RIVERSIDE COUNTY
SOLID WASTE MANAGEMENT ADVISORY COUNCIL

LTF COMPOST SUBCOMMITTEE

AGENDA

May 12, 2014
10:00 a.m. – 12:00 p.m.

Riverside County
Waste Management Department
14310 Frederick Street
Moreno Valley, CA 92553

ITEM

1. **Call to Order and Self Introductions**
2. **Solid Waste Permitting Tiers and Enforcement**
3. **Review of Composting Conditions of Approval**
4. **Review of Financial Assurances Formula**
5. **Next Meeting June 9, 2014 10:00 am @ RCWMD (Second Monday of the Month)**
6. **Adjournment**

RIVERSIDE COUNTY
SOLID WASTE MANAGEMENT ADVISORY COUNCIL
LTF COMPOST SUBCOMMITTEE

MINUTES

April 14, 2014

The following were present:

MEMBERS PRESENT	REPRESENTING	MEMBERS ABSENT	REPRESENTING
Bruce Scott	Farming Community	Robert Magee	1st District Supervisor's Office
Greg Reyes	Environmental Health/LEA	Gary Koontz	Waste Haulers
Ron Bray	Riverside County Agriculture		
Nick Young	California Department of Food and Agriculture		
Dan Noble	Association of Compost Producers		

County Staff	Representing	Guests/Interested Parties
Hans Kernkamp	Waste Management Department	Paul Ryan
Joe McCann	Waste Management Department	Chris Cunningham
Lucy Gonzalez	Waste Management Department	Matthew Cotton
Tracey Towner	County Code Enforcement	Joanne Lee
Greg Flannery	County Code Enforcement	
Hector Viray	County Code Enforcement	
Ken Baez	County Planning Department	

AGENDA ITEM 1
CALL TO ORDER AND SELF-INTRODUCTIONS

The meeting was called to order at 10:10 a.m., with self-introductions.

Hans Kernkamp provided a brief overview of the LTF Compost Subcommittee's objective. As a result of the Cal Biomass facility issues, the County is considering a compost ordinance to better regulate compost facilities. There have been some challenges with enforcement, specifically with issues related to odors and how current regulations limit the SCAQMD and LEA. A new ordinance or Best Management Practices (BMPs) would provide additional enforcement authority for the County. Subcommittee members suggested that the BMPs be renamed and applied as Conditions of Approval that the County could apply to new composting projects in the future.

Mr. Kernkamp stated that there is also the issue of land application (chip and grind material) on agriculture land. There appears to be gaps in the County's ability to enforce in this area. Originally, it was considered that the Agriculture Commissioner could manage this area; however, it is not within their purview, and the LEA has limitations to their jurisdiction with enforcement. As a result, it was requested by the LTF that the Subcommittee also make recommendations on this issue.

Mr. Kernkamp stated that at the prior meeting, there was a request for clarification as to which department or agency would have enforcement jurisdiction (Code or Planning) with regard to the

Conditions of Approval as they are presented today. It was also requested that Waste Management Department (WMD) staff prepare a proposed financial assurance formula for new facilities and forward that draft to Subcommittee members for comment.

AGENDA ITEM 2
SELECTION OF SUBCOMMITTEE CHAIRMAN

Dan Noble volunteered to be Chairman and a motion was made by subcommittee member Greg Reyes, seconded by Nick Young and all were in favor, with none opposed.

AGENDA ITEM 3
APPROVAL OF MARCH 10, 2014 MEETING MINUTES

Dan Noble asked if there are any adjustments to the minutes. Greg Reyes requested a correction to page 2, paragraph 3 to remove the word permit where referenced and replace with EA Notification throughout the paragraph.

Dan Noble requested a motion to approve the minutes. First Motion: Bruce Scott, Second Motion: Greg Reyes, all in favor, none opposed.

Dan Noble proposed adding the topic of Compost Tiered Permitting to the agenda as Item 4 for open discussion, all members agreed.

AGENDA ITEM 4
COMPOST TIERED PERMITTING

Greg Reyes provided an overview stating that the majority of Green Material Operators (GMO) who fall under the Enforcement Agency Notification process involves the completion of an application and submitting a plan. If all is correct and complete under the application and plan per the State requirement, the LEA has 5 business days to process and forward to the state and issue a SWIS ID number. Mr. Reyes advised that most haulers will ask you for the SWIS ID number, which confirms that the Solid Waste Facility (SWF) has been approved by the State/CalRecycle. The next two tiers are registration or full permit, both require full land-use approval to be included in the package given to the LEA. The EA Notifications have three options. First, the SWF has performed CEQA or obtained land-use approval and can provide proof. Second, the SWF can provide a copy of a letter from the local land-use authority that they do not need a permit. Third, the SWF can provide a copy of a certified letter forwarded to the land-use Department stating the type of business to be conducted. Approximately 90% of the operators will check the third option. Most applications will not include a check or a formal submittal when received at the Planning Department, which will result in having to follow-up with the SWF and result in further delays. The LEA must have the land-use approval as part of the application or cannot accept the package. There is one exception, under a research notification, but this has a 2 year window and most will continue to renew this window. The State put the EA Notification tier into the regulations in efforts to promote recycling. This does not stop the land-use authority from enforcing land-use rules, including potential shut-down. LEA only completes quarterly inspections to be sure the SWF complies with the plan submitted.

Ken Baez stated the concern is with the immediate (within 5 days) issuance of EA Notification/SWIS Number from the LEA as it gives the impression that SWF has complied with required regulations. However, Code Enforcement will request of the SWF a land-use entitlement after Code Enforcement discovers that the Planning Department does not have land-

use approvals on record. Mr. Baez suggested that it would be best for the land-use to be included in the initial application package. Then the Planning Department can issue a letter to the SWF stating that the SWF is zoned properly.

Greg Reyes stated that the disconnect in the process is within County departments. If a permit requires a change, the process is dictated by the State, and no re-issuance of the original approval is required. Although with any EA Notification changes will require an entirely new package. Mr. Reyes is concerned where the authority resides when there is a change required by the Planning Department after review of an agency application. LEA is advised by the Planning Department of the required data, and the LEA has no authority to inform the SWF to stop, because the SWF has met the State mandates. The question is how to strengthen the process, possibly through an ordinance change.

Paul Ryan stated that it is worthwhile for the County to have some direction from the Board of Supervisors prior to the LEA accepting notice, and the application being accepted by the Planning department. It is in the best interest of the State to adopt a regulation or statute stating that an application must go through land-use approval first.

Tracy Towner stated that a policy, ordinance or resolution needs to be put in place, so that the three departments can connect prior to LEA application approval, which can evolve into the bigger issue of the CEQA review and improved application process.

Dan Noble suggested that the following three avenues could be pursued/recommended when processing EA Notification tier projects:
1) Informal agreement between the County Departments as to land-use coordination; 2) An Ordinance to require land-use/CEQA prior to submitting an EA Notification; 3) A legislative change at the state level to insure the proper process for EA Notifications. Hans Kernkamp suggested that the LEA, Code, Planning, County Counsel and WMD could meet and discuss, and staff could report back at a future meeting.

AGENDA ITEM 5
REVIEW OF COMPOSTING BEST MANAGEMENT PRACTICES

Dan Noble stated the draft Conditions of Approval (formerly "BMPs") provided by staff had been updated from the last Subcommittee meeting. Joe McCann stated that the revisions included not referring to any specific regulatory references to sections in Title 14 or the Water Board regulations/draft WDR. Overall, the goal is the concept of applicability of how to capture all land-use cases, not just the ones requiring CUPs. He also mentioned they were not intended to apply to Biosolids, which was one of Matt Cotton's questions.

Hans Kernkamp stated the County has a long history with Biosolids and WMD has some concerns about including those materials under this process. The Conditions of Approval are to be applied to any new land-use entitlement project. Composting using Biosolids would be a separate issue and would need to be handled on a case specific basis. The draft Conditions of Approval were not intended to address this waste stream and staff is not in a position to promote Biosolids. What needs to be determined is if these BMPs or Conditions of Approval are technically reasonable to be placed and enforced on a project. Therefore, clarification with the title BMPs should be revised to be called Conditions of Approval, so the Planning Department has some guidelines for those facilities who want to receive solid waste. Bruce Scott stated what is missing from the BMPs are the Regional Water Control mandates and Air Quality. To include

these two areas within the BMPs would cover the ground, water, and air, which can be referenced as being the minimum. Hans Kernkamp advised that the goal is to focus on odor and operations of composting facilities.

Dan Noble stated there still needs to be clarification on implementation of the BMPs, follow-up, and final approval. Hector Viray advised that when there is a Condition of Approval violation on site, there is process to investigate and provide a Notice of Violation to the SWF, a minimal notice of a couple of weeks for the SWF to meet voluntary compliance. If the SWF fails to meet compliance they are given an administrative citation, and Code will then pursue a lien against the property and pursue a County Counsel injunction.

AGENDA ITEM 6
ESTABLISHMENT OF FINANCIAL ASSURANCES FORMULA

Hans Kernkamp stated WMD has come up with a 2-tiered approach for the Financial Assurance calculation. A flow chart will be circulated via email prior to next meeting so members can provide feedback.

AGENDA ITEM 7
LAND APPLICATION OF GROUND GREEN MATERIAL
No Discussion

Actions: *Noted by Dan Noble (Summary for Next Meeting Items of Discussion)*
1) WMD will pursue an internal County meeting regarding the three pronged approach.
2) WMD will e-mail the BMPs/Conditions of Approval.
3) WMD will e-mail the Financial Assurance calculation
4) Land Application will be tabled until the BMPs/Conditions of Approval are reviewed and agreed to.
5) Roger Mitchell (San Diego Regional Water Quality Control Board) was invited; however, currently unavailable, and will be invited to future meetings. The local regional water board (Santa Ana) representative, Mark Adelson, will be invited to the next meeting when the land application issue is discussed.

AGENDA ITEM 8
SETTING OF SCHEDULE FOR FUTURE MEETING TIME & PLACE

The next meeting is scheduled for 10:00 a.m. on May 12, 2014 at the WMD Headquarters.
(*Meetings are reoccurring every second Monday of the month.)*

AGENDA ITEM 9
ADJOURNMENT

Meeting adjourned at 12:20 p.m.

Composting Operations	Riverside County Best Management Practices
Applicability	The County BMPs shall be applied to all composting operations undergoing the entitlement process for a Conditional Use Permit (CUP), Plot Plan, or other land-use entitlements.
Feedstock (F)	1. Acceptable feedstock materials include: • Greenwaste as defined in Title 14 CCR • Agricultural materials as defined in Title 14 CCR • Food Material that meets the definitions in Title 14 CCR • Manure as defined in Title 14 CCR • Paper products • Restaurant grease and oils • Digestate (if permissible under Title 14 CCR)
Additives (Ad)	If applicable: 1. Mix additives with feedstock or active compost to create favorable composting conditions. 2. The amount of additives added shall be consistent with applicable regulatory requirements or prevailing industry standards 3. Additives do not include septage, biosolid, or compost feedstock. 4. Additives shall undergo random load-checking for physical contaminants and refuse.
Amendments (Am)	If applicable: 1. Add amendments to cured or stabilized compost to provide attributes for the products. 2. The amount of amendments added shall be consistent with applicable regulatory requirements or prevailing industry standards. 3. Amendments do not include septage, biosolid, or compost feedstock. 4. Amendments shall undergo random load-checking for physical contaminants and refuse.
Feedstock Preparation (FP)	1. Feedstock load-checking operations shall be conducted in accordance with the standards set forth in Title 14 CCR. 2. Removal of physical contaminants and refuse (overs/trash) shall be removed from the facility in accordance with Title 14 CCR, or within seven (7) days of screening, whichever date is sooner. 3. Greenwaste shall be processed/ground within the timeframes provided in Title 14 CCR. 4. Foodwaste and manure shall be covered with ground greenwaste, or unscreened or screened compost within 3 hours of receipt and incorporated into an active pile within 48 hours of receipt to minimize odor generation and attraction to vectors. 5. Incorporate wet or odiferous feedstock loads directly into actively composting windrows or aerated static piles, where practical. 6. Mix odiferous feedstock materials with appropriate amount of bulking agent, high carbon amendments, or finished compost and then moisture conditioned to reduce odor releases. 7. Manure shall not exceed 20% by volume. 8. Restaurant grease and oils shall not exceed 5% by volume. 9. Application of restaurant grease and oils shall comply with the following standards: a. Apply to processed feedstock or an active windrow/pile at the time of receipt. b. Mix with processed feedstock prior to or during pile formation.

	c. Once grease trap liquids have been applied to a windrow, the windrow will be turned immediately to incorporate the liquid into the windrow feedstock. d. At no time shall grease trap liquids will be stored onsite in tanks or ponds. e. Grease trap liquids will not be applied in a manner that results in ponding around the windrow/pile. f. No direct application to an active windrow that still has a compost cover for emissions control, as required by SCAQMD Rule 1133.3. g. Directly apply to an active windrow that no longer requires a compost cover, or to an active static pile that is aerated under negative pressure and uses an emissions control device, as required by SCAQMD Rule 1133.3. 10. Grinding of odiferous feedstock materials should be accompanied with the application of misting water or other odor control measures approved by the DEH/LEA.. 11. Feedstock composition must be adjusted to achieve a high carbon to nitrogen ratio (30:1), proper moisture contents, and good porosity, all of which are conducive to aerobic decomposition and odor minimization. 12. Reduce material mixing activities in unfavorable weather conditions (stagnant air or windy) to minimize odor generation.
Active Composting (AC)	1. Static pile composting method is prohibited for facilities that will contain more than 5,000 cubic yards of material (including feedstock, additives, amendments, chipped/ground material, and compost) at any one time. 2. Active composting shall be by means of either the windrow method, aerated static pile, extended aerated static pile, or an alternative technology approved by the LEA/DEH. 3. Where feasible, the active composting pad location and windrow/pile configuration and orientation should be such that wind-driven off-site exposures of receptors to composting odors can be minimized. 4. Daily monitoring of windrow moisture content and temperature shall be conducted to ensure continuous aerobic composting and detect overheating so as to avoid spontaneous combustion. 5. All windrows and piles aerated with positive or negative pressures shall be covered with a layer of finished compost, or other covering methods as approved by LEA/DEH, immediately after windrow and/or pile formation. 6. Moisture conditioning of active windrows and piles during the rainy season should be coordinated with weather forecasts. The composter should use his best judgment on the degree of watering to be carried out when rainfall is forecasted. As a good practice, no moisture conditioning should be carried out during rainfall or when there is a 60% or greater chance of rainfall in the next day or two. 7. When heavy or extended rainfalls are forecasted, the composter should take the appropriate measures to protect active windrows and piles from saturation with water, including but are not limited to: cover windrows and piles with tarps; add dry feedstock or compost on top of windrows and piles; and increase positive drainage on side slopes of windrows and piles by making the slopes steeper or covering them with tarps. 8. The active composting pad shall be graded and maintained to prevent ponding and transmit any free liquid laterally to containment structures on-site. The composting pad and containment structures shall be designed and constructed in compliance with all applicable water quality control regulations. 9. All windrows shall be turned regularly to ensure continuous aerobic composting, or according to applicable regulatory requirements pertaining to achieving pathogen reduction and odor minimization standards.

	10. Avoid windrow turning in unfavorable weather conditions. 11. Where applicable, construct smaller windrows to increase the surface to volume ratio, thus aeration efficiency.
Compost Curing (CC)	1. Curing of compost shall be conducted away from the active composting area to avoid cross-contamination and facilitate separate odor monitoring. 2. Curing compost that have temperature exceeding 122°F, or are seeping leachate, and/or emitting odors on a consistent basis shall be re-composted in the active composting area. 3. Long-term storage of finished compost shall be limited to no greater than one year to avoid it becoming a fire hazard. 4. Screen compost to facilitate aeration and expedite the curing process. 5. Avoid screening of compost in unfavorable weather conditions, or apply misting water or other odor reducing measures, as approved by the LEA/DEH during screening to lessen odor emissions.
OIMP Implementation (OI)	1. The facility shall have a designated full-time staff in charging of implementation of the facility's Odor Impact Minimization Plan (OIMP) and handling of odor complaints and investigations. This person shall also be responsible for regular reviewing and updating of the OIMP in pace with changes in composting operation or procedures. 2. The composting staff shall be well acquainted with and adequately trained to implement the OIMP. 3. If the facility receives an infraction (Area of Concern and/or Notice of Violation) during monthly inspections from the LEA/DEH involving odors, in addition to addressing the LEA/DEH, the operator shall submit a Report to the County's Planning and Waste Management Departments, documenting the source of the odor and both propose and implement mitigation measures which may include installation of wind barriers, such as contiguous tall vegetation, misting systems, or other odor reducing measures, to the County's satisfaction. 4. If after 15 days of implementing mitigation measures, as stated in the Report submitted to the County Planning and Waste Management Department's, the odor issues have not been resolved, as verified by the LEA, the operator shall immediately remove the odiferous material offsite for disposal in accordance with all applicable local, State, and Federal laws, ordinances, and regulations.
Facility Maintenance (FM)	1. On-site dust control shall use domestic water, non-potable reclaimed water, or dust suppressants, as identified in SCAQMD Rule 403. 2. Site drainage design shall prevent run-on onto the active composting area, feedstock storage area, compost curing area, and finished compost storage area. 3. Surface run-off from all compostable materials processing, treatment, and storage areas shall be contained on-site, in compliance with applicable water quality control regulations. 4. All wastewater conveyance and containment facilities shall be periodically inspected to ensure performance and assess their capacity to attract vectors and generate odors and to effectively collect and contain wastewater. 5. Use compost filter berms to filter stormwater entering the containment structure. The compost filters can be reintroduced back to the composting process. 6. Re-circulate retained wastewater into the composting process.

Characteristics	Tier 1	Tier 2
Total Facility Capacity	<25,000 cy (all allowable materials received, processed, and stored: feedstock, amendments, active and curing composting, and finished products)	>25,000 cy (all allowable materials received, processed, and stored: feedstock, amendments, active and curing composting, and finished products)
Allowable Feedstock[1]	Agricultural material, green material, paper material, vegetative food material, or a combination of these feedstock, including anaerobic digestate derived from the acceptable feedstock.	Tier 1 feedstock plus biosolids, or food materials, or manure, or grease waste, or a combination of these feedstock.
Bond Amount Calculation Methodology		
Base Bond Amount (**BBA**)	$250,000 or Apply Formula	APPLY FORMULA
Cleanup Activities Covered	Material Loading + Transportation + Disposal + Testing + Administration (assuming 7.5%)	
Material Loading Cost[2]	$8 per ton	
Transportation Cost[2]	0.0041 cent per ton per vehicle-mile-traveled (VMT), assuming 22 tons/truck load	
Total Disposal VMT (**TVMT**)	Total onsite Storage Capacity (**TSC**) ÷22 tons/load x roundtrip VMT to landfill	
Disposal in Riverside County	At current fees: Unprocessed Greenwaste (**GW**) @ Greenwaste Rate (**GR**) (e.g., $45.80 in 2014) Active compost, biosolid, and grease waste @ Hard-to-Handle Rate (**H2H**) (e.g., $47.73/ton in 2014) Finished compost and ground clean greenwaste @ Beneficial Refuse Rate (**BR**) (e.g., $10/ton in 2014)	
Administration Fee (**AF**)	7.5% of the sum of material loading and transportation costs	
Material Testing (**MT**)	$5,000	$10,000
Maximum Total On-site Storage Capacity (ton or cy)[3]	Feedstock Receiving Area: Maximum Greenwaste (**GW**) capacity Active Composting Area: Maximum Active Compost (**AC**) capacity Curing & Product Storage Areas: Maximum Finished Compost (**FC**) capacity **TSC** = **GW** + **AC** + **FC**	
Conversion Factors	**GW**: 0.5 ton/cy **AC**: 0.65 ton/cy **FC**: 0.4 ton/cy	
Formula	{[(**TSC** x $8/ton) + (**TSC** x **TVMT** x 0.0041 cent/ton/mile)] x (1 + 7.5%)} + (**GW** x **GR** + **AC** x **H2H** + **FC** x **BR**) + **MT**; or **BBA**, whichever is greater.	
Annual Bond Adjustment	Due to the long CUP life of composting facilities, the bond value need be adjusted according to the CPI during its annual update. Adjustable values include: **BBA**, material loading cost ($8/ton), transportation cost (0.0041 cent), **MT**, and **AF**. In addition, disposal fee needs be updated, as warranted.	

[1] A composting facility is a Tier 2 facility regardless of its total facility capacity, as long as it composts food materials, or manure, or grease waste.

[2] Material loading and transportation unit costs are derived from the RCWMD unit costs for CalBioMass cleanup.

[3] Materials are assumed to be stored in windrows (trapezoids) 12' wide at the base and 8' tall with 8-foot aisles space between windrows