The Future of Sonoma County Organics

Results of the SCWMA’s Organic Material Processing Services RFP

June 20, 2018
Project Background

• RFP Released May 31, 2017
• Addenda Released/Q&A process for proposers
• Proposals Due January 16, 2018
  • 12 proposals received
  • 2 have subsequently been withdrawn
• Evaluation Team consists of SCWMA staff, County of Sonoma staff, Mendocino Solid Waste Management Authority staff, and former SCWMA Board Member
• All proposals were evaluated, 6 were selected for interviews
Project Background (continued)

• 3 short term, 6 long term solutions considered
  • Existing facilities include Cold Creek Compost, Napa Recycling and Waste Services, and Redwood Landfill
  • New facilities (in-county) proposed by Hitachi Zosen Inova, Renewable Sonoma, and Stage Gulch Organics

• Evaluation team developed short term and long term recommendations
  • 3 year agreements with Cold Creek Compost and Redwood Landfill
  • Pursue long term agreement with Renewable Sonoma
Summary of Proposals - BioMRF

• Location: Santa Rosa (Laguna WWTP) property
• Technology: In vessel and aerated static pile composting
• Term: 20 years
• Material Accepted: All organic material, except biosolids
• Capacity: 66,000 – 80,000 TPY of SCWMA organic materials
• Disposal Costs: $119.90/ton
• Estimated Average Transport Costs: $14.59/ton
Summary of Proposals – Cold Creek Compost/Stage Gulch Organics

• Location: Stage Gulch Road, East of Petaluma
• Term: 15 or 20 years
• Technology: Circular turned aerated pile composting technology
• Accepted Materials: All Organic Materials, except service ware and biosolids
• Capacity: 60,000 – 100,000 TPY of SCWMA organic materials
• Disposal Costs: $36 - $65/ton (depending on term length and location), $50/ton for Stage Gulch Organics
• Estimated Average Transport Costs: $18.45 (SGO)-37.19 (CCC)/ton
Summary of Proposals – Entsorga

• Location: Todd Road, Santa Rosa
• Term: 20 years
• Technology: Bee Reactor/Turtle Q Ring System, similar to aerated static pile composting
• Accepted Materials: All organic materials, except manure and biosolids
• Capacity: 44,844 – 68,640 tons per year
• Disposal Costs: $120/ton
• Estimated Average Transport Costs: $13.78/ton
Summary of Proposals – Hitachi Zosen Inova

• Location: Santa Rosa (Laguna WWTP) property
• Term: 20 years
• Technology: Anaerobic Digestion
• Accepted Materials: All Organic Materials, except wood waste, manure, and biosolids
• Capacity: 70,000 tons per year
• Disposal Costs: $89/ton
• Estimated Average Transport Costs: $14.59/ton
Summary of Proposals – Napa Recycling and Waste Services

- Location: American Canyon
- Term: 3, 10, 15, or 20 years
- Technology: Aerated Static Piles (anaerobic digestion and gasification proposed for long term)
- Accepted Materials: All Organics Materials, except biosolids
- Capacity: 26,000 – 46,800 tons per year
- Disposal Costs: $45-$49 per ton, depending on term
- Estimated Average Transport Costs: $27.47/ton
Summary of Proposals – Recology Jepson Prairie Organics

• Location: Vacaville
• Term: 3 years
• Technology: Aerated Static Piles
• Accepted Materials: All Mixed Organic Materials (residential only)
• Capacity: 40,000 tons/year
• Disposal Costs: $65.93/ton
• Estimated Average Transport Costs: $42.17/ton
Summary of Proposals – Renewable Sonoma

• Location: Santa Rosa (Laguna WWTP) property
• Term: 20 years
• Technology: Covered Aerated Static Piles and Anaerobic Digestion
• Accepted Materials: All Organic Materials, except service ware
• Capacity: 60,000 – 140,000 tons per year
• Disposal Costs: $67 – $89/ton (depending on amount of material received), used $78/ton for analysis purposes
• Estimated Average Transport Costs: $14.59/ton
Summary of Proposals – Sacyr Environmental Management

- **Location:** Santa Rosa (Laguna WWTP) property
- **Term:** 20 years
- **Technology:** In-vessel composting
- **Accepted Materials:** Green waste, Mixed Organics without Food Ware, Biosolids
- **Capacity:** 95,811 – 110,782 tons per year
- **Disposal Costs:** $103.20-$118.00/ton
- **Estimated Average Transport Costs:** $14.59/ton
Storm Fisher Biogas

• Location: Santa Rosa (Laguna WWTP) property
• Term: 20 years
• Technology: Anaerobic Digestion and In vessel composting
• Accepted Materials: All organic materials except manure and biosolids
• Capacity: 60,000 – 80,000 tons per year
• Disposal Costs: $99-$165/ton
• Estimated Average Transport Costs: $14.59/ton
Waste Management/Redwood Landfill

• Location: Novato
• Term: 3 and 20 years
• Technology: Covered Aerated Static Piles
• Accepted Materials: Wood Waste, Green Waste, Mixed Organic Materials (residential food waste comingled).
• Capacity: 66,000 tons per year
• Disposal Costs: $46.22 – $47/ton
• Estimated Average Transport Costs: $20.06/ton
Sonoma County Needs Assessment

• Sonoma County’s per capita disposal has increased over the past three years
• SCWMA’s 2014 Waste Characterization study indicates tens of thousands of tons of organic material landfilled
• AB 1383 will require significant reductions in landfilled organics
• New facilities will be designed to meet increasing regulatory requirements
• In-county facilities have easier access to local compost market
### Evaluation Results Table – Short Term

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Sonoma County Waste Management Agency - Organic Materials Processing Services
# Evaluation Results Table – Long Term

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Financial Impacts

• The baseline costs (hauling and disposal) is approx. $4.9 million/year @ 75,000 tons per year

• With increased diversion (especially food waste) costs under the existing system could increase to $7.0 million/year (100,000 TPY)

• Under staff’s recommendation (Renewable Sonoma), costs at current levels would increase to as much as $7.8 million/year

• Under staff’s recommendation (Renewable Sonoma), hauling and disposal of 100,000 tons would be as much as $9.3 million/year
  • Direct haul would reduce SCWMA costs significantly
Conclusions

• Renewable Sonoma’s proposal best matched the SCWMA’s evaluation criteria

• Napa Recycling’s and Waste Management’s long term proposals ranked 2\textsuperscript{nd} and 4\textsuperscript{th}, respectively, but capacity is limited (especially for commercial food waste), so other solutions would be needed in conjunction

• Hitachi Zosen Inova’s proposal ranked 3\textsuperscript{rd}, but as proposed, expansion capacity would be a major constraint

• Cold Creek Compost/Stage Gulch Organics proposal ranked 5\textsuperscript{th}, as the evaluation committee had concerns about site viability
Staff Recommendation

• Staff recommends:
  • Approving the agreements with Cold Creek Compost and Waste Management for a period of 3 years, with extensions of up to 5 additional years
  • Schedule a public hearing for the August 15, 2018 SCWMA Board of Directors meeting for consideration of developing an agreement with Renewable Sonoma for an operating term of 20 years, with extensions of up to 10 years
Next Steps

• Receive public feedback regarding staff’s recommendations
• Resolve the issue of whether commercial food waste can be committed to an in-county facility
• If a decision is made to support an in-county facility, SCWMA staff would develop a model staff report regarding SCWMA member agencies’ commitment of flow to SCWMA solution and request a flow commitment from members
• If flow is sufficient, enter into agreement with selected contractor to design, permit, build, and operate site for a minimum of 20 years
Questions?

Written questions and comments can be sent to:

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