

Appendix 5A – List of Goals and Objectives

Goal – Objectives – Action Plan	Indicator	Means of Verification	Person(s) Responsible	Target Date or Frequency	Progress
1. Sustain Regulatory Compliance (Louisville Green)					
1.1. Ensure that the % dry solids, metals concentrations, fecal coliforms, stabilization and drum outlet temperature in our product are within State and Federal Limits					
Objective is being met; however, we need to track the actual regulations and make sure nothing has changed from one quarter to the next.	Core Team Meetings	Notes from Core Team Meeting	David	Quarterly First one due 3/30/08	David checked/verified federal regulations in Feb. 2008; need to check/verify state regs. Review is 75% complete. <i>David wants to check a couple of things with Sharon first.</i>
2. Sustain Regulatory Compliance (Air Emissions)					
2.1. DIGESTER GAS - Ensure control over our digester gas					
Provide condensate removal system(s) that will increase functionality and protect the digester gas lines to both the flare and the drying systems. Maximize digester gas usage. Provide a parallel line to the flare to provide redundancy for easier maintenance.	Recommendations submitted to and approved by MSD.	New condensate traps in service.; Modifications to store gas, if feasible.; Redundant line installed.	Robert Bates, Joe Falleri, Sharon Worley, Norman Robinson		<ul style="list-style-type: none"> ▪ VFD was awarded and ordered; expected by end of March. Rexa valve is being purchased. ▪ Precision Scientific to take one PRV and one flame arrester for testing. <i>Jim B. left messages – no response.</i> ▪ 90% Review Mtg of Condensate and Flare project held 3/4. <i>Waiting on budget and schedule from CH2M.</i>
2.2. AIR REGULATIONS - Ensure that the air emissions associated with making our product are within State and Federal Limits					
MSD has permits for the following: Digesters & Dryers & Venturi Scrubbers/RTOs & Pellet Silo Baghouses & Silos & Wet Cake Hopper. These are NOW under the EMS – recent update.	records and reports required by permits	Review records and reports	Monthly Odor Control Team	Hot List by 4/1/08	Permits are stored in Compliance Library and in eB. Hot List and Monitoring/Reporting requirements are under development. We might want to add specifics to Operational Control list.
2.3 DUST CONTROL - Ensure proper control of atmospheric dust					
Address potential safety/liability concerns due to dust – Get assistance identifying sources of dust and recommended corrections	Contract with industrial hygienist	recommendations from Industrial Hygenist	Sharon Worley; Nannette Edwards	5/1/08	Therm-a-cor draft report reviewed. Dust sample to be sent for analysis. Mike G. to check on status of dust cleaning work orders.
Get assistance with dust cleaning	Scope drafted; Project out for bid; bids received	Contract awarded	Robert, Sharon, Nannette	6/1/08	SMG will provide technical basis for scope after we get dust test results.
3. Produce Louisville Green that is Marketable Quality (> Class A stds)					
3.1. DENSITY - Maintain Control of Product Density in Dryers					
Density is to be maintained at or above 94% .	Pellet Tracking sheet.	Pellet Tracking sheet turns red if below 94%.	David Coe	Daily	Review Tracking Sheet for DENSITY. list of monitoring information needed– status? Jim B. is working on list.
Purchase new media for Dryer Trains 1 and 2	Notes from LG Meeting	Review of LG Meeting Notes	Robert Bates	4/1/2008	Schedule for #2?

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Investigate applicability of density in-line monitors for our system	Notes from LG Meeting	LG Mtg notes	Robert Bates	5/1/2008	Robert investigating a “rent-to-own”.
3.2. CAPTURE - Improve Control of Product Capture in Dryers					
ensure that capture of pellets is >65% capture on a 1.8 mm screen. Capture of pellets is to be ≤10% on a 2.8 mm screen. <i>Test method for Capture to be modified for the QC test to be more meaningful?</i>	Size of pellets in daily samples	Capture test results	Joe Falleri, Robert Bates, David Coe	Per Sample	Review Tracking Sheet for CAPTURE: Oversized Pellets. On March 10, Trains 2 and 3 had oversized pellets.
3.3. TRUCK LOADING -					
Oil is to be evenly applied to the product when a truck is loading. Ordering and using totes of oil is expensive and time consuming. Install bulk oil storage system.	Stop orders of totes.	Check records for bulk oil orders?	Mike Gower	DATE???	Ordered load from Culp. In-use. Norm to check oil absorption into pellet compared to cheaper oil.
3.4. OIL - Verify the effects if any of MAP and Oil on the flammability and ignitability of our product					
Initial testing was done and reported on June 6 . Follow-up testing is needed to verify results.	samples sent for evaluation	lab test results from independent lab	Robert Bates, Norman Robinson	Date dependent on John Braun’s review of contract	Robert to finalize memo re: MAP testing then give to Clarke when contract is finalized.
3.5. NUTRIENTS - Verify the Nutrient Quality of our Product is minimum of 5-3-0					
Track nutrient levels to ensure within guaranteed limits.	Samples being sent monthly for AOAC anal.	lab test results from A&L Labs	David Coe	Monthly	AOAC analyses: March – all looks good.
4. Reduce Cost of Producing Louisville Green					
4.1 DEWATERING MGMNT SYSTEM - Investigate the Dewatering Management System					
Determine if it uses polymer more efficiently and if it makes a more consistent cake	Pilot Testing arranged and executed	Review Technical Report	Robert Bates	On-going	6 month test underway? Update? Soon.
4.2 REDUCE RECYCLE BIN VACTORING					
Investigate the recycle bin issues that are encountered regularly and implement corrective action to reduce this as much as possible.	LG Meeting Notes	Review of LG Meeting Notes	Joe Falleri	report to team by 3/15/08	Recycle Bin update?
4.3 REDUCE SLOP OUTS IN DEWATERING					
Investigate the slop out issues that are encountered and implement corrective action to reduce this as much as possible.	LG Meeting Notes	Review of LG Meeting Notes	Joe Falleri	report to team by 3/15/08	Slop out update? Last week it was mentioned that Centrifuges have been underloaded causing problems. Management needs to clarify expectations.
4.4 UNDERSTAND OUR PRODUCTION CAPABILITIES AMONG THE THREE (3) SHIFTS: A, B, AND C					
Evaluate # of transports to be calculated for each shift. Also report on the equipment in-service time for each shift b/c some shifts have less equipment “up time” than others.	LG Meeting Notes	Review of LG Meeting Notes	David Coe, Jim Emily	Monthly	Table is distributed and reviewed monthly.

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THE FOLLOWING ITEMS ARE FOR DISCUSSION WITH THE LG MARKETER AND ARE NOT TYPICALLY DISCUSSED IN THE WEDNESDAY LG MEETING.					
5. Increase Public Acceptance of Louisville Green					
5.1. OUTSIDE COMMUNICATION - Develop a public participation plan to communicate with interested parties					
Manufacture some bags of L'ville Green so that we have a good supply for homeowners.	# meetings with sales agent	Review meeting notes	Robert Bates, Clarke Fenimore	2/15/2008	This was on hold for several months; however, Clarke and Robert are to coordinate bagging product in the near future. Clarke wants to give each MSD employee a coupon with their paycheck for a free bag. Coupon will have expiration date. Locations of vendors on back of coupon. At a later date, a buy one get one free coupon may go out in the water/sewer bill. Coupon will have expiration date. Locations of vendors on back of coupon.
Develop and use at least two promotional items or giveaways to market the product in a positive way	# meetings with sales agent	Review meeting notes, public participation records	Robert Bates, Sharon Worley, Clarke Fenimore	2/01/2008	Objective met in 2007. Signs to promote L'ville Green are to be purchased for advertising our product where it is being used. Sharon had the idea of Metro posting signs where they use it such as public parks or golf courses ☺ Excellent Idea Alex thought that banners at the hardware stores would be excellent also ☺. Clarke is investigating Banners and is to work with Sharon to get this accomplished.
Propose to Kentucky Farm Bureau that MSD donate (\$0.25 per ton) to KFB scholarship fund for pellets sold to Kentucky farmers. KFB would in turn put informational inserts into customer billings.	# meetings with sales agent	Review meeting notes, public participation records	Clarke Fenimore	Waiting for KFB Feedback	KFB's Board is reviewing this and will address it when they meet again. Clarke is to provide feedback.
Attend at least Three (3) Public Meetings in 2007 to enhance our Public Image. Attend at least Five (5) Public Meetings in 2008.	# meetings attended	public participation records	David Coe, Robert Bates, Sharon Worley, Clarke Fenimore, Norman Robinson	End of 2007, End of 2008	Goal was met in 2007. West County Task Force, Farm Machinery Show, State Fair, Whole Foods Market Festival, and Jeffersontown Gaslight Festival are all on our list for the future. May 7, 8, and 9 Louisville Water Company has a Water Festival that we plan to attend for outreach.
Pursue Universities (Georgia, Kentucky) to do research with L'ville Green.	# meetings with sales agent	Review meeting notes, public participation records	Sharon Worley, Clarke Fenimore	March 2008	Louisville Green won a contest for growing cotton in Statesboro, GA. Clarke will forward the full report when he receives it. This was part of research being done by the University of Georgia. Univ. of Kentucky is continuing research with LG. We haven't received any feedback to date. Eric Turley os KY State has reported that studies are being done with LG coated with a pesticide versus using pesticide alone to see if runoff is contaminated to a lesser degree than pesticide alone.

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6. Increase End-Use Options for Louisville Green					
6.1. DISTRIBUTION SALES PLAN - Distribute at least 80% of biosolids for sale in public market in 2008					
Increase market demand by identifying and implementing a marketing plan with our Sales Agent.	# meetings with sales agent	review annual summaries referenced in the EMS Progress Report	Robert Bates, Sharon Worley, Clarke Fenimore	End of 2008	75% Goal was met easily in 2007. 94% of the material manufactured was distributed by our sales agent. Clarke believes that the Farm Machinery Show that happens every February has been our best source of new customers. He will of course attend in 2008.
Develop New Brochures for Farmers and Homeowners as well as the LG Webpage	# meetings with sales agent	review meeting notes	Robert Bates, Sharon Worley, Clarke Fenimore	3/01/2008	Clarke and Sharon are making progress towards new brochures and flyers. The L'ville Green webpage will be updated as well. The end goal is to have brochures/flyers/webpage that satisfies our needs and Clarke's needs. Clarke has learned of a website for farmers where ad space can be purchased. This will be discussed more at the next meeting as to whether it may be worthwhile for us.
6.2. DISTRIBUTION PLAN (OTHER) - Identify at least two viable avenues for distributing biosolids that are not sold in 2008					
Obtain fertilizer license in the state of North Carolina	# meetings with sales agent	review meeting notes	David Coe	3/01/2008	Objective met in 2007. Same objective for 2008. A permit for distributing L'ville Green in North Carolina is being pursued. Lab analysis must be performed by a lab certified in the state of North Carolina. Also, the state of North Carolina requires that certain customer information be provided on the bag or brochure. They have not approved our bag and brochure as of yet. Department of Highways may use L'ville Green again this year and will continue to determine if it deters deer. Currently, they are expecting it for free and Clarke isn't willing to give it away. Due to political confusion, this is on hold until after the Governatorial Election. Louisville Green is being used at the Great Lawn at the Louisville River Front. Bernheim Forest showed interest but expects it for free. Clarke isn't willing to give it away at this time. Habitat for Humanity has also shown interest in our product. They do approx. 200 homes per year. This would mean about 2 tons per home. David to stay in contact.

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7. Implement to completion the Environmental Management System (EMS)					
7.1. INTERNAL AUDIT - Implement internal audit program of the environmental management system (EMS)					
Identify personnel for internal audit team.	# of EMS Core Team Meetings	Review Notes from Core Team Meetings	David Coe	9/1/2007	Objective achieved in 2007. Robin Burch was the lead on the internal audit team. Joe Faleri was on the audit team because of his in-depth plant knowledge. At least one other person (likely from off plant) who has audit experience will complete the team. Sherry Knox and Connie Davis are currently on the Audit Team with Joe Falleri. Greg Brewton was also on the Internal Audit Team. EMS Manager's Overview training was provided to the internal auditors to help prepare them.
Train personnel on conducting internal audit.	# of EMS Core Team Meetings	Review Notes from Core Team Meetings	David Coe	12/5/2007	Objective achieved in 2007. Caroline Hemenway provided Audit Team Training in early December 2007. Robin Burch lead the internal audit. David attended an internal auditors workshop on Nov 13 and 14 of 2007.
Develop internal audit plan and execute audit.	# EMS Core Team Meetings	Review Notes from Core Team Meetings	David Coe	End of 2007	Objective achieved in 2007. Training our Internal Auditors was the first step. The 5 team members did a marvelous job critiquing our EMS. The team desk audited for 3 full days and followed up with plant auditing and interviews for an additional 3 days. The report is very thorough and very professional.

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7.2. 3RD PARTY VERIFICATION AUDIT – Prepare for a 3rd party verification audit of the environmental management system (EMS)					
After agreement on the Internal Audit Report has been reached between the audit team and core team. Corrective Action Plans are to be constructed and time frames for completion agreed upon.	# EMS Core Team Meetings	Review Notes from Core Team Meetings	Robin Burch, David Coe	2/01/2008	A meeting was held with the lead auditor and the Core Team to discuss the report in its entirety as well as to discuss our approach for corrective action concerning the 7 nonconformances generated.
A follow up audit by the lead auditor will be conducted to review progress, and an addendum to the Internal Audit Report will be written to document progress towards correcting the 7 nonconformances.	# EMS Core Team Meetings	Review Notes from Core Team Meetings	Robin Burch, David Coe	3/27/2008	Robin Burch will conduct the follow up audit when applicable.
Conduct Element 17 Management Review	# EMS Core Team Meetings	Review Notes from Core Team Meetings	Derek Guthrie	5/5/2008	Derek Guthrie, Marion Gee, and Saeed Assef of the ETeam will conduct the Management Review (Element 17) of our EMS. 90 minute meetings are scheduled with these three and the EMS Core Team for March 28@8:30AM and May 5@8:30AM. The second meeting is a follow up and may or may not be needed.
Conduct 3 rd Party Verification Audit	# EMS Core Team Meetings	Review Notes from Core Team Meetings	David Coe	6/1/2008	Application for 3 rd Party Verification Audit has been mailed to Peter Machno. David will be corresponding with him to make sure he has everything that he and the NBP requires. In addition, a contract for the 3 rd Party Audit has been executed and Jon Shaver will be our auditor. David Coe is scheduling the desk review and the official audit with Jon Shaver. We expect to conduct it in late May.