Presentation of Energy/Compost Facility/Export Options

RFP Issues/Performance Specifications

Public Meeting

October 17, 2012
Agenda

- Background
- Review RFP Issues/Performance Specifications
- Landfill Capping Considerations
- RWQCP Considerations
- Next Steps
Background

- Timeline
- Public Participation
Background: Timeline

- Feasibility Study – September 2011 - Completed
- Measure E – November 2011 - Passed
- Action Plan – July 2012 – Council approved
- RFP to be Released – February 2013
- Proposals Due – July 2013
- Proposals Evaluated – February 2014
Background: Public Participation

- RFP Performance Specifications – Tonight
- Draft RFP – December 2012
- Findings, Proposal Evaluation/Financial Analysis: Late Fall 2013, Prior to City Council Meeting in February 2014
RFP Issues/Performance Specifications

- RFP Process Considerations
- Project Concept
- Technical, Environmental Considerations
- Business Terms/Contract Principles/Risk Allocation
RFP Process Considerations

- Why RFP?
- Performance Based
- Performance Guarantees
  - Construction Phase
  - Operation Phase
    - Throughput
    - Environmental Compliance
    - Energy/Product Output, Quality
    - Residuals Quantity (Diversion)
- Price Guarantees
RFP Proposal Evaluation Criteria

- Key Evaluation Criteria
  - Company and Staff Qualifications
  - Demonstrated Use of Technology
  - Viability of Technical Approach
  - Environmental Mitigation
  - Conformance to City Business and Contract Terms
  - Price

Process allows choice of other than Lowest Priced Proposal (Value Analysis)
Project Concept - Objectives

- Reliable, Long-Term Solution for Organics Management
- Enhance Beneficial Use of Organics
- Reduce Environmental Impacts, including Greenhouse Gases
- Reduce Landfill Disposal, Increase Diversion
- Phase Out Incinerator at RWQCP
- Keep Cost Competitive
Project Concept – E/C Facility

- **Feedstock**
  - Food Scraps
  - Yard Trimings
  - Biosolids

- **Technology**
  - Anaerobic Digestion (wet and/or dry)
  - Gasification

- **Site(s)**
  - Measure E Landfill/Byxbee Park
  - RWQCP
Technology: Anaerobic Digestion

Basic Anaerobic Digestion Process

Feedstocks injected into the digester

Biogas

Digestate

Slurry

Filtrate (Liquid)

Separator

Bio-Fiber (solid)
Technology: Gasification
Project Concept – Export

- Feedstock
  - Food Scraps
  - Yard Trimnings
  - Biosolids

- Food Scraps and Yard Trimnings
  - Collection
  - Direct Haul

- Biosolids
  - Storage
  - Loading Area
Technical & Environmental Considerations

- Permitting
- Project Design, Construction, and Operation
- Product Marketing (compost)
- Facility Size
- Production of Energy
- Use of Landfill gas
- Compost Digestate
Technical/Environmental Considerations (continued)

- Compost Quality
- Environmental Controls
- Integration Landfill Capping
- Aesthetic Preference
- Performance Guarantees during Facility Construction and Operation
Business Arrangements/Risk Allocation Considerations

- Facility Ownership/Financing
- Term of Contract Operations
- Company Market Risk/Reward for Products
- Company Compensation Basis
- “Local Content” Purchasing
Contract Principles/Risk Allocation Considerations

- Single Point of Responsibility by Company
- Company Risk for Permitting
- Company Risk for Development Schedule
- Site Conditions
- Construction–Related Contractor Guarantees
- Operations-Related Contractor Guarantees
- Company responsible for Alternative Disposal Sites and Arrangements, if Facility not operating
- Capital Improvements over time
Contract Principles/Risk Allocation Considerations (continued)

- Project Security
- Uncontrollable Circumstances/Changes-in-Law Affecting Costs and Performance
- Convenience Termination and Default Termination
- City Step-in Rights
- Dispute Resolution
- Facility Removal/Site Restoration
Questions & Answers
Landfill Capping Options


2. Cap part of it and ask for postponement for the remainder.*

3. Do not cap yet and ask for another postponement.*

* Need Agency approvals for Options 2 and 3.
Landfill Capping
3.8 Acre Development Area
# After Landfill is Capped

<table>
<thead>
<tr>
<th>Onsite Disposal Option</th>
<th>10 Acre Pad</th>
<th>7 Acre Pad</th>
<th>5.4 Acre Pad</th>
<th>3.8 Acre Pad</th>
</tr>
</thead>
<tbody>
<tr>
<td>If we cap the landfill, and an Energy/Compost facility is built later - how much is the cost to replace the cap?</td>
<td>$2.9 Mil.</td>
<td>$2.7 Mil.</td>
<td>$0.9 Mil.</td>
<td>$0</td>
</tr>
<tr>
<td>Excavation and onsite re-grading of the refuse (use ARI estimate of $3.25 per cy)</td>
<td>$0.8 Mil.</td>
<td>$0.2 Mil.</td>
<td>$0.02 Mil.</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$3.7 Mil.</strong></td>
<td><strong>$2.9 Mil.</strong></td>
<td><strong>$0.9 Mil.</strong></td>
</tr>
<tr>
<td>Offsite Disposal Option</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Cap Replacement Costs (Only in pad and small surrounding area)</td>
<td>$0.8 Mil.</td>
<td>$0.5 Mil.</td>
<td>$0.3 Mil.</td>
<td>$0</td>
</tr>
<tr>
<td>Transportation and Disposal at Kirby Canyon Landfill – Assume $42.66/cy transportation and disposal cost From ARI Report</td>
<td>$10.4 Mil.</td>
<td>$2.9 Mil.</td>
<td>$1.0 Mil.</td>
<td>$0</td>
</tr>
<tr>
<td></td>
<td><strong>Total</strong></td>
<td><strong>$11.2 Mil.</strong></td>
<td><strong>$3.4 Mil.</strong></td>
<td><strong>$1.3 Mil.</strong></td>
</tr>
</tbody>
</table>
Questions & Answers
RWQCP - Biosolids

- Need to Decommission Incinerators
- Available Space at RWQCP
- Plan for Onsite Biosolids Processing Facility
Deterioration in the Incinerators

Deterioration in steel wall of incinerator.
RWQCP: Biosolids Facility Space

Area for Biosolids Processing Facility
Biosolids Facility Plan

- EC Facility Plan to inform BFP.
- If EC Facility Plan does not provide best option RWQCP will still need to retire incinerators.
- An RFP for the preparation of a Biosolids Facility Plan released September 2012; Proposals to be received October 30\textsuperscript{th} 2012.
Questions & Answers
Next Steps

- December 3rd, City Council Study Session – Present draft RFP and discuss landfill capping issues.
- January 2013, City Council Meeting – Vote on release of RFP and direction for landfill capping option.
- February 2013, release RFP.
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FINAL SLIDE

Alternative Resources, Inc.