- 3 12. ensure that the Project becomes operational, as defined in Section 1 1, within forty-eight (48) months of the date of this Memorandum of Understanding,
- 3 13 provide the County and its agents with access to the Project for the purpose of conducting public tours upon mutual agreement, at a minimum of four tours per year, for the term of this Memorandum of Understanding, provided that all participants in public tours shall abide by rules of conduct specified by IES and when on the Project premises sign a reasonable release of liability form as agreed by the Parties, and
- 3 14. provide the County with a written annual Project report, in a form acceptable to the County that includes a summary of permitting efforts, CEQA efforts, and facility performance data. Facility performance data shall include at a minimum emissions, total facility throughput, diversion from disposal, and net and gross energy output

#### 4. Obligations of County

In addition to all other obligations stated elsewhere in this Memorandum of Understanding, during the design and construction of the Project, the County shall:

4.1. provide consultant services and in-kind assistance to IES in obtaining Grants and/or Loans, to be secured only to fund the Project, such assistance to include, but is not limited to, identification of potential Grants and/or Loans on a County (as deemed reasonable by the County, including but not limited to assistance from the newly formed Los Angeles County Office of Sustainability), State and Federal basis to assist in payment of project development costs, construction costs and operating

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- costs, application preparation for available State and Federal Grants and/or Loans, and assistance in obtaining Grants and/or Loans,
- 4.2 provide consultant services and in-kind technical assistance to IES as deemed necessary by the County and IES,
- 4.3. provide a public statement, acceptable to both parties, if requested by IES, to the extent that the County has reviewed the IES technology and deems it an effective alternative to landfilling and transformation,
- 4.4 provide consultant and in-kind services to educate the public about the Project in an amount up to \$100,000, including publicizing the Project, maintaining web and e-communications regarding the project, and seeking additional media coverage, as appropriate All public education and promotional efforts will be coordinated between the County and IES and require mutual agreement;
- 4.5 continue its efforts at the State level to have conversion technology facilities statutorily recognized as an "In-state renewable electricity generation facility" pursuant to the Public Resource Code Section 25741 and eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to Public Utilities Code Sections 399 11-399.20, provided that, notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result;
- 4.6 continue its efforts at the State level to have conversion technologies statutorily recognized as beneficial use rather than disposal, for the purposes of compliance with the California Integrated Waste Management Act of 1989 ("AB 939"), provided that notwithstanding the foregoing, the County does not in any way promise or represent that said efforts will be successful or yield any result and;
- 4.7. notwithstanding the RFO or any other statements or communications by the County or its employees and agents, all obligations of the County relating to the Project are contained in the above Section 2 and in this Section 4 of this Memorandum of Understanding

#### 5. Term of Memorandum of Understanding

This Memorandum of Understanding shall remain valid for the time period that the Project remains operational IES shall maintain the Project in operation pursuant to the terms of this Memorandum of Understanding for at minimum five (5) years from the date the Project commences processing at a minimum capacity of 184 tpd of Feedstock.

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- In addition to other remedies available to the County in law, equity, or under this Memorandum of Understanding, the County shall have the option, at its sole and absolute discretion, to terminate this Memorandum of Understanding and end the County's participation or affiliation with the Project if IES breaches this Memorandum of Understanding and fails to cure the breach within thirty (30) calendar days from the date the County notifies IES of the breach Furthermore, if such a breach occurs, the County reserves the right to demand reimbursement for all costs incurred by the County relating to the Project from the date this Memorandum of Understanding is signed, in which event IES will be responsible to reimburse the County for said costs within ninety (90) days of the County's demand for reimbursement. Failure of the County to provide notice of a breach shall not constitute a waiver of any rights of County under this Memorandum of Understanding, under law, or in equity
- The Parties recognize that certain emission reduction credits (ERCs) issued by the South Coast Air Quality Management District ("District") may be required in order to receive necessary permits to operate the Project. Within sixty (60) days of the signing of this Memorandum of Understanding, IES will notify the County in writing if the Project requires ERCs, and if so, indicating how the Project will procure the necessary ERCs and the estimated cost to obtain the ERCs for the Project. Each Party shall have the option to terminate this Memorandum of Understanding by providing thirty (30) days' prior written notice to the other Party, without any further obligation to any Party if the Project is unable to secure ERCs within twenty-four (24) months of the date of this Memorandum of Understanding.
- 5 4. This Memorandum of Understanding supersedes the Offer. Notwithstanding the foregoing, without excusing IES from any obligation in this Memorandum of Understanding, IES shall make a best effort to fulfill the terms of the Offer
- Should the Parties be unable to qualify as an "In-state renewable electricity generation facility" pursuant to California Public Resources Code Section 25741 and eligible for consideration under the Renewable Portfolio Standard ("RPS") pursuant to California Public Utilities Code Sections 399 11-399.20, and if eligibility under RPS is a condition imposed by a third party lender as a condition for the Project financing, each of the County or IES shall have the option to terminate this Memorandum of Understanding providing thirty (30) days' prior written notice to the other party, without further obligation to either party
- The County shall have the right to use the Project name, the Southern California Conversion Technology Demonstration Project, non-proprietary data, and information for educational and outreach purposes following any

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termination of this Memorandum of Understanding or following termination of the Project The County of Riverside may use the Project name, "the Southern California Conversion Technology Demonstration Project", for educational and outreach purposes upon approval by the County

#### 6. Indemnification of County

- IES will indemnify, defend and hold harmless the County, its elected 61 officials, employees, and agents from any and all actual or alleged claims, demands, causes of action, liability, loss, damage, or injury to property or persons, including wrongful death, whether imposed by a court of law or by administrative action of any federal, state, or local governmental agency, relating to, arising out of, or incident to the Project, including, without limitation, relating to any Grants or Loans, failure or alleged failure to obtain from third parties any necessary Permits or necessary intellectual or other property rights for the Project, failure to comply with any Permit or with CEQA, in connection with the design, operation and/or maintenance of the Project, or relating to any acts, omissions, negligence, or willful misconduct of IES or its employees, contractors, or agents in connection with the Project, including, without limitation, relating to its design, operation and/or maintenance, for which IES shall remain fully responsible, and including under the Comprehensive Environmental Response, Compensation and Liability Act ("CERCLA") and pursuant to the California Carpenter-Presley-Tanner Hazardous Substance Account Act
- 6.2. This indemnification includes, without limitation, the payment of all penalties, fines, judgments, awards, decrees, attorney's fees, and related costs or expenses, and the reimbursement of County, its elected officials, employees, and/or agents for all legal expenses and costs incurred by each of them and shall survive the expiration or termination of this Memorandum of Understanding

#### 7. Representations and Warranties

- 7 1 IES hereby represents and warrants to the County that IES has or will have at the time of entering into the Memorandum of Understanding all sufficient and requisite intellectual property or other requisite rights to the technologies it will employ for the Project.
- Nothing in this Memorandum of Understanding causes IES to breach any agreement between IES and any third party Nothing in this Memorandum of Understanding would, upon mutual consent of IES and the County, preclude a third party from participating in the Project, including but not limited to other jurisdictions within Los Angeles County

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and other public agencies, for the purpose of the advancing the successful development of the Project.

#### 8. Confidential Information

- For purposes of this Memorandum of Understanding, "Confidential Information" shall mean information designated as confidential in writing by IES, at the time such information is disclosed by IES to the County, and that satisfies all of the following criteria:
  - 8.1.1 IES' following proprietary information trade secrets, customer lists, business plans, written strategy statements, written forecasts, proprietary technology to which IES holds exclusive intellectual property rights (including computer software and hardware products, data bases, data processing and communications networking systems), and
  - 8.1.2. information is in writing and is marked and designated as 'confidential' in writing by IES, whether by letter, proprietary stamp or legend, prior to or at the time such information is provided by IES to the County; and
  - 8.1.3 information is not subject to disclosure by law, order or legal mandate, including under the California Public Records Act; and
  - 8.1.4 information is not provided, available or accessible to third parties, the public, or the County from sources other than IES
- 8.2. Unless otherwise acceptable to IES, the County shall restrict distribution of Confidential Information to third-parties outside of the County for needs only in furtherance of this Memorandum of Understanding and related purposes and who have been apprised of the confidential nature of such information in accordance with the terms of this Memorandum of Understanding
- 8.3. Notwithstanding any other provision in this Agreement, the obligations of the County in this Section 8 shall not apply to the extent that such information meets *any* of the following conditions
  - 8.3.1 is part of the public domain or becomes generally known to third parties on a non-confidential basis, through no breach by the County of this Memorandum of Understanding,
  - 8 3.2. was known by or disclosed to the County prior to receipt from IES without any obligation to keep it confidential,



- 8.3 3 was independently developed by or on behalf of the County; or
- 8 3.4 IES consents to the disclosure of such Confidential Information by the County on a non-confidential basis
- 8.4 If the County or any of its agents shall be under a legal obligation in any administrative or judicial circumstance to disclose any Confidential Information, the County shall make a reasonable attempt to give IES prompt notice thereof (unless there is a legal obligation to the contrary) so that IES may seek a protective order or other appropriate remedy, at IES' sole cost and expense In the event that such protective order is not obtained prior to the date the County may be obligated to disclose the information, the County shall furnish only that portion of the information that is required under said administrative or judicial circumstance

#### 9. General Provisions

- Governing Law, Venue This Memorandum of Understanding shall be 9.1 governed by the laws of the State of California, without regard to the conflicts of laws principles thereof Each of the Parties hereby irrevocable and unconditionally consents to submit to the exclusive jurisdiction of the courts of the State of California for any actions, suits or proceedings arising out of or relating to this Memorandum of Understanding (and each of the Parties agree not to commence any action, suit or proceeding relating thereto except in such courts), and further agrees that service of any process, summons, notice or document by U.S. registered mail to the other party's address set forth in the first paragraph of this Memorandum of Understanding shall be effective service of process for any action, suit or proceeding brought in any such court. Each of the Parties hereby irrevocably and unconditionally waives any objection to the laying of venue of any action, suit or proceeding arising out of this Memorandum of Understanding in the courts of the State of California or the United States America located in the State of California and hereby further irrevocably and unconditional waives and agrees not to plead or claim in any such court that any such action, suit or proceeding brought in any such court has been brought in an inconvenient forum.
- 9 2. Each Party to this Memorandum of Understanding shall do all things and execute and deliver all instructions and documents necessary to fulfill and effect the provisions of this Memorandum of Understanding and protect the respective rights of the Parties to this Memorandum of Understanding
- No waiver by any Party of any breach of any term or provision of this Memorandum of Understanding shall be construed to be, nor be a waiver of any preceding, concurrent or succeeding breach of the same, or any other term or provision hereof. No waiver shall be binding unless in

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- writing and signed by the Party to be charged or held bound In cases purporting to charge or hold bound the County, the signature must be obtained from the Board of Supervisors
- 9 4 This Memorandum of Understanding shall be deemed as drafted by all of the Parties acting together, so as not to be construed against any of them.
- This Memorandum of Understanding and its Exhibits contain all the terms and conditions agreed upon by the Parties to this Memorandum of Understanding regarding the subject matter of this Memorandum of Understanding. Any prior or contemporaneous agreements, promises, negotiations, or representations, either oral or written, relating to the subject matter of this Memorandum of Understanding, not expressly set forth here, are of no force or effect.
- 9.6. Should any of the provisions herein be determined to be invalid by a court or government agency of competent jurisdiction, it is agreed that such determination shall not affect the enforceability of other provisions herein
- 9.7. This Memorandum of Understanding shall be governed by the laws of the State of California.
- 9 8. This Memorandum of Understanding may be executed in counterpart originals with the same force and affect as if a single original had been executed by all of the Parties. Each counterpart signature shall be deemed as an integral part of the original Memorandum of Understanding This Memorandum of Understanding may be executed via telefacsimile, followed immediately with executed original signatures to all Parties.
- 9 9 IES shall be prohibited from assigning this Memorandum of Understanding or any portion hereof without the County's prior express written consent executed by the Board of Supervisors or its designee
- 9 10 Each provision of this Memorandum of Understanding is contractual in nature and not merely a recital
- 9 11 Time is of essence with respect to each of the provisions of this Memorandum of Understanding
- 9 12 This Memorandum of Understanding shall bind the County only upon the approval and upon it being duly executed by the Board of Supervisors
- 9.13 Any notice required or permitted to be given under this MEMORANDUM OF UNDERSTANDING shall be in writing and shall be deemed to have

been given when deposited in the United States mail, registered or certified mail, postage prepaid, return receipt required, and addressed as follows

If to IES

MS. KAREN BERTRAM
PRESIDENT
INTERNATIONAL ENVIRONMENTAL SOLUTIONS
25685 SHERMAN ROAD
ROMOLAND, CA 92585

If to the COUNTY

MR. COBY SKYE, PE CIVIL ENGINEER LOS ANGELES COUNTY DEPT. OF PUBLIC WORKS, ENVIRONMENTAL PROGRAMS DIVISION 900 SOUTH FREMONT AVE, ANNEX 3RD FLOOR ALHAMBRA, CA 91803

or such other address as either party may from time to time specify in writing to the other. Duly mailed notices as aforesaid shall be effective upon the earlier of actual receipt or seventy-two (72) hours after deposit in the mail.

- 9.14 This Memorandum of Understanding shall be binding upon, and inure to the benefit of, the Parties hereto and their respective successors, heirs, administrators, and assigns.
- 9 15 The Parties hereby mutually agree that this Memorandum of Understanding shall not operate to create the relationship of partnership, joint venture, or agency between the COUNTY and IES IES's contractors for the Project are exclusively and solely under the control and dominion of IES Nothing herein shall be deemed to make IES or its contractors an agent or contractor of the County
- 9 16 In the event that provisions of any attached appendices or exhibits conflict in any way with the provisions set forth in this Memorandum of Understanding, the language, terms and conditions contained in this Memorandum of Understanding shall control the actions and obligations of the Parties and the interpretation of the Parties' understanding concerning the obligations and liabilities of IES
- 9 17 Each Party acknowledges to have either consulted with legal counsel regarding the Party's rights and obligations contained in this

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- Memorandum of Understanding or to fully understand the terms herein and to have determined to have to need to consult with legal counsel
- 9 18 Nothing in this Memorandum of Understanding shall deem the Parties to be partners, joint venturers or agents with or of each other
- 9 19 Each person executing this Memorandum of Understanding on behalf of IES represents and warrants to have the requisite authority to execute this Memorandum of Understanding and to bind IES.

IN WITNESS WHEREOF, the Parties here Understanding to be executed by their repres COUNTY OF LOS ANGELES on	entative officers, duly authorized by the
	COUNTY OF LOS ANGELES
	By Director of Public Works
APPROVED AS TO FORM	
County Counsel	
By <sup>-</sup>	

INTERNATIONAL ENVIRONMENTAL SOLUTIONS

A Nevada corporation

By:

By: President

s: Secretary

Note: Exhibit 4B and Exhibit 4C are on file with the Department of Public Works

#### **RESOLUTION NO. 2006-997**

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF CALABASAS, CALIFORNIA, SUPPORTING THE SOLID WASTE CONVERSION TECHNOLOGY AND REQUESTING A FACILITY AT THE CALABASAS LANDFILL

WHEREAS, the 2003-2004 California Waste Composition Study indicates that approximately 40 million tons of waste is landfilled in California; and

WHEREAS, Zero Waste is a primary goal of the California Integrated Waste Management Board's strategic plan; and

WHEREAS, Assembly Bill 2770 required the California Integrated Waste Management Board (CIWMB) to research and evaluate new and emerging non-combustion thermal, chemical, and biological technologies and to submit a report to the Legislature; and

WHEREAS, the Conversion Technology Report submitted to the Legislature supported the following major findings:

- Conversion technologies are distinct from landfills and incineration, and can result in substantial environmental benefits for California, including the production of renewable energy, reduced dependency on fossil fuels, and reduction of greenhouse gases.
- Conversion technologies can enhance landfill diversion efforts and can be complementary to the existing recycling infrastructure. The conversion technology facilities complement the local infrastructure and that they maintain or enhance the environmental benefits and economic sustainability of the Integrated Waste Management System.
- Conversion technologies would be expected to meet federal, state, and local air emissions requirements. Local air districts in California are best equipped to review and condition conversion technology facilities.

WHEREAS, Assembly Bill 1090 reprioritizes California's waste management hierarchy to include conversion technologies and properly define these technologies based on sound science and their environmental impacts and benefits in relation to other solid waste management options.

WHEREAS, there are multiple benefits to the Conversion Technologies such as:

 Waste materials are reduced in volume by up to 90%, significantly reducing the need for landfill space. In some cases the residual ash can be used in construction products such as concrete or brick production.

- 2. Synthetic gas or methane produced by these processes is used to generate electricity.
- 3. Co-locating these facilities with a comprehensive recycling and materials recovery operation assures that most inorganic materials and other recoverable items are removed for recycling or reuse prior to conversion processing. Advanced removal of inorganic items also reduces ash and other waste by-products requiring landfilling.
- 4. Significant reduction in physical space requirements compared to landfills.

WHEREAS, the Environmental Commission received testimony from the Los Angeles County engineering staff on the solid waste conversion technology during the public meeting of December 6, 2005 and made a recommendation to the City Council for approval of this resolution.

#### NOW THEREFORE, BE IT RESOLVED AS FOLLOWS:

- 1. With landfill space at a premium, and disposal rates estimated to increase, Los Angeles County must invest in landfill alternatives, such as conversion technologies, that inhibit disposal rates, generate jobs, and utilize abundant biomass and organic waste material in an environmentally beneficial manner.
- 2. Waste recycling must be extended to establish a statewide recycling goal and local planning requirements, develop an extensive recycling and composting infrastructure, increase removal of hazardous materials from the waste stream, establish advanced disposal fees and other manufacturer responsibility measures in conserving natural resources and reducing our dependence on landfills.
- 3. In supporting efforts by the Alternative Technology Advisory Subcommittee, the Calabasas City Council strongly requests that a construction of conversion technology facility at the Calabasas Landfill be considered for any future planning of facilities within Los Angeles County.

PASSED AND APPROVED AND ADOPTED this A 1th day of January, 2006.

ATTEST:

Gwen Peirce, Assistant City Clerk

Barry/Groveman, Mayor

APPROVED AS TO FORM:

Michael Colantuone, City Attorney

Adopted 10-23-07 Weaver/Quintero All Ayes

RESOLUTION	NO.	07-188
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## A RESOLUTION OF THE COUNCIL OF THE CITY OF GLENDALE, CALIFORNIA, SUPPORTING THE DEVELOPMENT OF SOLID WASTE CONVERSION TECHNOLOGIES

WHEREAS, each year, over 40 million tons of waste are disposed in California; and

WHEREAS, the County of Los Angeles has evaluated conversion technologies, which are capable of converting post-recycled residual solid waste into marketable products, green fuels, and clean, renewable energy, and identified a number of viable technologies for Southern California; and

WHEREAS, there are significant, potential benefits for the City of Glendale from co-locating a conversion technology facility at a solid waste facility, such as:

- Conversion technologies can result in substantial environmental benefits, including preserving land and resources, reducing dependency on fossil fuels, and reducing air and water pollution, including greenhouse gas emissions.
- Conversion technologies can enhance landfill diversion efforts and can be complementary to the existing recycling infrastructure, thereby reducing the volume of materials disposed at landfills and maintaining long-term landfill capacity.
- 3. Conversion technologies can recover marketable products and generate green fuels and renewable electricity, thereby enhancing the economic viability of the integrated waste management system and locally producing renewable energy resources to meet local demand.

NOW, THEREFORE, BE IT RESOLVED BY THE COUNCIL OF THE CITY OF GLENDALE,

- SECTION 1. That the Council supports the County of Los Angeles' efforts to evaluate and promote development of conversion technologies that minimize landfill disposal, create "green" jobs, and utilize waste material in an environmentally beneficial manner.
- SECTION 2. That City Public Works staff are authorized and directed to work with the County of Los Angeles to ensure that the Scholl Canyon Landfill is considered for any future development of conversion technology facilities.

SECTION 3. That the City's legislative advocates are authorized and directed to work, in concert with the County of Los Angeles, to support legislation that establishes a viable permitting process for conversion technologies based on performance standards rather than prescriptive definitions and provides full diversion credit for these technologies under the California Integrated Waste Management Act.

Adopted this 23rd day of October, 2007.

Mayor, City of Glendale

ATTEST:

City Clerk

STATE OF CALIFORNIA ) COUNTY OF LOS ANGELES ) CITY OF GLENDALE ) APPROVED AS JO FORM

CITY ATTORNEY

DATE 10-17-07

I, Ardashes Kassakhian, City Clerk of the City of Glendale, do hereby certify that the foregoing Resolution No. was duly adopted by the Council of the City of Glendale, California, at a regular meeting held on the \_\_\_23rd\_\_\_ day of \_\_\_October\_\_\_, 2007 and that the same was adopted by the following vote:

Ayes:

Drayman, Quintero, Weaver, Yousefian, Najarian

Noes:

None

Absent:

None

Abstain:

None



R. Rex Parris
Ronald D. Smith
Ken Mann
Sherry Marquez
Ed Sileo
Mark V. Bozigian

Mayor
Vice Mayor
Council Member
Council Member
Council Member

July 3, 2008

Supervisor Yvonne B. Burke, Chair Los Angeles County Board of Supervisors. 866 Kenneth Hahn Hall of Administration 500 West Temple Street Los Angeles, California 90012

Re: CITY OF LANCASTER LETTER OF INTEREST FOR THE DEVELOPMENT OF CONVERSION TECHNOLOGIES IN LOS ANGELES COUNTY

Dear Supervisor Burke:

On behalf of the City of Lancaster, I wish to express our interest and support for the development of conversion technologies in Los Angeles County, and the Antelope Valley in particular. As a leader in resource conservation and environmental stewardship, Lancaster advocates local implementation of conversion technologies encompassing a variety of processes that will convert municipal waste into renewable energy, bio-fuels, and will enhance landfill diversion efforts.

The City of Lancaster applauds and supports the County's efforts to evaluate and promote development of conversion technologies that minimize landfill disposal, create "green collar" jobs, and utilize waste material in an environmentally responsible and beneficial manner. We look forward to the continued opportunity to work with the County of Los Angeles to ensure that Lancaster is considered for any future partnerships for the development of a conversion technology facility.

A resolution of the City Council adopting the development of conversion technologies in the City of Lancaster is attached. If you have any questions, please contact Mr. Peter Zorba at (661)723-6234 or at pzorba@cityoflancasterca.org.

R. Rex Pari Mayor

RRP:PZ:vp

Attachment: Resolution No. 08-49

Michael D. Antonovich, Los Angeles County Supervisor, 5<sup>th</sup> District Mark Bozigian, City Manager, City of Lancaster Randy Williams, Public Works Director, City of Lancaster Peter Zorba, Environmental Engineer, City of Lancaster Coby Skye, Alternative Technology Advisory Subcommittee, Los Angeles County Department of Public Works, Environmental Programs Division

#### RESOLUTION NO. 08-49

A RESOLUTION OF THE CITY COUNCIL OF THE CITY OF LANCASTER, CALIFORNIA, ADOPTING THE DEVELOPMENT OF CONVERSION TECHNOLOGIES IN THE CITY OF LANCASTER

WHEREAS, each year, over 40 million tons of waste are disposed in California; and

WHEREAS, the County of Los Angeles has evaluated conversion technologies, which are capable of converting post-recycled residual solid waste into marketable products, green fuels, and clean, renewable energy, and identified a number of viable technologies for Southern California; and

WHEREAS, there are significant potential benefits for the City of Lancaster from hosting a conversion technology facility, such as:

1. Conversion technologies can result in substantial environmental benefits, including preserving land and resources, reducing dependency on fossil fuels, and reducing air and water pollution, including greenhouse gas emissions.

2. Conversion technologies can enhance landfill diversion efforts and can be complementary to the existing recycling infrastructure, thereby reducing the volume of materials disposed at landfills and maintaining long-term landfill capacity.

Conversion technologies can recover marketable products and generate green
fuels and renewable electricity, thereby enhancing the economic viability of the
integrated waste management system and locally producing renewable energy and
fuel resources to meet local demand.

NOW, THEREFORE, BE IT RESOLVED AND ORDERED BY THE CITY COUNCIL OF THE CITY OF LANCASTER, STATE OF CALIFORNIA, THAT:

Section 1. The Council supports the County of Los Angeles' efforts to evaluate and promote development of conversion technologies that minimize landfill disposal, create "green collar" jobs, and utilize waste material in an environmentally beneficial manner.

Section 2. City Public Works staff are authorized and directed to work with the County of Los Angeles to ensure that the City of Lancaster is considered for any future partnerships for the development of conversion technology facilities.

Section 3. The City's legislative advocates are authorized and directed to work, in concert with the County of Los Angeles, to support legislation that establishes a viable permitting process for conversion technologies based on performance standards rather than prescriptive definitions, and provides full diversion credit for these technologies under the California Integrated Waste Management Act.

Resolution No. 08-49 Page 2
PASSED, APPROVED and ADOPTED this 24th day of June, 2008, by the following vote:
AYES: Council Members: Mann, Marquez, Sileo, Vice Mayor Smith, Mayor Parris
NOES: None
ABSTAIN: None
ABSENT: None
ATTEST: APPROVED:
GERI K. BRYAN, CMC City Clerk City of Lancaster  City of Lancaster  City of Lancaster
STATE OF CALIFORNIA } COUNTY OF LOS ANGELES } ss CITY OF LANCASTER }
CERTIFICATION OF RESOLUTION CITY COUNCIL
I, <u>Shirley Mahoney</u> , <u>Assistant City Clerk</u> City of Lancaster California, do hereby certify that this is a true and correct copy of the original Resolution No 08-49, for which the original is on file in my office.
WITNESS MY HAND AND THE SEAL OF THE CITY OF LANCASTER, on this26th day ofJune,2008
(seal)

Shirley Maloney



### City of Long Beach Legislative File Number 08-0670 (version 1)

Recommendation to respectfully request City Council support the County of Los Angeles' efforts to evaluate and promote development of next generation conversion technologies that minimize landfill disposal, create "green collar" jobs, and utilize waste material in an environmentally beneficial manner.

Request that City Manager work with the County of Los Angeles to ensure that Long Beach is considered for any future partnerships for the development of conversion technology facilities.

Request City's legislative advocates work with the County of Los Angeles to support legislation that establishes a viable permitting process for conversion technologies that protect public health, safety and the environment, and provides full diversion credit for these technologies under the California Integrated Waste Management Act.

The City of Long Beach is among the nation's leaders in waste diversion due to the thoughtful planning and investment by city leaders and the Environmental Services Bureau in the Southeast Resource Recovery Facility (SERRF), which began commercial operation in 1988. According to City documents, SERRF is a publicly owned solid waste management facility that uses mass burn technology to reduce the volume of solid waste by about 80% while recovering electrical energy. The facility is owned by a separate authority created by a joint powers agreement between the Sanitation Districts of Los Angeles County and the City of Long Beach, but is operated by a private company under contract. Residential and commercial solid waste from Long Beach and surrounding contracting communities is combusted in high temperature boilers to produce steam, which in turn is used to run a turbine-generator creating 36 megawatts of electricity. The SERRF site generates enough power each year to supply 40,000 residential homes with electricity and has reduced solid waste from entering landfills by over four million cubic yards. In addition, the SERRF site has allowed the City to keep the cost for waste management significantly below average, passing the savings on to our residents in their monthly bills. Each month, an average 825 tons of metal are recycled rather than sent to a landfill. As a public service and at the request of law enforcement agencies within California, SERRF began destroying narcotics and drug related paraphernalia in 1992. The program has been a tremendous success. SERRF has destroyed an average of 17,000 pounds of narcotics each month. This commitment by the City of Long Beach to assist in the removal of illegal narcotics from our cities' streets has saved law enforcement agencies hundreds of staff hours and thousands of dollars in alternative disposal costs.

The County of Los Angeles has evaluated next generation conversion technologies, which

are capable of converting post-recycled residual solid waste into marketable products, green fuels, and clean, renewable energy, and identified a number of viable technologies for Southern California. This next generation thermal conversion technology differs from our current SERRF technology in that it eliminates the residue combustion ash, which is currently treated and sent to an authorized landfill to be used as road base material. This difference is significant, since the only local landfill permitted to receive the ash is Puente Hills and it is scheduled to close in 2013.

Our existing SERRF site provides a valuable service to the residents of our city, pushing our diversion rate to 69% and converting our waste to electricity. However, next generation conversion technologies can further enhance our efforts to become our own "wasteshed", Conversion technologies may also provide us with the electricity necessary to support increased demand from cold-ironing in the harbor and Port. Just as our predecessors pursued technologies reducing the economic and environmental impacts of sending waste to local landfills, it makes sense that we explore opportunities to increase our conversion rate, better serve our residents, and further diminish our footprint on the environment.

None.

None.

Approve recommendation.

Suja Lowenthal Councilmember, Second District