



Meeting of the Board of Directors

April 19, 2017

SPECIAL MEETING

CLOSED SESSION PRIOR TO REGULAR MEETING 8:00 a.m.

Regular Meeting Begins at 8:30 a.m. (or immediately following closed session)

City of Santa Rosa, Council Chambers

100 Santa Rosa Avenue

Santa Rosa, CA

Meeting Agenda and Documents

SONOMA COUNTY WASTE MANAGEMENT AGENCY

Meeting of the Board of Directors

April 19, 2017

SPECIAL MEETING

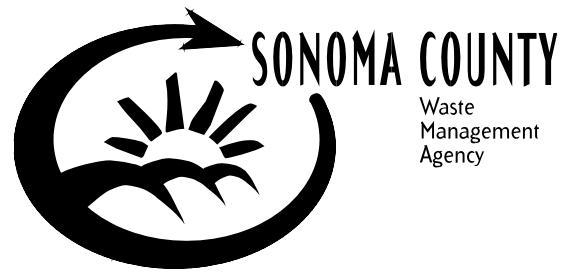
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Note: This packet is 61 pages total



SONOMA COUNTY WASTE MANAGEMENT AGENCY

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April 19, 2017

SPECIAL MEETING

CLOSED SESSION PRIOR TO REGULAR MEETING 8:00 a.m.

Regular Meeting at 8:30 a.m. (or immediately following closed session)

Estimated Ending Time 11:30 a.m.

City of Santa Rosa Council Chambers
100 Santa Rosa Avenue
Santa Rosa, CA

Agenda

<u>Item</u>	<u>Action</u>
1. Call to Order Special Meeting	
2. <u>Closed Session:</u> PUBLIC EMPLOYEE PERFORMANCE EVALUATION Title: Executive Director PUBLIC EMPLOYEE PERFORMANCE EVALUATION Title: Agency Counsel	
3. Adjourn Closed Session	
4. Agenda Approval	
5. Public Comments (items not on the agenda)	

Consent (w/attachments)

- 6.1 Minutes of the March 15, 2017 Special Meeting
- 6.2 April and May 2017 Outreach Calendar
- 6.3 Evaluation of Home Composting Program

Regular Calendar

- 7. Public Workshop for Establishing Priorities for the Long Term Organics Capacity Request for Proposals [Carter]
- 8. Boardmember Comments
- 9. Staff Comments
- 10. Next SCWMA meeting: May 17, 2017
- 11. Adjourn

Consent Calendar: These matters include routine financial and administrative actions and are usually approved by a single majority vote. Any Boardmember may remove an item from the consent calendar.

Regular Calendar: These items include significant and administrative actions of special interest and are classified by program area. The regular calendar also includes "Set Matters," which are noticed hearings, work sessions and public hearings.

Public Comments: Pursuant to Rule 6, Rules of Governance of the Sonoma County Waste Management Agency, members of the public desiring to speak on items that are within the jurisdiction of the Agency shall have an opportunity at the beginning and during each regular meeting of the Agency. When recognized by the Chair, each person should give his/her name and address and limit comments to 3 minutes. Public comments will follow the staff report and subsequent Boardmember questions on that Agenda item and before Boardmembers propose a motion to vote on any item.

Disabled Accommodation: If you have a disability that requires the agenda materials to be in an alternative format or requires an interpreter or other person to assist you while attending this meeting, please contact the Sonoma County Waste Management Agency Office at 2300 County Center Drive, Suite B100, Santa Rosa, (707) 565-3579, at least 72 hours prior to the meeting, to ensure arrangements for accommodation by the Agency.

Noticing: This notice is posted 72 hours prior to the meeting at The Board of Supervisors, 575 Administration Drive, Santa Rosa, and at the meeting site the City of Santa Rosa Council Chambers, 100 Santa Rosa Avenue, Santa Rosa. It is also available on the internet at www.recyclenow.org



Date: March 15, 2017
To: SCWMA Board Members
From: Patrick Carter, SCWMA Executive Director

Executive Summary Report for the SCWMA Board Meeting of March 15, 2017

Item 6, Consent Items: Items 6.3 Confirmation of Sonoma County Local Task Force Bylaws, 6.4 Approval of MOU for C&D Facility Certification Development Services, 6.5 Approval of Scope of Work for Home Composting RFP, and 6.8 Support for DEA Take Back Events were pulled from Consent for discussion. Item 6.1 Minutes of the February 15, 2017 Regular Meeting, 6.2 March and April 2017 Outreach Calendar, 6.6 Approval of Scope of Work for Spanish Language Outreach RFP, 6.7 Approval of Scope of Work for Used Oil Program Management RFP were approved.

Item 6.3, Confirmation of Sonoma County Local Task Force Bylaws: After a brief discussion, the Board confirmed the bylaws, with the provision that the cities be given complete discretion to appoint members to their respective member positions on the Local Task Force. The existing bylaws require the primary position be either an elected official or city staff member.

Item 6.4, Approval of MOU for C&D Facility Certification Development Services: After discussion, the Board approved the Memorandum of Understanding with the Central Contra Costa Solid Waste Authority and the County of Solano regarding construction and demolition debris certification development services.

Item 6.5, Approval of Scope of Work for Home Composting RFP: The Board requested additional evaluation information of the existing program to be presented at the next SCWMA meeting. The Board gave staff direction to proceed with the RFP process.

Item 6.8, Support for DEA Take Back Events: Staff was given direction to communicate the Board's support for DEA take back events to individual police departments, including a checklist of what is required for participation and copy the SCWMA Board Member and City Manager in that communication.

Item 7, Discussion and Possible Action on Franchise Agreement Assignment Assistance: Staff was given direction to develop a scope of work for assisting interested members with franchise agreement assignment, clearly defining what was being offered and how member participation would affect the project cost.

Item 8, Discussion and Possible Action on the 2017-18 SCWMA Draft Budget: Staff was directed to include additional funding for professional development and for performance evaluation. Staff was also given direction to further explore the SCWMA staff's unfunded liability, determine the amount, and potential mechanisms to begin addressing the unfunded liability.



To: Sonoma County Waste Management Agency Board Members

From: Patrick Carter, Executive Director

Subject: April 19, 2017 Board Meeting Agenda Notes

Closed Session Prior to Regular Meeting

Conference with Legal Counsel, Public Employee Performance Evaluation, Executive Director

Consent Calendar

These items include routine financial and administrative items and **staff recommends that they be approved en masse by a single vote.** Any Board member may remove an item from the consent calendar for further discussion or a separate vote by bringing it to the attention of the Chair.

- 6.1 **Minutes of the March 15, 2017 Meeting:** regular acceptance.
- 6.2 **April and May 2017 Outreach Calendar:** This item provides an update on upcoming outreach events. No action is required.
- 6.3 **Home Composting Evaluation:** At the March 15, 2017 SCWMA Board meeting, the Board directed staff to evaluate the existing program through the UCCE to determine whether home composting program should continue. Staff included the 2015-16 UCCE program report and analyzed their conclusions of the amount of material diverted through this program. Not enough information was provided to evaluate whether the 5,919 tons per year of claimed diversion effect is valid, but staff does believe the program does assist with the diversion of material and that there is merit in issuing an RFP to continue the program in some form. **Staff recommends the Board continue with the RFP process in order to evaluate whether there continues to be value in continuing the home composting program.**

Regular Calendar

7. **Public Workshop for Establishing Priorities for the Long Term Organics Capacity Request for Proposals Priorities:** The SCWMA's consultant on the Organics RFP process, R3 Consulting Group, recommended and included two stakeholder workshops in their scope of work for this project. The Board indicated an interest in hosting one of the events. Staff is requesting specific feedback on a number of priorities for the RFP as well as direction on whether non-participating or non-passing parties in the RFI process should be included in the RFP invitation. Stakeholders and interested parties which are unable to attend the workshops may participate through a Survey Monkey questionnaire. The presentation and link to the survey are at the SCWMA webpage, http://www.recyclenow.org/agency/public_meetings.asp **Staff recommends the Board conduct a public workshop at this meeting to receive feedback on the forthcoming RFP for Securing Long-Term Organics Capacity to determine the Board and community priorities for future organics processing sites.**



Minutes of the March 15, 2017 Special Meeting

The Sonoma County Waste Management Agency met on March 15, 2017, at the City of Santa Rosa Council Chambers, 100 Santa Rosa Avenue, Santa Rosa, California.

Present:

City of Cloverdale	Melanie Bagby	City of Santa Rosa	Absent
City of Cotati	Susan Harvey	City of Sebastopol	Henry Mikus
City of Healdsburg	Brent Salmi	City of Sonoma	Madolyn Agrimonti
City of Petaluma	Absent	County of Sonoma	Susan Gorin
City of Rohnert Park	Don Schwartz	Town of Windsor	Deb Fudge

Staff Present:

Executive Director	Patrick Carter	Staff	Felicia Smith
Counsel	Ethan Walsh		Kristin Thigpen
Agency Clerk	Sally Evans		Courtney Scott

1. Call to Order Special Meeting

Closed session was called to order at 8:00 a.m.

**2. Closed Session: CONFERENCE WITH LEGAL COUNSEL
PUBLIC EMPLOYEE PERFORMANCE EVALUATION**

3. Adjourn closed session at 8:48 a.m.

The regular Board meeting was called to order at 8:56 a.m.

Vice-Chair Henry Mikus, City of Sebastopol, stated there was nothing to report from closed session.

4. Agenda Approval.

5. Public Comments (items not on the agenda)

None.

6. Consent (w/attachments)

- 6.1 Minutes of February 15, 2017 Regular Meeting
- 6.2 March and April 2017 Outreach Calendar
- 6.3 Confirmation of Sonoma County Local Task Force Bylaws
- 6.4 Approval of MOU for C&D Facility Certification Development Services
- 6.5 Approval of Scope of Work for Home Composting RFP
- 6.6 Approval of Scope of Work for Spanish Language Outreach RFP
- 6.7 Approval of Scope of Work for Used Oil Program Management RFP
- 6.8 Support for DEA Take Back Events

Board Discussion:

Items 6.3, 6.4, 6.5 and 6.8 were pulled off the consent calendar for discussion.

Melanie Bagby, City of Cloverdale, requested Item 8 on the agenda be addressed first, as she needed to leave for another meeting at 10:30 a.m.

Public Comments:

None.

The motion for approval of Items 6.1, 6.2, 6.6, and 6.7 on the Consent Calendar was made by Susan Harvey, City of Cotati, and seconded by Brent Salmi, City of Healdsburg.

6.1 Minutes of February 15, 2017 Regular Meeting

6.2 March and April 2017 Outreach Calendar

6.6 Approval of Scope of Work for Spanish Language Outreach RFP

6.7 Approval of Scope of Work for Used Oil Program Management RFP

Vote Count:

Cloverdale	Aye	Santa Rosa	Absent
Cotati	Aye	Sebastopol	Aye
Healdsburg	Aye	City of Sonoma	Aye
Petaluma	Absent	County of Sonoma	Aye
Rohnert Park	Aye	Windsor	Aye

AYES -8- NOES -0- ABSENT -2- ABSTAIN -0-

Motion passed.

Regular Calendar

8. Discussion and Possible Action on the Fiscal Year 2017-18 SCWMA Draft Budget

Patrick Carter, Agency Executive Director, presented the 2017/2018 Draft Budget before the Board. Mr. Carter reported the budget included a recommended increase to the organics tipping fees to compensate for the CPI adjustments for the sites to which the material was taken. Mr. Carter listed the new programs being discussed for the 2017/2018 fiscal year as follows: updates to the Agency website to make it more user and mobile friendly, researching new model ordinances, Agency's vehicle replacement, Agency rebranding efforts, and continued exploration of a North County Household Hazardous Waste Facility.

Mr. Carter provided an update to the City of Rohnert Park's inquiry at a prior meeting regarding unfunded liabilities. Mr. Carter reported there was no mechanism currently in place for the County to request pre-payment or special payment from the Agency for unfunded liabilities.

Board Discussion:

Don Schwartz, City of Rohnert Park, asked that sufficient funding be allocated in the budget for professional development and to cover HR-related costs such as performance evaluations.

Mr. Schwartz, Susan Gorin, County of Sonoma, and Ms. Harvey expressed they were in agreement the unfunded liabilities needed to be reported in the budget and a mechanism needed to be in place.

Ms. Harvey and Deb Fudge, Town of Windsor, expressed their preference for the Agency or a trust account to maintain funds to be allocated for unfunded liabilities. Ms. Fudge asked the unfunded liabilities item be brought back with more information before the Board for additional discussion.

Ms. Harvey inquired what was driving additional revenues due to increasing disposal trends. Mr. Carter replied he believed it was due to increased economic activity.

Ms. Harvey inquired regarding the jump to \$90,180 for Additional County Services and asked if it equaled one Full-time Equivalent (FTE) worth of work.

Mr. Carter replied these were costs specifically defined in the MOU with the County of Sonoma which stated these could be reimbursed and he believed the costs calculated by the County were reasonable.

Ms. Gorin noted the Administration Services budget item reflected a 3% cost of living adjustment granted to all County employees and asked Mr. Carter if the additional assistance for health insurance was included in the budget.

Mr. Carter replied he obtained costs from the EFS system and believed it included salary and benefits but he would confirm the information.

Ms. Gorin stated she believed the funds for unfunded liabilities would remain with the Sonoma County Employees' Retirement Association (SCERA) and not with the County, and the funds would be invested well and earn investment income wherever they would be.

Mr. Schwartz requested the information regarding unfunded liabilities be received before the Agency budget approval in April or May and asked that only one tipping fee increase take place.

Mr. Mikus pointed out staff's recommendation of a \$2 per ton tipping fee increase on wood and yard debris was on the table for discussion, as it was included in the draft budget.

Mr. Carter noted the tipping fee increase would be a separate action.

Mr. Mikus asked for confirmation the \$100,000 for HHW Facility Feasibility would be funded through reserves. Mr. Mikus recommended moving further along with this project and suggested spending the money on a site study or clarifying the focus.

Mr. Carter confirmed the \$100,000 for HHW Facility Feasibility would be funded through reserves and noted in fiscal year 2016/2017 work was funded through the HHW operating fund, but staff was contemplating funding that through Reserves for fiscal year 2017/2018, as it was a one-time expense.

Public Comments:

None.

Board Discussion (continued):

Mr. Schwartz recommended the budget be finalized and include the unfunded liabilities information in time to implement a one-time tipping fee change, in April or May. Mr. Schwartz provided Agency staff direction to determine how much funding should be set aside either as a one time, annually or a reasonable amount of time to insure the Agency did not have any unfunded liabilities.

6.3 Confirmation of Sonoma County Local Task Force Bylaws

Mr. Carter explained this item was pulled from consent at the last Agency meeting by Ms. Harvey. Mr. Carter noted the Bylaws provisions required each member and an alternate be identified by their organization or recommending agency and a city representative may be an elected official or a staff person, and a citizen of the city may serve as an alternate representative. Mr. Carter noted there was the question of whether the cities would be interested in allowing individual residents of the city to serve in the primary position in addition to just the alternate.

Board Discussion:

Ms. Harvey explained that in looking through the Bylaws she realized it said the city representative needed to be an elected or staff person and found out Cotati's representative was a citizen, therefore an elected or staff person needed to be primary or the Bylaws would need to be changed.

Mr. Schwartz stated Rohnert Park generally took the position every jurisdiction should be able to appoint who they want to appoint and suggested changing the Bylaws to reflect no restrictions.

Mr. Schwartz requested the LTF minutes be sent to the Agency Board and Alternates as a matter of practice, as they were an advisory to the Agency Board.

Public Comments:

Ken Wells, Local Task Force Sierra Club Representative, apologized for the oversight on updating the Bylaws previously, and noted there were citizen alternates on the LTF. Mr. Wells stated he was in support of the adjustment in the Bylaws regarding representation. Mr. Wells thanked Mr. Schwartz for expressing interest in receiving the LTF minutes.

Board Discussion (continued):

Ms. Bagby noted she was also in favor of the Bylaws change, as Cloverdale also had a citizen appointee to the LTF.

Ms. Harvey motioned to confirm the Sonoma County Local Task Force Bylaws with the change stating the cities would select the member of their choice to serve as primary or secondary on the LTF. Ms. Bagby seconded the motion.

Vote Count:

Cloverdale	Aye	Santa Rosa	Absent
Cotati	Aye	Sebastopol	Aye
Healdsburg	Aye	City of Sonoma	Aye
Petaluma	Absent	County of Sonoma	Aye
Rohnert Park	Aye	Windsor	Aye

AYES -8- NOES -0- ABSENT -2- ABSTAIN -0-

Motion passed.

6.4 Approval of MOU for C&D Facility Certification Development Services

Mr. Carter presented the MOU for C&D Facility Certification Development Services for Board approval. Mr. Carter noted staff felt it was crucial to understand where the material ended up and how to quantify it and come up with policies that make sense to insure that material was being diverted.

Mr. Carter explained the Agency entered into an MOU with regional partners last year (JPA in Contra Costa, at the time Sunnyvale, San Jose, and the County of Solano). Mr. Carter stated a competitive process took place to identify potential consultants to develop procedures for measuring the amount of diversion happening at construction and demolition facilities. Mr. Carter noted there were two responses and proposals and Tseng and Associates was selected as the preferred consultants to go forward with that. Mr. Carter noted the agreement with Tseng Associates was included in the packet for reference.

Mr. Carter stated Agency staff was seeking the Board's approval of the MOU between the SCWMA, the County of Solano, and RecycleSmart, a JPA in Contra Costa County. Mr. Carter noted this MOU addressed how cost was divided between the three members and provisions as to who was managing the program on behalf of the members, termination, indemnity and all standard contract provisions. Mr. Carter stated Agency staff was confident in the selection of the contractor, believed the RFP process was fair, and the Agency was within its rights with the process.

Board Discussion:

Mr. Mikus asked Ethan Walsh, Agency Counsel, to address a letter received by the Agency regarding this item.

Mr. Walsh explained the Agency received a letter and an email asking this item be taken off consent in objection of the process as the RFP was not clear and did not address the types of concerns for the program. Mr. Walsh stated he did not believe there were any legal concerns with the RFP process, as the process was laid out in the RFP and the process was followed.

Mr. Mikus asked for confirmation the organization who submitted the letter did not submit a proposal and Mr. Carter replied affirmatively.

Ms. Harvey asked if there was a Q&A period for this RFP. Mr. Carter replied affirmatively, and noted there was an addendum issued.

Public Comments:

Stephen Bantillo, Recycling Certification Institute, stated the letter was sent by his organization and he was in agreement with Mr. Walsh regarding the legality and his organization's concerns.

Mr. Bantillo noted his organization was concerned the RFP was not written as clearly as it could have been and with a variety of conflicting interests, therefore, they were unable to propose on the RFP. Mr. Bantillo stated communications with other consultants or firms expressed the same concerns.

Mr. Bantillo stated his organization felt this MOU was not necessary, as there was already a national certification protocol implemented nationwide. Mr. Bantillo explained his organization

was currently working in the bay area with the Alameda County Waste Management Authority and his organization had seven lines certified in the bay area that handled approximately half of the C&D in the bay area. Mr. Bantillo stated their cost would've been significantly less if they had proposed on the RFP, and the reason for any cost at all would be due to the core participant's request in needing something different. Mr. Bantillo explained that Agencies wanting facilities certified could do it at no cost to the Agency by writing an ordinance or regulation stating facilities needed to meet MRpc87 level of standard. Mr. Bantillo stated his organization's request was for this contract to require MRpc87 level of standard.

Board Discussion (continued):

Ms. Gorin noted this happened frequently when an RFP was issued, and she looked to legal counsel to insure the RFP process was legal.

Mr. Walsh replied the process was legal and the concerns raised by Mr. Bantillo were policy concerns.

Ms. Gorin stated she would assume this RFP would pay attention to the National Standards in any certification.

Mr. Carter replied all information that provided reliable accurate information was being considered.

Ms. Gorin stated she was comfortable with staff's recommendation to approve the MOU.

Mr. Schwartz shared he recalled facilities in the county were concerned regarding the commitment involved in the process, and he was glad the scope of work included their participation.

Madolyn Agrimonti, City of Sonoma, motioned to approve the MOU for C&D Facility Certification Development Services and Susan Gorin, County of Sonoma, seconded the motion.

Vote Count:

Cloverdale	Aye	Santa Rosa	Absent
Cotati	Aye	Sebastopol	Aye
Healdsburg	Aye	City of Sonoma	Aye
Petaluma	Absent	County of Sonoma	Aye
Rohnert Park	Aye	Windsor	Aye

AYES -8- NOES -0- ABSENT -2- ABSTAIN -0-

Motion passed.

6.5 Approval of Scope of Work for Home Composting RFP

Mr. Schwartz pulled this item off consent for discussion, as he wished to inquire what evidence there was this educational home composting program had worked prior and worth doing again. Mr. Schwartz asked to see the results of the evaluation for the previous home composting program prior to considering this RFP.

Mr. Carter replied information was included in the report provided by the previous contractor and could be presented at the April Board meeting.

Public Comments:

None.

Mr. Schwartz motioned to hold the item for consent until the following month when the results of the evaluation were included in the report. Ms. Harvey seconded the motion.

Board Discussion:

Ms. Gorin asked if this item was time sensitive.

Mr. Carter replied it would be difficult to accomplish the RFP process without a gap and it would also be difficult to put a program together quickly if the new contractor would be participating at the Sonoma County Fair, but there was no requirement the home composting program would have to start July 1st. Mr. Carter noted it may not necessarily be the same contractor in the future, therefore the previous evaluation may not be an indication of the contractor going forward.

Mr. Schwartz amended his motion to approve the RFP but have the evaluation provided at the April Board meeting and prior to approving future contracts. Ms. Harvey seconded the amended motion.

Vote Count:

Cloverdale	Aye	Santa Rosa	Absent
Cotati	Aye	Sebastopol	Aye
Healdsburg	Aye	City of Sonoma	Aye
Petaluma	Absent	County of Sonoma	Aye
Rohnert Park	Aye	Windsor	Aye

AYES -8- NOES -0- ABSENT -2- ABSTAIN -0-

Motion passed.

6.8 Support for DEA Take Back Events

Mr. Schwartz pulled this item off consent for discussion. Mr. Schwartz stated he was in favor of the recommended action of encouraging public safety/police departments to participate in the Drug Enforcement Administration (DEA) prescription drug take back event. Mr. Schwartz requested the Agency Executive Director provide information regarding the event, and the specific steps to take to participate, to the public safety/police departments, and copying county board members and city managers.

Board Discussion:

Ms. Bagby stated she was in agreement the outreach was important and believed her jurisdiction’s police chief would respond favorably.

Ms. Agrimonti stated the City of Sonoma had previously participated in this event and expressed her support for the event. Ms. Agrimonti recommended informing the community where to do this during the year.

Mr. Carter explained the education could be supplemented, however this was one of the few opportunities to legally dispose of controlled substances. Mr. Carter noted this events only

happened twice a year, as the regular medicine take back locations could not take the controlled substances because it required a sworn peace officer to monitor that activity.

Public Comments:

None.

Board Discussion (continued):

Ms. Agrimonti motioned to approve requesting the Agency Executive Director provide information to the public safety departments, copying county board members and city managers regarding the drug takeback event and the specific steps to take to participate. Ms. Fudge seconded the motion.

Vote Count:

Cloverdale	Aye	Santa Rosa	Absent
Cotati	Aye	Sebastopol	Aye
Healdsburg	Aye	City of Sonoma	Aye
Petaluma	Absent	County of Sonoma	Aye
Rohnert Park	Aye	Windsor	Aye

AYES -8- NOES -0- ABSENT -2- ABSTAIN -0-

Motion passed.

7. Discussion and Possible Action on Franchise Agreement Assignment Assistance

Mr. Carter stated this item was regarding the discussion that took place at the last Board meeting regarding the potential assignment of the franchise agreements that would affect 9 of the 10 jurisdictions in Sonoma County. Mr. Carter noted it was suggested there were likely a number of questions that would be common amongst all members regarding the assignment but also recognizing each franchise agreement was unique and ultimately each city and the County needed to take ownership for whatever assignment it would have.

Mr. Carter stated the intent of this item was to determine if there was interest in having a consultant look at the franchise agreements to determine what things were common between the nine jurisdictions, and potentially helping the cities and the County perform their due diligence on the potential assignment. Mr. Carter estimated the cost for a consultant to perform an analysis of the franchise agreements was less than \$25,000.

Board Discussion:

Ms. Gorin asked where the interest in this came from and what the Agency expected to get out of participating and going into the level of detail that may be asked for in an RFP.

Mr. Carter replied this was a service the Agency was looking at providing the Agency members, to provide the expertise for the review of the contract to those who would not necessarily have someone devoted to solid waste. Mr. Carter noted attorneys would need to be involved from the cities and county and this service would not supersede that need.

Mr. Carter noted the suggestion that this was a service the Agency could provide was made by Dan St. John, City of Petaluma, during board member comments at the end of the last Board meeting.

Ms. Fudge noted Windsor was within about a month of awarding a new contract and noted Santa Rosa was almost on the same timeline, but she would be willing to move forward if it helped smaller cities.

Ms. Bagby stated Cloverdale was somewhere in the middle of the term, but she felt this was a valid use of the Agency's pulling power to benefit smaller cities, and she was interested in moving forward with this.

Mr. Schwartz stated Rohnert Park may not be interested in this because they would need their attorney to review it anyways and they could use R3 Consulting Group if they needed to. Mr. Schwartz acknowledged this could be of value to smaller cities. Mr. Schwartz asked if this was something Mr. Walsh would be able to take on for the cities interested, as it would reduce the cost.

Mr. Walsh recommended the interested cities speak with their attorneys to see if that worked for them. Mr. Walsh stated it was something he could do, but he would have to provide the information to the Agency Board member, as he could not provide legal advice directly to the cities. Mr. Walsh stated he could also reach out to the city attorneys if the Board wished.

Ms. Gorin stated she felt the staff report did not describe the tasks to be performed.

Mr. Walsh noted that when there was an assignment provision in these types of franchise agreements and an entity taking over for another entity, a large part of the conditions could be the ability of the entity taking over. Mr. Walsh noted he did not have that type of knowledge in the industry and those expertise to offer.

Mr. Mikus stated that in his review of the franchise agreements as it related to compost materials, he was surprised at the subtle differences. Mr. Mikus said he was supportive of this item moving forward.

Public Comments:

Ken Wells, Interested Party, commented that while this was an assignment, there were recycling, diversion, and education responsibilities. Mr. Wells noted it would be useful to review them, and while it may not be allowable under the language of the assignment, it might be nice to know what the responsibilities were in the different communities. Mr. Wells stated this could be an opportunity to get on the same page and of great value to the Agency.

Board Discussion (continued):

Ms. Gorin stated she was in agreement with Mr. Wells that there was value in communicating what the community values were and having shared goals regarding HHW, diversion and other things. Ms. Gorin noted that would be the Agency Board communicating with the jurisdictions in their negotiations and that did not require a consultant.

Ms. Gorin asked if the proposal was that the Agency would be advocating to the jurisdictions about what their franchise agreements should look like or would it just be reporting back.

Mr. Carter replied Agency staff proposed looking at the assignment portions for consistency sake, and reiterated this would only be offered as a service to those interested to determine what discussions would need to take place and things that would be common among all members. Mr.

Carter noted that in the future, when franchise agreement were up, the Agency could offer to assist jurisdictions as to the type of issues to consider, as the Agency did with Santa Rosa and Windsor in their current procurement processes.

Ms. Gorin recommended if they were to move forward with this, those smaller cities wishing to should do so on a contractual basis. Ms. Gorin asked that what was being offered to the smaller cities be really clear.

Vice-Chair Mikus asked if Ms. Gorin would be comfortable if Agency staff came back with a scope of work clearly defined.

Ms. Gorin replied she would also want the ability to opt-in and opt-out and an analysis about how it would affect the Agency finances.

9. Boardmember Comments

Mr. Schwartz asked for the status on the JPA renewal conversations.

10. Staff Comments

Mr. Carter reported he had been to eight of the cities for JPA renewal discussions and all eight had voted to approve the JPA renewal agreement. Mr. Carter noted Santa Rosa was scheduled for April 4th and the County for April 11th.

11. Next SCWMA meeting: April 19, 2017

12. Adjournment:

The meeting adjourned at 10:35 a.m.

Submitted by:
Sally Evans



Agenda Item #: **6.2**
 Agenda Date: **4/19/2017**

ITEM: **April and May 2017 Outreach Calendar**

April 2017 Outreach Events

Day	Time	Event
1	10 AM-10:30 AM	Recycling Presentation to Pasitos Program– Amarosa School, Santa Rosa
4	4 PM – 8 PM	Community Toxics Collection – Windsor
5	9 AM – 4 PM	Sustainable Enterprise Conference – Rohnert Park
6	4:30 PM – 5:30 PM	HeadStart Parent Committee Meeting at Doyle Park – Santa Rosa
6	5 PM – 6 PM	HeadStart Parent Committee Meeting at Martinez and Guillory – Windsor
7	1 PM – 2 PM	Recycling Assessment at Ram’s Gate Winery – Sonoma
11	4 PM – 8 PM	Community Toxics Collection – Sonoma
11	5 PM – 6 PM	HeadStart Parent Committee Meeting at MLK Jr. – Santa Rosa
13	12:30 PM – 1 PM	HeadStart Parent Committee Meeting at Kawana School – Santa Rosa
18	10 AM – 11 AM	Waste Assessment at Sports Basement – Santa Rosa
18	4 PM – 8 PM	Community Toxics Collection – Cloverdale
18	5 PM – 6 PM	HeadStart Parent Committee Meeting at Lincoln School – Santa Rosa
21	9 AM – 11 AM	Recycling Training at Lambert Bridge Winery - Healdsburg
21-23	9 AM – 5 PM	E-Waste Collection Event – Healdsburg Community Center
22	8:30AM – 11:30 AM	Roseland Creek Elementary Career Fair - Santa Rosa
22	12 PM - 4 PM	City of Santa Rosa Earth Day – Santa Rosa
23	10 AM – 2 PM	Earth Day and Wellness Festival – Town of Windsor
25	4 PM – 8 PM	Community Toxics Collection – Santa Rosa, SE

May 2017 Outreach Events

Day	Time	Event
2	4 PM – 8 PM	Community Toxics Collection – Guerneville
3	5 PM-8:30 PM	Downtown Wednesday Market – Santa Rosa
5	3 PM – 9 PM	Roseland Area Cinco de Mayo – Santa Rosa
5	8 PM – 5 PM	Windsor Cultural Festival and Cinco de Mayo– Windsor
5	5 PM – 8 PM	Annual Cinco de Mayo Family Festival – Sonoma
7	10 AM – 4 PM	SRJC 2017 Day Under the Oaks – Santa Rosa

9	4 PM – 8 PM	Community Toxics Collection – Oakmont
9	4:30 PM – 5:30 PM	HeadStart Parent Committee Meeting at Temple Road – Santa Rosa
10	5 PM-8:30 PM	Downtown Wednesday Market – Santa Rosa
11	8 AM - 5 PM	Zero Waste Symposium – Rohnert Park
16	4 PM – 8 PM	Community Toxics Collection - Healdsburg
17	5 PM-8:30 PM	Downtown Wednesday Market – Santa Rosa
19-21	9 AM – 5 PM	E-Waste Collection Event – Santa Rosa Whole Foods Coddington
23	4 PM – 8 PM	Community Toxics Collection – Boyes Hot Springs
24	5 PM-8:30 PM	Downtown Wednesday Market – Santa Rosa
30	4 PM – 8 PM	Community Toxics Collection – Larkfield
31	5 PM-8:30 PM	Water Expo during the Wednesday Night Market – Santa Rosa



Agenda Item #: **6.3**
Cost Center: **Yard Debris**
Staff Contact: **Carter**
Agenda Date: **4/19/2017**
Approved By:

ITEM: Evaluation of Home Composting Program

I. RECOMMENDED ACTION / ALTERNATIVES TO RECOMMENDATION

Staff recommends the Board continue with the RFP process in order to evaluate whether there continues to be value in continuing the home composting program.

II. BACKGROUND

The SCWMA has had a program to educate Sonoma County residents about the benefits of composting at home since 2007. The University of California Cooperative Extension/Master Gardeners (UCCE) has been providing this service through a series of agreements for the duration of this program. The current agreement with the UCCE expires on July 1, 2017. The UCCE provides summary reports and evaluation of the program each year, the latest of which is included as an attachment.

At the March 15, 2017 SCWMA Board meeting, the Board directed staff to evaluate the existing program through the UCCE to determine whether home composting program should continue.

III. DISCUSSION

Staff believes the UCCE has fulfilled its obligations under the agreement for the home composting and pesticide use reduction education program. The UCCE participated in the events and venues required, held workshops and presentations, and distributed outreach information. The UCCE has submitted reports to the SCWMA as required. Staff also believes the program has resulted in increased landfill diversion and reduced pesticide use.

The UCCE determined that this program results in 5,919 tons of diversion per year. This was calculated by the UCCE by applying the amount of kitchen scraps and yard debris diverted for each survey respondent to the 14,623 people reached at the large events, farmers markets, educational booths, and school presentations. However, staff is unable to determine whether this is a statistically valid survey (285 respondents out of 2,602 participants who provided contact information in UCCE events, out of 14,623 people reached in that year). Staff believes that the respondents which reported diversion actually diverted material, and it is highly likely that other non-respondents also diverted some amount of material, but staff does not have enough information to be able to extrapolate up to the 5,919 tons per year diverted.

Regardless of the diversion amounts from the current program, the future program is likely to be different, as the contractor or the program activities may change. Staff included a section in the

evaluation specifically to address how the proposers self-evaluate, so additional attention will be paid to the evaluation of proposals and the future program with regard toward producing verifiable and quantifiable results.

IV. FUNDING IMPACT

The Draft FY 17-18 Budget includes \$28,000 for this project. Actual costs will depend on the proposals received through the RFP.

V. ATTACHMENTS

Home Compost Education and Pesticide Use Reduction Education Program Report 2015-2016

Home Compost Education and Pesticide Use Reduction Education Program Report 2015-2016



Composting workshop at Bayer Farm in Santa Rosa, June 2016

2015-2016 Annual Report

Prepared by Mimi Enright, Program Manager
UC Cooperative Extension Sonoma County

Home Compost Education & Pesticide Use Reduction Education Program

Annual Report, July 2015-June 2016

This is a report of activities for the second year (July 1, 2015 to June 30, 2016) of the renewed three-year contract from July 1, 2013 to June 30, 2016.

1 Results Summary



A total of 14,623 people were reached through over 300 events, community gatherings, workshops, farmers' markets, library series talks and the resource desk. Many thousands more were reached via our website and Facebook page which provide educational information on home composting and pesticide use reduction strategies as well as many other topics. Five Hundred ninety-one (591) school children were also reached in school vermicomposting presentations. Based on these efforts, an estimated 5,916 tons of organic materials (kitchen scraps and yard waste) were diverted from the landfill this last year.

2 Program Goals and Contracted Tasks

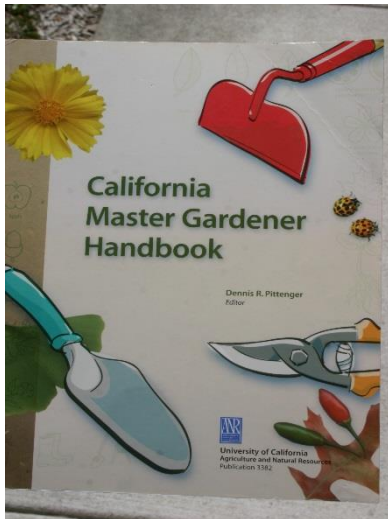
To reduce organic landfill inputs by teaching home composting through volunteer Master Gardeners (MG) at public events, schools, community gatherings, resource desks, and workshops.

- Provide home composting and pesticide use reduction education (PURE) information via direct contact with 5,000-10,000 county residents at selected major public events, including, but not limited to, the Sonoma County Fair, Spring Home and Garden Show, and the Cloverdale Citrus Fair for a minimum of 25 event days per fiscal year.
- Create an educational demonstration garden at the Sonoma County Fair.
- Provide home composting and PURE information via direct contact with county residents at ten farmers' markets (Healdsburg, Cloverdale, Sebastopol, Oakmont, Sonoma, Santa Rosa, Occidental, Cotati, Windsor and Petaluma), and Master Gardener Library Series presentations at 9 libraries (Cloverdale, Guerneville, Petaluma, Rohnert Park, Sonoma, Healdsburg, Windsor, Sebastopol, and Santa Rosa) for a minimum of 200 Farmers' Market and Library Series days.
- Distribute 10,000 educational brochures on home composting and PURE including UC Consumer Pest Cards, at the events listed above.
- Conduct 20 school classroom presentations, leaving the class with worm composting materials for students and teachers to practice school waste diversion and to effect behavioral change in students.



- Provide a resource desk and phone line to answer composting questions 5 days per week and 4-6 hours per day.
- Determine the effectiveness of Master Gardener outreach efforts (landfill tonnage and/or pesticide use reduction) through a short survey sent to at least two hundred people once every three (3) years who have received educational information.

3 Background



Since 1993, the University of California Cooperative Extension (UCCE) has provided compost education for county residents with funding from the Sonoma County Waste Management Agency (SCWMA). In the last twenty years, the program has made over 750,000 contacts with composting brochures, bin distribution programs, educational booths at large public events, library talks, farmers' market information tables, workshops, and by providing a resource desk for call-in/drop-in questions in Santa Rosa. Each year large numbers of people have been reached by concentrating efforts at educational booths at well-attended public events.

From 1994-2002, surveys were conducted to document home composting by trained workshop and educational event participants, which provided the benchmark for tonnage diversion up until 2002. According to those surveys we estimated that almost 70% of workshop contacts began or increased composting and reduced their input into the waste stream by 19.5 gallons per household per month.

In 2003-04, a short post card survey was sent to people who received information about home composting from the Master Gardener Program. This survey was designed to gather information about the effectiveness of information disseminated on home composting from mini-demos and event booths. From survey responses we estimated that about one-quarter (23.2%) of those, who had received information on composting, started or increased their composting. Those respondents indicated that on average they were composting almost 1 gallon (0.92 gallons) of kitchen waste and almost 4 gallons (3.68 gallons) of yard waste per month.

Additionally, almost one-third (29.7%) of the survey respondents indicated that on average they were diverting 13.8 gallons per month of organic materials into the curbside pick-up containers. Similar results were obtained from surveys conducted in 2007 and 2010 in which twenty percent (20%) of the people receiving compost information from the Master Gardener Program started or increased composting. They also indicated that they were composting about 18 gallons of kitchen scraps and yard waste per month.



The 2013 survey showed that 64% of respondents had started or increased composting and that they were composting an average of 4.4 gallons of kitchen scraps and 42 gallons of yard waste per month. That is a large increase from previous surveys in past years. In 2016, the survey showed that 54% of respondents had started or increased composting and that they were composting an average of 5.6 gallons of kitchen scraps and 22 gallons of yard waste per month. Current diversion estimates are based on the 2016 survey, the results of which indicate that the educational efforts by the Sonoma County UCCE Master Gardeners are very effective and have led to a significant reduction in landfill inputs.



In regard to pesticide usage, most people who received information from Master Gardeners have changed their attitudes toward garden pesticides. In the 2016 survey, 42% of respondents tend to leave problems alone instead of treating them with something, another one-third now seek out the lowest possible toxicity products for application, and one-quarter have changed their gardens to include more appropriate plants that have fewer pest problems. This should lead to less pesticide use in the home garden, cleaner runoff water, and fewer unused toxic pesticides requiring disposal by the Sonoma County Waste Management Agency.

The Compost Education Program is operated primarily by volunteers. The budget reflects maintenance of current educational efforts. There are four unique aspects to this project:

1. Master Gardener (MG) volunteers are under the direction of the University of California Cooperative Extension and connected to UC-based research expertise.
2. Non-biased documentation of the results of educational efforts is conducted periodically in order to re-evaluate and update methodologies of the program. Landfill diversion estimates are based on statistically valid indicators of behavioral change collected from survey data.
3. Master Gardeners have a broad-based network of community projects and a reputation for providing practical science based information.
4. The volunteer nature of the program provides multiple in-person contacts for homeowners at a substantially lower cost than private contracting.

4 Objectives Achieved in 2015-16

Events, Community Gatherings, and Workshops



The Master Gardeners had booths at numerous large public events, community gatherings, and workshops (38 event days) in the county and provided information to 6,420 people. They distributed thousands of brochures and demonstrated home composting with display compost bins and worm boxes. We have excellent geographic coverage at events all around Sonoma County. The events, dates, and number of contacts are listed in Table 1.

At one of our premier events each year, the demonstration garden at the Sonoma County Fair, we displayed a home compost bin and provided home composting brochures to many contacts. Large audiences were attracted to the garden which demonstrated sustainable landscaping practices, and many attendees received information on composting as in past years.

Table 1. Master Gardener Home Composting Education Program at Large Events, Community Gatherings, and Workshops

EVENT	DATE	# OF CONTACTS
Petaluma Art & Garden Festival	July 12 (1 day)	103
Sonoma County Fair	July 24 – August 15 (15 days)	2,869
Heirloom Exposition	Sept. 8 – 10 (3 days)	474
Jail Industries Nursery Sales	Sept. 12, Oct. 10, May 7 (3 days)	588
North Bay Science Fair	Oct. 24 (1 day)	882
Redwood Empire Scion Exchange	January 23 (1 day)	71
Harvest for the Hungry Plant Sale	March 19 (1 day)	45
Food Gardening Workshops	April 9, April 23 (2 days)	300
Gloria Ferrer Event Info Table	April 9 (1 day)	135
Other Info Tables	Feb. 24, April 16, June 13 (3 days)	71
Petaluma Bounty Plant Sale	April 24 (1 day)	40
Sunset Magazine Open House 23@ Cornerstone Gardens	April 14 – 15 (2 days)	465
Sudden Oak Death Workshops	May 14 – 15 (2 days)	315
Compost Workshops	June 11, June 18 (2 days)	62
TOTAL	38 Event Days	6,420

Other Educational Events

The Master Gardeners presented information on composting at over 300 small-scale events throughout the year. They distributed brochures, made short presentations on home composting and worm composting, and answered questions for 7,034 people (5,377 at farmers' markets, demonstration gardens, garden clubs, and our Garden Sense program home visits and 1,657 via our Library series). The event dates and contact numbers are listed in Tables 2 and 3.

The farmers' markets have information tables where Master Gardeners provide guidance on plant culture, pest control and composting. The library series events focus on a specific gardening topic and include information and handouts on home composting and pesticide use reduction. Some of the library series talks specifically focus on composting or worm composting.



In 2016, in partnership with the Sonoma County Waste Management Agency via our Community Compost Education series, we hosted a series of eight composting workshops over the summer including our first Spanish language educational workshops on composting. These Spanish language events were held at Bayer Farm in Santa Rosa, Graton Labor Center in Graton and La Luz in Boyes Hot Springs.

Our Garden Sense program, launched in September 2013, is a partnership with the Sonoma County Water Agency. Garden Sense volunteer consultants meet with Sonoma County residents in their gardens to discuss sustainable landscape practices, advise how to increase irrigation efficiency, reduce or remove lawns, soil health and create climate-appropriate gardens based on the client's functional needs.

Table 2. Master Gardener Home Composting Education Program Contacts at Farmers' Markets, Small Fairs, Garden Clubs, and Community Gardens

EVENT	DATE	# OF CONTACTS
4 Cotati Farmers' Mkts.	1 st Thursday (monthly) 4 mos.	61
12 Cloverdale Farmers' Mkts.	June through August	106
21 Healdsburg Farmers' Mkts.	May through September	122
30 Sebastopol Farmers' Mkts.	May through November	657
83 Sonoma Farmers' Mkts.	April - Oct. & Fridays all year	52
21 Santa Rosa Farmers' Mkts.	May through September	1,339
26 Petaluma Farmers' Mkts.	May through October	374
21 Occidental Farmers' Mkts.	May through September	452
5 Oakmont Farmers' Mkts.	1 st Saturday (monthly) 5 mos.	91
5 Windsor Farmers' Mkts.	May, June 2010	159
Harvest For The Hungry	February – November	45
Petaluma Education Garden	All year	852
Sonoma Garden Park	All year	574
Sonoma Waterwise Garden	All year	58
Garden Sense Home Visits	All year	435
TOTAL	250 Farmers Market Days	5,377

Table 3. Master Gardener Home Composting Program Contacts at Library Series Talks

LIBRARY OR LECTURE SERIES	# OF CONTACTS
Cloverdale Library	29
Guerneville Library Series	63
Healdsburg Library Series	130
Petaluma Library Series	169
Rincon Valley Library Series	118
Rohnert Park Library Series	62
Sebastopol Library Series	177
Sonoma Library Series	153
Windsor Library Series	179
Garden Club & Other Lectures	577
TOTAL CONTACTS (70 Event Days)	1,657

School Presentations

Master Gardeners made 10 school presentations in classrooms with an average of 25 - 30 students. During this last fiscal year 591 students (K-12) were contacted. The demonstrations were for the length of a normal class period. They were done to develop an environmental awareness and to encourage recycling of organic wastes from the classroom and school. Most presentations included the establishment of a worm box in the classroom. Fliers were sent home with students to encourage parents to compost and recycle. See Table 4 for a list of schools and presentation dates.



Table 4. Master Gardener School Presentations

SCHOOL	DATE
1 @ Petaluma Library	July 22
1 @ Heirloom Expo	Sept. 10
1 @ Sequoia Elementary	Nov. 18
2 @ Evergreen Elementary	Dec. 7
2 @ SRJC	Dec. 10
1 @ Parkside Elementary	Mar. 15
1 @ Alta Mira Middle School	April 13
1 @ Petaluma Library Garden	June 22
10 Presentations at 6 Schools	

Resource Desks

The Master Gardeners maintain an Information Desk at the UCCE Sonoma office at 133 Aviation Boulevard, Suite 109 in Santa Rosa. We provide answers to walk-in clientele, via e-mail and phone for gardening questions in Santa Rosa five days per week. This is one of the core functions of our organization and a key resource for educating the community. Trained Master Gardeners answered questions related to home gardening from 1,169 people.



Educational Brochures

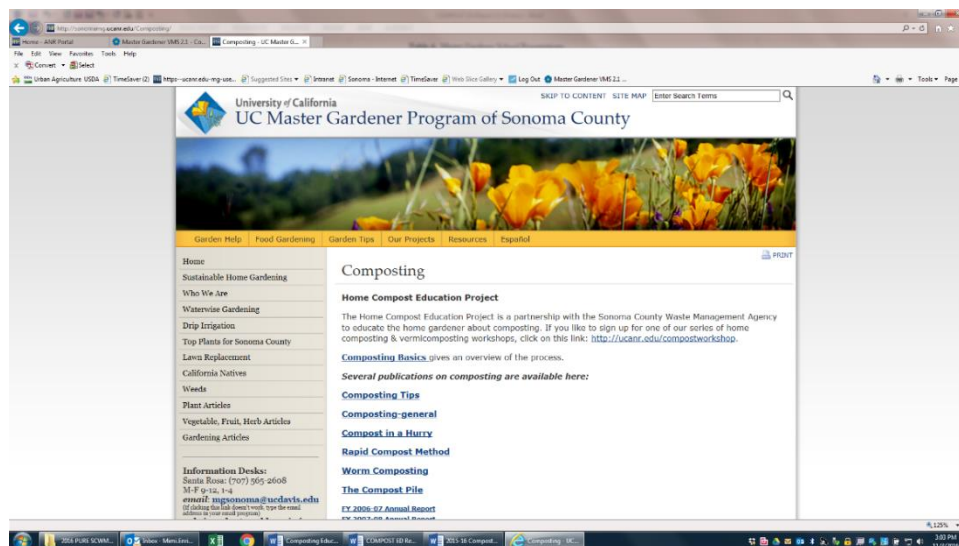


The Master Gardeners distributed copies of educational brochures about home composting at all of our major events, workshops, and schools presentations. Master Gardeners developed all of the educational brochures, except Composting Matters.

- *More Hints for Composting*
- *Composting Matters Activity Book*
- *Recycling Tips For Gardeners*
- *Abono Natural (Home Composting in Spanish)*
- *Worm Composting*
- *Putting Worms To Work And Keeping Them Happy*

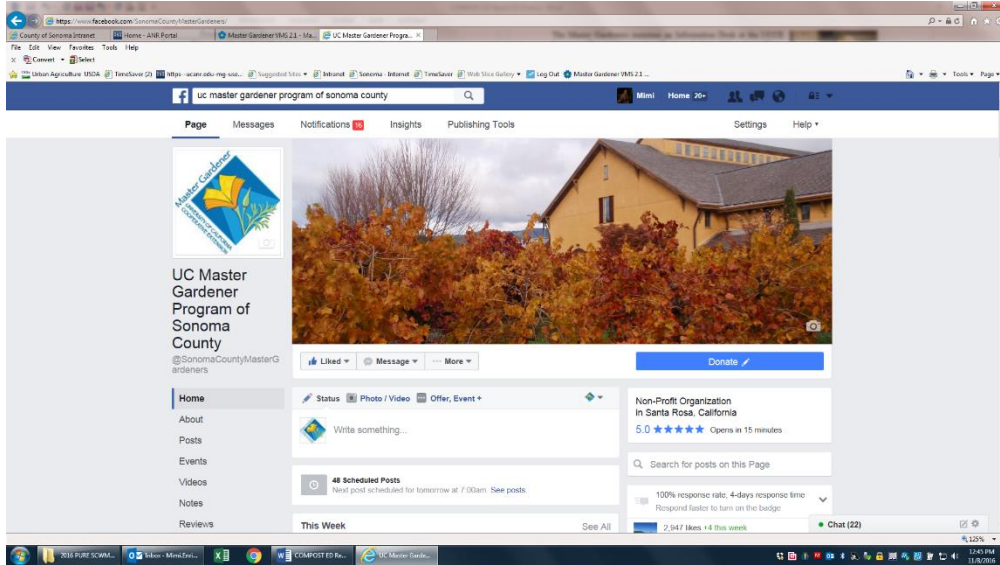
Website (ucanr.edu/sonomamg)

The UCCE Sonoma County Master Gardener website (generating 275,433 sessions during FY15-16) offers many resources for the home gardener, including a variety of composting publications that can be accessed at <http://ucanr.edu/sonomamg>.



Facebook Page

The Sonoma County Master Gardener Facebook page was created in late 2011. Through regular posting, we have created a dedicated following on Facebook. Many posts actively promote composting.



5 Conclusions and Recommendations

This past fiscal year, 2015-2016, was the third year of a renewed contract that ended June 30, 2016. The home composting program has been teaching backyard composting to homeowners, apartment dwellers, and school children for more than twenty years. Each year we evaluate the program and make changes to meet the goal of reaching the largest number of people in the least time-consuming and most rewarding ways for the participants and the Master Gardener volunteer trainers. The group is committed to including composting and pesticide use reduction information as an essential part of gardening.

A concentration of efforts toward providing information at events where people are already present has greatly increased our numbers of contacts the last few years. Many of those contacts are made during short conversations at Master Gardener educational booths at places such as Bloomin' Backyards (the Sonoma County Master Gardeners' biennial garden tour), the demonstration garden and information table at the Sonoma County Fair, farmers' markets, garden club talks, other fairs & festivals, community gardens, and library series presentations. A recap of our contacts for this fiscal reporting year is detailed below:

- | | |
|--------------------------------------|---------------|
| • Major Events and Workshops | 6,420 |
| • Farmers Markets and Library Series | 7,034 |
| • Phone Desk, Santa Rosa and Sonoma | 1,169 |
| TOTAL | 14,623 |
| • School children | 591 |
| • Website | 275,433 |

Home composting and pesticide use reduction education has become an integral part of the Master Gardener program, and the volunteers are committed to it. A composting curriculum and an IPM (integrated pest management) program have been added to the core-training program for all new Master Gardeners, effective publications and handouts have been developed, and there is timely coordination of activities. The Master Gardeners are proud of the success of the home composting program and our outreach to the public on this topic.



6 Tonnage Diversion Estimates



The Master Gardeners had direct contact with 14,623 people in FY 2015-16 at large events and workshops (39 event days) and over 300 smaller scale events such as farmers’ markets, tours, small fairs, library presentations, and resource desk. We also distributed composting brochures through educational booths, the Master Gardener desk, and through school presentations (591 youth). Calculations for the tonnage diversion estimates are based on direct contacts with adults only.

Our (University of California) survey in 2016 indicated that 54% of respondents increased or started composting. Home composters reduced their landfill inputs by 5.6 gallons of kitchen scraps and 22 gallons of yard waste per month. Based on these figures the diversion increase for FY 2015-16 due to the addition of new home composters or increased volume by those already composting was:

- 14,623 X 54% = 7,896 households beginning or increasing home composting
- **Kitchen scraps*** diverted = 5.6 gallons per month/household = 44,220 gallons per month = 128.24 tons per month = 1,539 tons per year = 2,628 cubic yards per year
- **Yard waste*** diverted = 22 gallons per month/household = 173,721 gallons per month = 365 tons per month = 4,380 tons per year = 10,325 cubic yards per year
- **TOTAL DIVERTED = 5,919 tons per year = 12,953 yd³ per year**

* *Weight and volume calculations for kitchen scraps are based on 70% moisture (5.8 lbs./gallon) (1,171 lbs./yd³). Weight and volume calculations for yard waste are based on 50% moisture (4.2 lbs./gallon) (848 lbs./yd³).*

Home Composting and Garden Pesticide Use Survey 2016

University of California Cooperative Extension (UCCE)
Master Gardener Program of Sonoma County

By Paul Vossen and Mimi Enright

The UC Master Gardener Program of Sonoma County has conducted several surveys over the last 19 years to determine the impacts of their Home Composting and Pesticide Use Reduction Education Programs. Home composting surveys were conducted in 1997, 2004, 2007, 2010, 2013, and 2016. For Garden Pesticide Use, three surveys were conducted in the following years: 2010, 2013, and 2016. Both of these two educational programs are funded by the Sonoma County Waste Management Agency (SCWMA). They reach approximately 10,000 people per year at fair booths, library talks, garden shows, several hands-on workshops, the county fair demonstration garden, over 300 farmers' market booths and by answering questions online, by phone or in person at our two offices in Santa Rosa or Sonoma.



The primary objectives of the programs are (1) to teach home gardeners about back yard composting in order to ultimately reduce landfill inputs of kitchen scraps and compostable yard waste; (2) to teach home gardeners about alternatives to the use of toxic pesticides in order to reduce the input of garden chemicals into our waterways; and (3) less garden pesticide usage/purchase overall, reduces the costs for later disposal of unused chemicals dropped off at the toxic waste dumps. Our educational programs that focus on reducing pesticide use help gardeners select plants that require less care and that have few or no pest problems. We also teach them about specific alternatives to conventional pesticides that use

either physical means to control pests or help them find organic, non-toxic products. Our back yard composting programs teach gardeners how to compost their garden wastes and kitchen scraps in conventional compost piles or with worms. They also learn about how soil and plants benefit from slowly released nutrients from organic matter.

In 2016 the survey was sent to 2602 people (electronically via email) who had previously received information about home composting and pesticide use reduction in their gardens. Two hundred eighty-five surveys were returned, which was 10.95% response rate. Each survey was sent to attendees who had signed in and provided their e-mail address at various Master Gardener educational events over the previous three years.

Garden Pesticide Use

A little over half 57.9% (165 out of 285 of survey respondents reported receiving information about pesticide use reduction that had been available to workshop attendees.

Of those respondents who reported receiving information from Master Gardeners:

- 55.2% reported that they no longer use any pesticides (none) in and around their home/garden
- 33.3% said that they use less pesticide
- 11.5% reported using about the same amount of pesticides
- 0% had used more pesticides, either year

When encountering a pest/disease problem in their garden:

- 34.4% reported seeking out a product with the lowest possible toxicity for control
- 1.7% said that they look for the most effective, longest lasting product they can find
- 42.3% said they tend to leave problems alone and wait until nature takes its course
- 21.6% reported that they have changed many of their garden plants to ones that have fewer pest or disease problems



When asked about the current status of pest problems in their garden:

- 51.5% percent responded that they have fewer pest problems compared to 3 years ago
- 38.4% indicated having the same number of pest problems
- 7.1% had no pest problems
- 3.0% had more pests

We asked if they had ever taken unused toxic garden chemicals to a free toxic waste roundup or to the SCWMA drop off site.

- 40.6% said yes, they had taken in unused toxic garden chemicals for disposal
- 59.4% said no.

Then we asked how much unused garden pesticide they had taken to a toxic waste drop off site.

- 6.0% said they had taken more
- 6.0% said about the same
- 21.8% said less
- 20.6% said that they had taken none (garden pesticides) to a toxic waste drop off site
- 45.6% did not respond to this question

For each survey, we asked them to list the garden pesticides used over the last 3 years. There was a clear reduction in usage of some the most toxic, conventional products such as: Ant Bait/Killer, Round Up®, Miracle Grow®, Slug & Snail Bait/Killer, Vitamin B-1, Sevin®, Lawn/Garden Insect Killer, Malathion, and Mite Killer. The is coincided with an increase in the usage of many of the low toxicity, organic, or alternative

products such as: Sluggo®, Insecticidal Soap, Copper Fungicide – specifically Microcop® or Liqui-Cop®, Diatomaceous Earth, Neem Oil, and Spinosad. See table 1.

Table 1. Percentage of people using the following home garden fertilizers and pesticides.

<i>Product by survey year</i>	2010	2013	2016
Ant Bait/Killer	35%	18%	34%
Round Up®	27%	26%	16%
Sluggo®	26%	34%	52%
Miracle Grow®	23%	20%	11%
Slug & Snail Bait/Killer	21%	16%	12%
Dormant Fruit Tree Spray	16%	16%	11%
Insecticidal Soap	16%	19%	20%
Dormant Oil Spray	13%	13%	13%
Lawn Fertilizer-Weed Killer	10%	10%	3%
Rose Fungicide	9%	9%	4%
Vitamin B-1	8%	7%	6%
Copper Fungicide	7%	10%	10%
Flying Insect Killer	7%	7%	9%
Sulfur Fungicide	7%	5%	4%
Sevin®	6%	2%	<1%
Neem Oil	<1%	2%	4%
Lawn/Garden Insect Killer	5%	1%	<1%
Gopher Bait	4%	4%	<1%
Microcop®/Liqui-Cop®	3%	7%	4%
Moss & Algae Killer	3%	3%	3%
Malathion	2%	<1%	<1%
Mite Killer	2%	< 1%	<1%
Poison Oak/Ivy Killer	2%	2%	2%
Spider Killer	2%	2%	<1%
Summer Oil Spray	1%	2%	2%
Bordeaux Spray	<1%	-	-
Broadleaf Weed Killer	<1%	<1%	<1%
Crabgrass Killer	<1%	<1%	<1%
Diatomaceous Earth	<1%	2%	2%
Diazinon	<1%	<1%	-
Termite Killer	<1%	3%	3%
Spinosad	<1%	3%	3%

We also asked a question about attitude changes toward the use of garden pesticides:

- 66.8% of respondents indicated that they had changed their attitude toward the use of pesticides in the home garden after receiving information and implementing new practices they had learned from the Sonoma County Master Gardeners.
- 33.2% said no, they had not changed their attitude toward garden pesticide use.

When asked how they had changed their attitude toward garden pesticides, here are some examples from the written responses:

- Our attitude toward pesticides was negative before meeting with the MG's and still is. I don't use them.
- My use has changed. I have gone from no control of anything to a minimalist non-toxic pest control methods. I planted more fruit crops and now have to control Peach Leaf Curl, Mildew, and Coddling Moth. My selection of pesticides is based on U.C. site recommendation as the most effective control.
- I do not and did not use chemical products in the garden.
- I have been trying to eliminate pesticide usage for more than 20 years. Have found after this past winter's heavier rain that I have more snails, slugs and earwigs than ever before. Using Sluggo and plastic containers with oil and soy sauce to eradicate. Use water for aphids and scale, leave everything else alone. Aside from rust and black spot on my roses and pear tree blight (had infected trees removed and will replace with something more disease resistant), aphids, earwigs and slugs.
- Yes- years ago I did use some roundup. We disposed of that and are strictly organic now. I eat only organic and don't want my yard or veggie garden contaminated.
- Try more environmental friendly approaches to gardening.
- Brought in plants that attract beneficial insects.
- I only use non-toxic solutions, including hand weeding, hand picking weevils, not replacing plants that have issues, compost, reducing overwatering, and letting other issues resolve themselves.
- Less use of toxic products and only used when absolutely necessary.
- By using fewer and fewer products; and finding other alternatives.
- I just search out mechanical or cultural ways to combat pests.
- I only use pesticides for serious problems and do what I can to find other ways to deal with problems.
- As I've become more focused on habitat gardening and native plants.
- Using less toxic pesticides & trying more organic controls.
- I don't use them but if I had a severe problem would check the IPM site to see what you recommend.
- Replace plant. Organic products/home remedies.
- Only use when absolutely necessary, perhaps twice a year.
- I want to use only natural, organic, non-toxic alternatives.
- I just don't use them and use natural ingredients to deal with pests.
- Buy plants that have a natural resistance, or are known for being disease resistant.
- Previously I would use whatever was necessary. Now I try to avoid pesticides.
- More aware of any substance that could harm bees. Eliminated the use of all pesticides.
- We use the least amount of pesticides as possible and much of our landscape is managed organically.
- Wait for nature and only use product in last resort.
- Won't use them anymore unless they are organic and non-toxic.
- I was aware of Master Gardeners' recommendations, possibly because I have been an ardent anti-toxics advocate.
- Adding compost, worm casting. Try to not disturb soil. Hand pick insects when possible.
- I have eliminated Sluggo Plus and will allow some disease on my native plants without treating them.
- Using management practices that eliminate the need for using pesticides.

Home Composting of Yard Waste and Kitchen Scraps:

Of the 285 returned surveys in 2016, 62.4% of the respondents indicated that they had remembered receiving information about composting from a Master Gardener. Surveys were sent to people who had attended some type of Master Gardener event at fair booths, farmers markets, workshops, reading one of the MG brochures, or by speaking to a Master Gardener on the phone or in person at our service desks. Of those who had received information, 54% indicated that they had started or increased home composting.

Of the gardeners that are composting yard waste:

- 1.0% have large compost piles composting between 30-75 gallons per week

- 19.2% are composting more than 10 gallons of yard waste per week
- 25.3% are composting about 5 gallons of yard waste per week
- 26.7% are composting about 2 gallons of yard waste per week
- 11.6% are composting about 1 gallon of yard waste per week
- 16.2% compost less than 1 gallon per week

Of the respondents who are composting kitchen scraps:

- 4.2% are composting 10 or more gallons of kitchen scraps per week
- 72.2% are composting between 1-5 gallons kitchen scraps per week
- 23.6% are composting less than 1 gallon of kitchen scraps per week

Of those respondents who are not composting yard waste or kitchen scraps:

- < 1% take the waste to the land fill on their own
- 74.2% use the green yard waste container
- 16.3% dispose of kitchen scraps in other ways (feed to chickens, bury in garden, feed to dog, etc.)
- 7.3% discard their kitchen scraps into the regular trash
- 2.2% put it into the garbage disposal

Conclusions:

The number of people indicating that they had started or increased composting over the last three years (2014 to 2016) was about the same as in 2000-2013. This indicates that Master Gardeners are doing a good job in reaching people one-on-one with a direct message rather than just giving them a brochure about composting. There has also been a steady interest in home gardening over the last three years with a corresponding increase in interest in home composting.

There is a large range in the amount of yard waste composted each week by home gardeners, probably based on the size of the garden. Most composters, however are putting about 1-5 gallons of kitchen scraps per week into the compost piles. Most of the people who are not composting are putting their yard waste and kitchen scraps into the green yard waste containers. On the average, households that the Master Gardeners have reached with information are composting 1.4 gallons of kitchen scraps and 5.5 gallons of yard waste each week. That is 27.6 gallons per month – 331 gallons per year. This has led to a significant reduction in landfill inputs over the last few years.





Agenda Item #: **7**
Cost Center: **Organics Reserve**
Staff Contact: **Carter**
Agenda Date: **4/19/2017**
Approved By:

ITEM: Public Workshop for Establishing Priorities for the Long Term Organics Capacity Request for Proposals

I. RECOMMENDED ACTION / ALTERNATIVES TO RECOMMENDATION

Staff recommends the Board conduct a public workshop at this meeting to receive feedback on the forthcoming RFP for Securing Long Term Organics Capacity to determine the Board and community priorities for future organics processing sites.

II. BACKGROUND

From 2007 to 2016, the SCWMA was engaged in a process to identify, study, permit, and build a new compost site to replace the temporary compost site at the Central Disposal Site. The process ended in 2016, when the SCWMA Board of Directors voted to rescind certification of an Environmental Impact Report selecting the Central Disposal Site as the preferred location for a new SCWMA-operated compost site.

The Board directed staff to issue a Request for Information to determine the level of interest from the private sector to identify and offer long term organics processing capacity for Sonoma County's green, wood, and food waste. That process resulted in 16 responses, which is indicative of a high level of interest. The Board entered into an agreement with R3 Consulting Group (R3) at the February 15, 2017 meeting to provide technical assistance in the RFP process.

III. DISCUSSION

R3 recommended holding two public stakeholder workshops to receive Board and community feedback on the priorities for this RFP. The specific issues for which feedback is requested include:

- Focusing on a single facility or multiple facilities
- Considering in-county facilities only, or all viable facilities
- Technology type proposed (composting, anaerobic digestion, vermicomposting, etc.)
- Finished product standards (organic agriculture, backyard gardening, land cover, etc.)
- The relative importance of disposal cost, securing long term capacity, providing local soil amendments, maximizing landfill diversion, reduction of greenhouse gas emission from transport and processing of organics and related to landfilling organics, and the production of clean energy

An issue on which staff requests Board direction is whether the Board is interested in including

parties that did not participate in or did not pass the RFI process, to participate in the RFP process. One such request is included as an attachment to this item. The RFI and addendum stated that only parties which passed the RFI process would be invited to participate in the RFP process, so including new companies or non-selected parties may frustrate or discourage participation in the RFP. This is a policy issue, not a legal issue, as the RFI document states in Section 5, RFI Considerations, Bullet 4 that the SCWMA retains the right of “commencing discussions with other entities that do not submit a response.”

Interested parties and stakeholders were notified (attached) of this SCWMA public workshop and a workshop to be held on April 27, 2017 from 3-6 pm at the Santa Rosa Veterans Memorial Building.

Stakeholders who are unable to attend either of these meetings may submit their comments through a Survey Monkey questionnaire created specifically for this project at the following address: https://www.surveymonkey.com/r/Compost_RFP

R3 has prepared a presentation to discuss the RFP process to-date, to set expectations, and to receive feedback on the requested issues to incorporate into the RFP document. After the presentation, staff recommends opening the workshop for the Board and the public to provide feedback on the requested issues.

The presentation and notice of the workshops are on the SCWMA website at http://www.recyclenow.org/agency/public_meetings.asp

IV. FUNDING IMPACT

There are no funding impacts as a result of this item. These workshops were included in the Scope of Work for R3’s RFP process assistance agreement.

V. ATTACHMENTS

Presentation
Notice of Public Workshops
Participation to upcoming RFP for Organics Waste Processing memo from Entsorga USA

Organics Processing Facility Request for Proposals Stakeholder Meeting



PRESENTATION TO:

Sonoma County Waste Management Agency

April 19, 2017



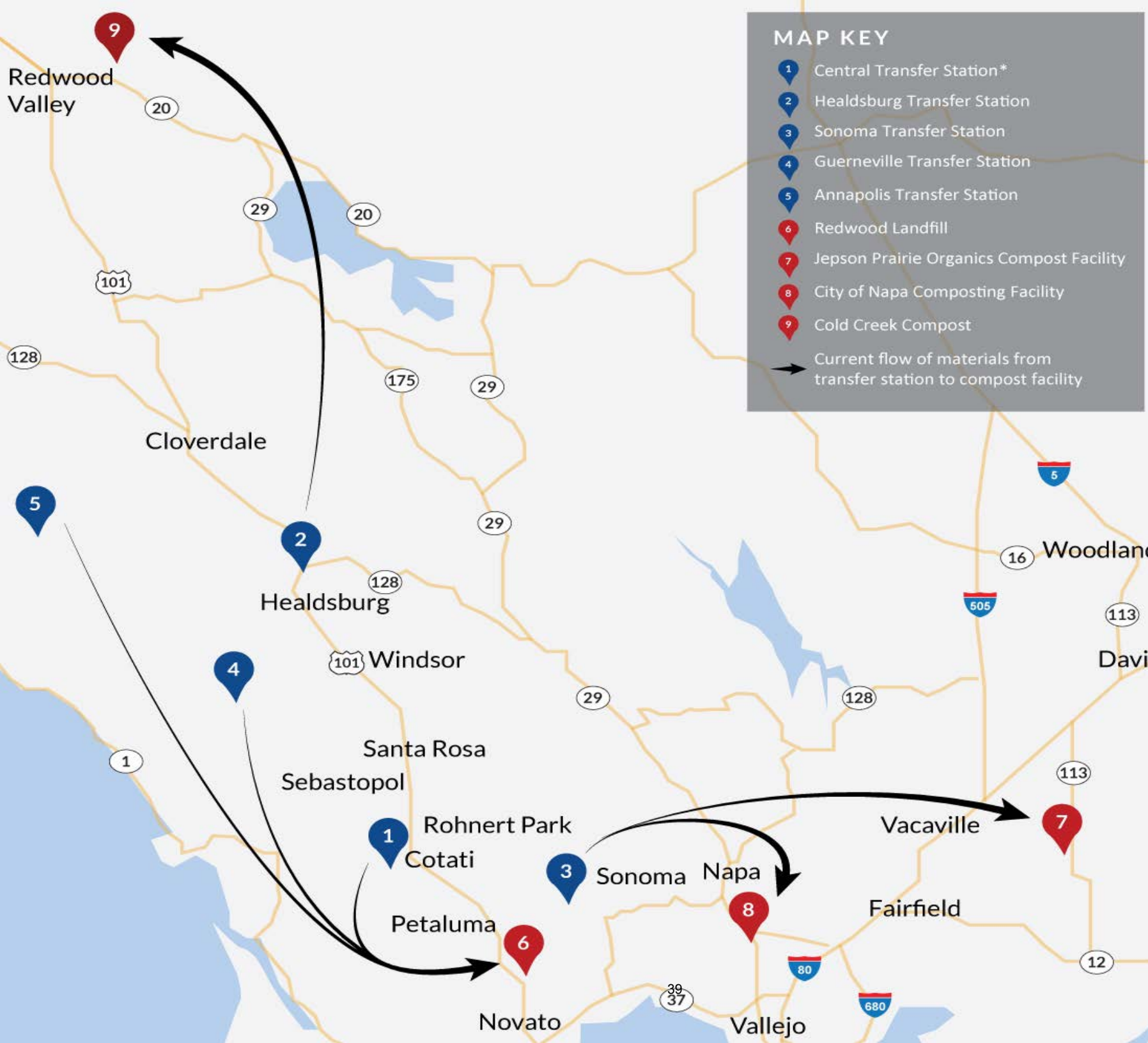
R3

Agenda

- Purpose and Background
- Overview of Process and Timeline
- Role of Member Agencies
- Role of SCWMA
- Role of Contractor(s)
- Evaluation Process
- Member Agencies: Letters of Interest
- Discussion of Priority Areas

Purpose of Workshop

- ❑ Organic Waste Processing Facility Needed
 - Organic waste currently out-hauled to four facilities out of county (map next slide)
 - Ratto hauls from five transfer stations to four facilities
 - Cost is nearly twice the tipping fee in 2014



MAP KEY

- 1 Central Transfer Station*
- 2 Healdsburg Transfer Station
- 3 Sonoma Transfer Station
- 4 Guerneville Transfer Station
- 5 Annapolis Transfer Station
- 6 Redwood Landfill
- 7 Jepson Prairie Organics Compost Facility
- 8 City of Napa Composting Facility
- 9 Cold Creek Compost
- Current flow of materials from transfer station to compost facility

Purpose of Workshop (continued)

- ❑ RFI on Organic Waste Processing Closed on November 14, 2016
- ❑ 16 responses
 - 10 compost (aeriated static pile or turned-windrow)
 - 2 enclosed composting
 - 4 anaerobic digesters/biochar (sometimes in combination)
- ❑ 2 currently have contracts with SCWMA (out of County facilities)
- ❑ Nearly all the rest proposed in-County

Overview of Process and Timeline

- ❑ Stakeholder Workshops 4/19 & 4/27
- ❑ RFP Documents for Approval 5/17
- ❑ Release RFP Package 5/31
- ❑ Mandatory Pre-Proposal Meeting 6/28
- ❑ Proposals Due 8/16
- ❑ Evaluation Results to Board 11/21
- ❑ Board Award of Processing Agreement(s)
December '17/January '18

Role of Member Agencies

- ❑ For Organic Waste, Member Agencies Need to Arrange:
 - Collection services
 - Direct hauler to approved facilities (currently County transfer stations, except for Petaluma)
 - In the future, enter into agreement with SCWMA committing flow to organics program...
 - Or, commit flow to non-SCWMA organics program

Role of SCWMA

- ❑ Secure and Manage Agreement w/ Contractor
- ❑ Provide Flow Commitment to Contractor for committed Member Agencies
- ❑ Hauler Pays Contractor Per Ton Rate Set by SCWMA
- ❑ SCWMA will not Site, Own or Operate Facility(ies)
- ❑ AB 876 (2015) Organics Management Infrastructure Planning (15 year plan)



Role of Contractor(s)

- ❑ Build, Own, Manage, Process, Sell and Carry All Responsibilities
- ❑ Benefits to Contractor(s):
 - Flow commitment & guaranteed revenues
 - Set per-ton rate for entire contract
 - Established market for quality finished product sales

Role of Contractor(s) (continued)

- ❑ Assume Risks of Facility Operations:
 - New environmental legislation or unforeseen environmental impacts change costs
 - Changes in the market for the finished product impact facility financing
 - Reductions in the incoming tonnage might result in lower revenue to cover fixed costs
 - Liability for facility failure

Evaluation Process

☐ Qualifications

- Project team experience and past practice
- References
- Litigation history

☐ Technical approach

- Location of facility
- Processing technology
- GHG impacts minimized
- Standards of finished product

☐ Tipping fee

Member Agencies: Letters of Interest

- ❑ Interested Member Agencies should Provide Letter of Interest from Management
 - Agencies will not be bound by this letter of interest (but will need to arrange for organic material capacity independently, if opting out)
 - RFP will be more effective with indication of potential interest
 - Member Agencies' binding decisions upon recommendation of award for agreement (November 2017)



Discussion of Priority Areas

❑ Location of Facilities

- In-county preferred
- Award preference points, or could prohibit/exclude all out-of-county proposals

❑ Maximum Number of Agreements Awarded

Discussion of Priority Areas (Continued)

❑ Source Materials for Processing

- Green/wood/yard waste
- Mixed food and green materials (residential organics)
- Source separated food and food related products (commercial food waste)

❑ Processing Technology Options

- Composting
- Anaerobic Digestion

Discussion of Priority Areas (Continued)

☐ Standards for Finished Product

- Home vegetable gardening (OMRI?)
- High-end compost for farming
- Land cover

☐ Importance of

- Cost
- GHG
- Clean energy

☐ Unified Rate Countywide

Questions and Comments

For additional questions, contact:

Patrick Carter | Sonoma County WMA

(707) 565-3687

Patrick.Carter@Sonoma-County.org

Garth Schultz | R3 Consulting Group, Principal

(510) 647-9674

gschultz@r3cgi.com



The logo for R3 Consulting Group, consisting of the letters "R3" in a large, blue, handwritten-style font.

April 12, 2017



Notice of Public Workshops

Notice is hereby given that the Sonoma County Waste Management Agency (SCWMA) is holding two public workshops to receive feedback on an upcoming Request for Proposals (RFP) process for securing long term organics processing capacity.

The SCWMA is seeking public input on community and stakeholder priorities for the upcoming RFP for the following issues:

- Focusing on a single facility or multiple facilities
- Considering in-county facilities only, or all viable facilities
- Technology type proposed (composting, anaerobic digestion, vermicomposting, etc.)
- Finished product standards (organic agriculture, backyard gardening, land cover, etc.)
- The relative importance of disposal cost, securing long term capacity, providing local soil amendments, maximizing landfill diversion, reduction of greenhouse gas emission from transport and processing and related to landfilling organics, and the production of clean energy

Two public workshops will be held, with date, time, and location as listed below:

April 19, 2017

Sonoma County Waste Management Agency Board of Directors Meeting
Santa Rosa City Council Chambers
100 Santa Rosa Avenue, Santa Rosa, CA 95407
Regular Session Meeting begins at 8:30 am

April 27, 2017

Santa Rosa Veterans Memorial Building
Lodge Room
1351 Maple Avenue, Santa Rosa, CA 95404
3 – 6 pm

For interested parties who are unable to attend either of the above meetings, feedback can be provided through a Survey Monkey questionnaire that has been created for this project at the following address: https://www.surveymonkey.com/r/Compost_RFP. Responses will be accepted until April 28, 2017.

To: **SCWMA Board of Directors**
Sonoma County Waste Management
Agency
2300 County Center Dr., B-100,
Santa Rosa, CA 95403
U-2017-301

Wilmington, March 20th, 2017

Re: Participation to upcoming RFP for Organic Waste Processing

Dear Sirs,

Our company provides technology and project solutions for composting, advanced mechanical biological treatment and anaerobic digestion. In the last ten years the Entsorga Group has delivered more than one million TPY of installed capacity with several large commercial facilities successfully operating in Europe (some directly owned and some owned and operated by third parties).

Recently we have opened our US office and our first 110.000 tpy US mixed waste to alternative fuel facility is now financed and in construction in Martinsburg WV.

We are interested in participating to the anticipated RFP for Organic Waste Processing following the previous RFI of September 2016. Our company did not respond to the original RFI, however we think that our proven composting platform with minimal impact on the surrounding areas could be a great fit for Sonoma County, while could represent a flagship facility for our composting technology platform in US.

Company Background:

The Entsorga group over the last twenty years has developed a remarkable number of integrated solutions and successfully executed projects in the fields of waste management and production of alternative fuels. Our company currently operates over four continents: Europe, Africa, North and South America.

With our continuous commitment in R&D, design and customer satisfaction, Entsorga can provide proprietary technology and lean and effective integrated solutions for:

- Composting
- Advanced Mechanical Biological treatment
- Anaerobic Digestion
- Cellulosic Bioethanol front ends
- Alternative Fuels production, storage and feed lines for the Cement Industry

Entsorga has developed a number of Proprietary Technologies to make it possible to implement composting treatment in a variety of situation: from small medium plant to large automated plants.

All technologies are founded on the following principles:

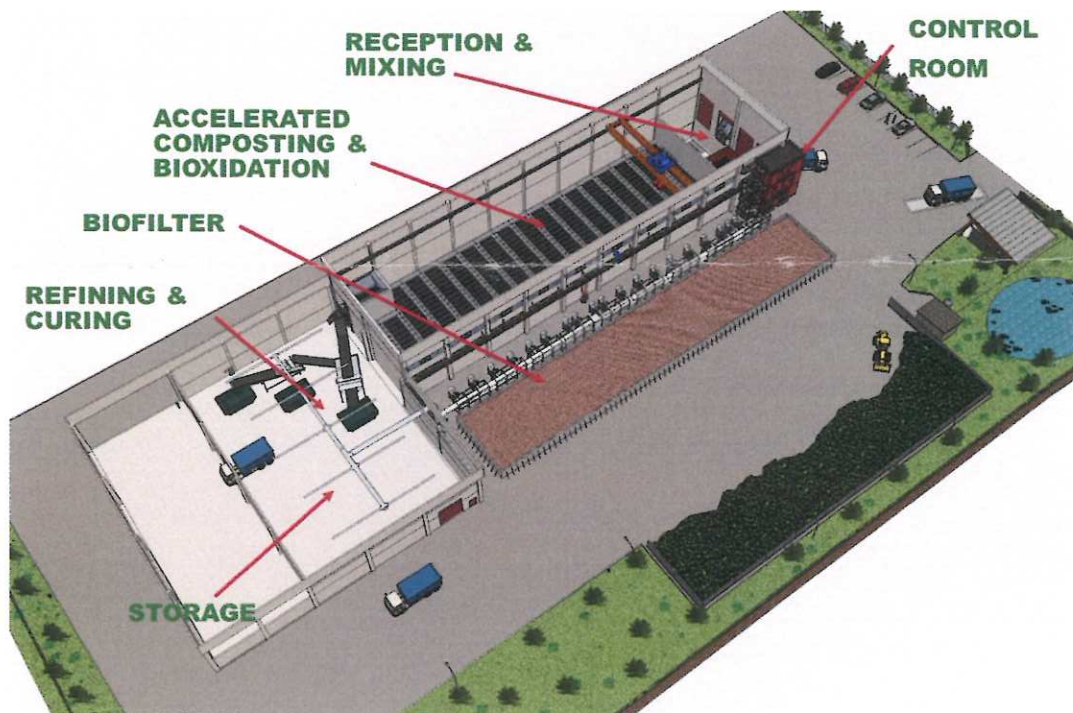
- Accelerate the bio-oxidation process by means of computer controlled forced aeration
- Carry out the treatment in enclosed spaces kept in negative pressure to avoid odor release
- Very efficient odor control on emissions by proprietary bio-filters.
- Limited footprint, modularity and upgradeability
- Use of process automation in order to have a 24/7 continuous process control
- Limited labor cost provided by enhanced utilization of effective automated equipment.
- Limited exposure of operators to foul air, dust and possible pollutants. Improved working conditions and increased H&S standards when compared to more traditional platforms.
- Increased reliability of the equipment and continuous improvements provided by technical support.

Entsorga BEE™ Composting process:

The composting process takes place essentially in two phases:

- Accelerated Composting and Bio-oxidation: this is the active phase (known as the high rate, active composting time), characterized by intensive processes of degradation of the organic components which can be broken down more easily
- Curing: during which the product becomes stable and enriched with humic molecules. This is known as the curing phase, and is characterized by processes of transformation of the organic substance, the maximum expression of which is the formation of humic substances.

In the following a plant layout, Entsorga BEE™ technology, with the description of the main process steps.



Project References

Here below we are providing few selected project references of plants that we have designed and executed in recent years.

- **Simbio MBT Plant in Celje, Slovenia
(Entsorga Italia S.p.A.)**

The Celje MBT Plant, located in central-eastern Slovenia, is catering to 31 municipalities representing some 250,000 residents. The plant is composed of one 30,000 tpy composting line and one 62,000 tpy advanced MBT designed to produce SRF which fuels a Waste to Energy plant producing power and heating.

The mechanical-biological and thermal treatment of this municipal waste has seen positive results, including a reduction in biodegradable waste deposited at landfills.

With the financial backing from the EU, the project has helped solve the problem of how to manage communal waste and dispose of sludge from the waste water treatment plant in Celje. With the introduction of modern treatment methods, the quantity of landfill waste in the targeted waste collection region is on pace to decrease by 62%. The project has also helped ensure that the treatment facilities at the waste management center comply with European technical and environmental standards covering waste and landfills.



Fig 1: Simbio MBT Plant, Celje

- **Deco MBT Plant in Chieti, Italy
(Entsorga Italia S.p.A)**

The Deco Plant is a state of the art MBT facility located in Chieti, Italy. The plant's design capacity is approximately 270,000 tonnes and is currently manufacturing SRF for a number of different users each having its own specification. This plant represents one of the biggest and most modern facilities in Europe. It has been in operation since November 2009 and currently operates near capacity.



Fig 2: Deco MBT plant, Chieti

- **Santhia MBT Plant, Santhia, Italy
(Entsorga Italia S.p.A)**

The Santhia MBT Plant is located in Santhia, Italy. The plant has been designed to process source separated organic waste producing a high quality compost material for agricultural use. The plant's designed capacity is serving a population of approximately 250,000. The plant utilizes Entsorga's proven and proprietary technology BEE™. The compost produces is branded "La terra dell'acqua" (that stands for "the soil of the water") as the fields surrounding the plant are rise crops flooded for part of the year. We have found that this is very attractive to farmers in the region because the compost produced by Entsorga is free of chemicals, herbicides and pesticides and is a cost effective and environmentally friendly alternative for improving plant health. In addition, the recovery of the organic fraction of waste is in compliance with the latest regulations in terms of biological waste diversion from landfill.



Fig 3: Santhia MBt plant

- **Wiltshire MBT Plant, England
(Entsorga Italia S.p.A)**

The Wiltshire facility has been in operation since 2013 and utilizes Entsorga's advanced MBT system. The company, in partnership with Wiltshire County, has built the MBT plant as part of a resource recovery park.

The new facility is designed to process 70,000 tonnes of mixed household waste collected in West Wiltshire each year. It removes recyclable materials and produces approximately 33,000 tonnes of SRF to displace fossil fuels. This fuel is used for power generation and cement production.

It is expected that the use of this facility will allow the local county to avoid paying landfill tax and landfill fines, creating a tangible net benefit to the taxpayers.



Fig 4: Wiltshire MBT plant

- **Martinsburg, West Virginia MBT Facility (under construction)
(Entsorga Italia S.p.A, Chemtex International, Apple Valley Waste Conversions & Summer Street Capital Partners)**

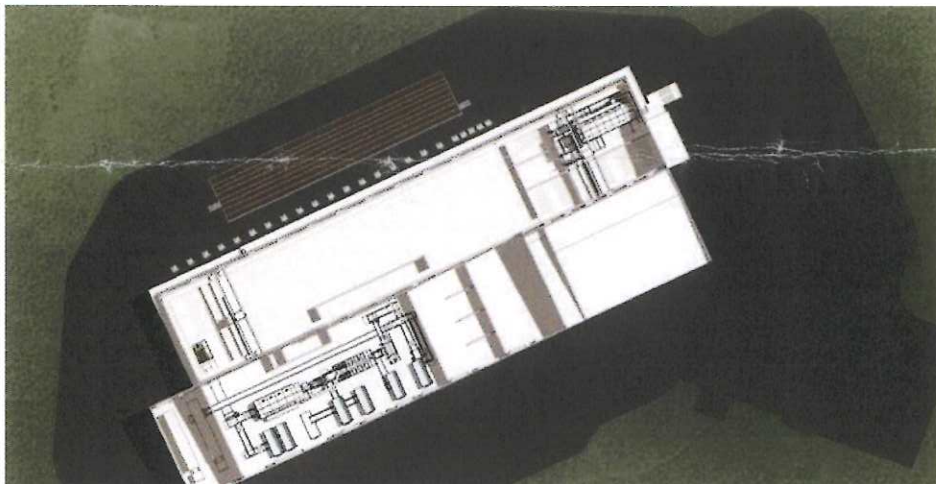


Fig 5: Martinsburg MBT plant layout

Entsorga Italia, Chemtex International and Apple Valley Waste Conversions have financed and are now building an advanced MBT Facility plant on Berkeley, West Virginia's old landfill site. The plant is designed to handle 88,000 tonnes of mixed municipal solid waste + 22,000 tonnes of C&I waste and

will produce a solid recovered fuel product to be delivered to a local cement kiln to be used as substitute to coal. Estimated start up, Q3 2017.

- **Derby Waste Facility (under construction)**
(Entsorga Italia S.p.A)

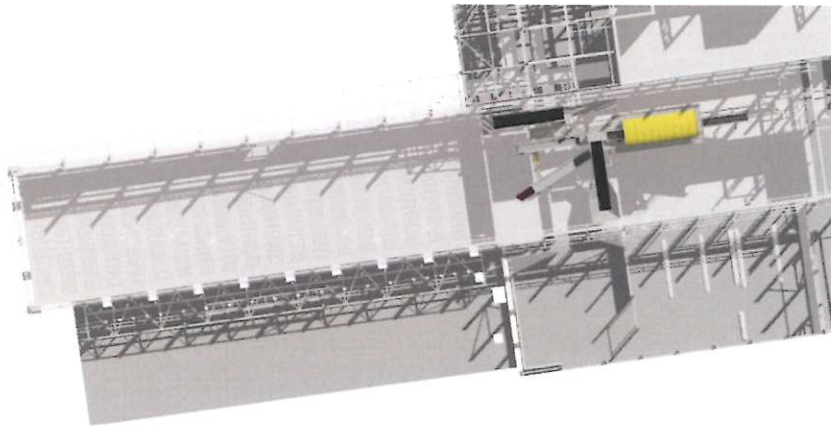


Fig 6: Derby MBT plant 3D Pretreatment and biooxidation areas

Entsorga Italia, has been awarded the contract an MBT Facility plant in Derby county UK. The plant is designed to handle 190,000 metric tonnes of mixed municipal solid waste and will produce a solid recovered fuel product to be delivered that will be used by the nearby gasification plant. Estimated opening, May 2017.

- **La Città Verde Composting plant, Crevalcore, Italy**
(Entsorga Italia S.p.A)



Fig 7: Crevalcore Composting plant

The La Città verde Composting plant is located in Crevalcore, Italy. The plant has been designed to process source separated organic waste producing a high quality compost material for agricultural

use. The plant's designed capacity is sufficient for the population of approximately 150,000. The plant utilizes EntSORGA's proven and proprietary technology in biocells with breathable fabrics called "Turtle Q-Ring". Even with the biocells technology, waste are managed with a bridge-crane (EntSORGA design). The recovery of the organic fraction of waste is in compliance with the latest regulations in terms of biological waste diversion from landfill.

- **Belvedere MBT, Peccioli, Italy
(EntSORGA Italia S.p.A)**



Fig 8: Peccioli MBT plant

The Belvedere MBT plant is located in Peccioli, Italy. The facility is designed to process 43,200 tonnes of mixed household waste collected before the material landfilling. The MBT plant reduces the waste volume so to reduce the landfilled waste. Belvedere company is also the owner of the Peccioli landfill. N° 3 biocells are also dedicated to composting of separated organic waste producing a high quality compost material for agricultural use.

- **Galda de Jos MBT, Romania
(EntSORGA Italia S.p.A)**



Fig 9: Galda de Jos MBT plant

The facility is designed to process 85,600 tonnes of mixed household waste collected before the material landfilling. The MBT plant reduces the waste volume so to reduce the landfilled waste. The facility is composed of 18 Turtle Q-Ring® biocells for waste biostabilization.

- **Nuoro Composting plant, Sardinia Italy (Entsorga Italia S.p.A)**



Fig 10: Nuoro composting plant

The Nuoro composting facility, with a throughput of 10,000 tpa of source segregated kitchen waste, entered in operation in December 2016. This solution is a lighter modular solution, ideal for small communities, touristic resorts, islands. The facility technology is the Le Coccinelle™ (Ladybird) solution with mobile biocontainers.

Anaerobic Digestion technology - renewable energy from OFMSW

Recently Entsorga has expanded its technology portfolio by including the anaerobic digestion. The chosen AD solution is leading proven proprietary technology that Entsorga will exclusively distribute worldwide. The combination of AD and Entsorga's proprietary composting technologies triggers significant synergies, providing substantial savings, like displacing residues or waste water treatment systems, makes this industrial facilities more environmentally compatible and economically viable.



Fig 11: Acea Pinerolese AD composting plant

In closing, while we would encourage your technical team to visit any of our existing facilities to directly experience the high quality standards of the operations and the minimal impact on the surrounding areas, we thank you for your consideration and remain available to meet or provide any additional information that might be required to directly bid or partner in the upcoming Organic Waste Processing RFP.

Best Regards.

A handwritten signature in blue ink, appearing to read 'Paolo Carollo', written over the printed name.

Paolo Carollo

Vice President Operations North America

Entsorga USA Inc.