

**Marketing Compost Manure to Public Entities
Texas Cooperative Extension
FY 01 319(h) Nonpoint Source Grant
TCEQ Contract No. 582-2-44407**

Quarter no. 5 From 06/01/03 Through 08/31/03.

I. Introduction/Abstract

Project efforts during the fifth quarter focused primarily upon installation of research plots in Dallas, Stephenville and College Station following submission of the final draft of the Applied Research Quality Assurance Project Plan to EPA. Although raw data will not be collected until EPA grants approval, applied studies were installed to allow scientists to take advantage of '03 growing season.

On the marketing side, the Upper Leon Soil and Water Conservation District Rebate Program was announced to all participating Soil and Water Conservation Districts and area compost producers. Program had initial interest from a private retailer wishing to purchase large volumes of material for retail. Because the intent of TCE and TCEQ in developing the Rebate Program was to promote and facilitate the use of dairy manure compost by private producers, specifically the agriculture market, it was determined that the Rebate Program implementation must be delayed until further requirements are added to the policy and EPA grants full approval of compost application on agricultural lands.

In continuing education and marketing efforts, TCE and TWRI attended meetings with individual cities, attended the Texas Nursery and Landscape Association Trade Show and presented information at compost workshops in the metroplex. RAA assisted in attending the Trade Show and continued to assist the compost producers in their production schemes and STA status.

In looking forward to the next quarter, TCE will anxiously await Applied Research Study QAPP approval from EPA so field data collection can be initiated. RAA will continue to coordinate marketing efforts by participating in workshops and attending tradeshow with TxDot/TCEQ personnel. TCE and RAA will finalize the Compost Education and Marketing Plan (CEMP), the Applied Research Study QAPP and will have submitted the Compost Quality Assessment QAPP for final approval. Furthermore, following the approval of the Applied Research Study QAPP, research studies will be installed and developed as described in the QAPP and the RDDP.

II. Overall Progress and Results by Specific Work Task within each Phase

PHASE 1

Task 1.1 Texas Water Resources Institute (TWRI) will serve as the prime contractor for the project and provide overall administration required fulfilling the "Technical Contractor" responsibilities under the Texas Commission on Environmental Quality (TCEQ) Composted Manure Incentive Project scope of work. Responsibilities include planning and facilitating meetings; negotiating subcontracts; submitting reimbursement documents and appropriate documentation of project progress; handling budget and fiscal reviews; adherence to Texas State Soil and Water Conservation Board (TSSWCB) and TCEQ nonpoint source management program; and ensure all activities, deliverables and tasks follow TCEQ contract provisions.

The following actions have been completed during this reporting period:

- a. Administrative tasks completed by TWRI will fall under phase II activities from this point forward.

Task 2.1 Assess the potential market, the compost product quality, existing educational and promotional materials available for a composted manure marketing project, and research and demonstration needs.

The following actions have been completed during this reporting period:

- a. Economics personnel are working towards the development of an economic calculator for potential compost users.

Task 2.2 Develop a strategic Compost Education and Marketing Plan (CEMP). The CEMP will include a Research/Demonstration Design Plan (RDDP) to address the research and demonstration needs and a Quality Assurance Project Plan (QAPP) to address environmental data collection.

The following actions have been completed during this reporting period:

- a. CEMP was approved by TCEQ.
- b. To take advantage of 2003 growing season, research plots were installed at the Dallas and Stephenville locations. Data collection will not be initiated until final EPA approval of project QAPP.

Task 2.3 Implement the strategic CEMP. The CEMP will provide educational outreach, technical assistance, and documented materials for compost producers and users. It will also provide for the direct marketing of composted manure. The CEMP will target both public entities and private citizens throughout the region.

The following actions have been completed during this reporting period:

- a. TCE attended the Texas Nursery and Landscape Association Trade Show in Dallas to provide project literature to TCEQ personnel who occupied booth space at the trade show. TCE and RAA attended show and communicated

benefits of dairy manure compost to trade show attendees. Also, fact sheets relaying dairy compost facilities and incentive payments were distributed at booth. RAA reported the following activities following the TNLA Trade Show:

- Discussed dairy compost use with landscapers and landscape architects
 - Met with Gustine Compost to discuss low organic matter and high pH issues. Specifically, RAA discussed a pH reduction trial to be conducted on-site at Gustine Compost.
 - Met with Sabino Cortez and discussed expanding sales through resellers (garden centers/landscape yards).
 - Discussed a potential nursery research study with Tarleton State and Erath Earth.
 - Discussed compost pathogen issues with Mark Schusler of Tarrant County College District.
- b. Developed educational materials (fact sheets, brochures, etc.) will be utilized at the County Extension Agent organics training scheduled for September 23-24 in Stephenville, TX.
 - c. Meeting room and lodging arrangements were made for TCE personnel to attend Organics Training.
 - d. Speakers related to project were notified of meeting and draft agenda was developed for CEA Organics Training.
 - e. Project brochure was revised to reflect minor wording and contact information changes. Due to high demand, additional copies were ordered and TAMU Communications Department printed 3000 copies of brochure.
 - f. TCE met with representatives from the Upper Leon and Cross Timbers Soil and Water Conservation District to further discuss the Upper Leon Soil and Water Conservation District (ULSWCD) Rebate Program. Draft paperwork was reviewed and submitted to participating SWCDs and TCEQ.
 - g. Following TCEQ approval, ULSWCD Rebate Program was announced to participating composters.
 - h. Rebate Program had initial problems and Program Policy required several additions, including:
 - Due to private companies attempting to purchase large volumes of material for retail through the Rebate Program total amount purchased per individual through the Program was limited to only 5000 cy.
 - In an effort to track compost use through the Rebate Program, TCE developed the Compost Use Assessment Tool, which consisted of a pre- and post-survey to be conducted by TCE personnel following each compost purchase.
 - In an effort to ensure compost applications were environmentally safe, a requirement for ULSWCD Rebate Program participants to complete a TSSWCB approved Water Quality Management Plan was added to Rebate Program policy.
 - i. Due to concerns by TCEQ, ULSWCD Rebate Program was put on hold until EPA could review program requirements and approve the process.
 - j. TCE attended a Dairy Compost Seminar hosted by TIBH in Fort Worth. TCE

presented brief presentation on the research and marketing efforts being conducted through TCEQ grant. Also addressed the Incentive Payment and the process and requirements associated with it. In attendance were individuals from TxDOT, EPA, Cities of Carrollton, Farmers Branch, Arlington, Fort Worth and Coppell and Organic Residual Reclamation.

- k. TWRI met with City of Waco to discuss potential compost uses as a landfill cover and to establish vegetation around landfill area.
- l. The following was reported by RAA as direct assistance to compost facilities:
 - Assisted Organic Residual Reclamation join the STA Program
 - Assisted Gustine Compost and Bosque River Compost in evaluating and assessing compost material analysis and discussed methods to improve product quality
 - Assisted Gustine Compost and Bosque River Compost in obtaining and successfully bidding several TxDOT jobs, including one job which acquired 27,000 tons of material. To facilitate TxDOT job, RAA contacted several TxDOT engineers/inspectors (Lonny Ragsdale, Ricky Ayers, Alan Easterling, Barrie Cogburn) and contractors (Bert Lary, Gary Construction).

Task 2.4 Develop a project web site comprised of technical information for project cooperators, demonstration locations and research data, sources of available compost, educational literature from TCE, and facts about TCEQ rebate program and the TCEQ and TSSWCB nonpoint source management program.

The following actions have been completed during this reporting period:

- a. TWRI progress related to Task 2.4 will be reported in Phase II from this point forward.

Task 3.1 Provide TCEQ with assistance for quality assurance activities. Compost production sites will be evaluated to ensure sound production practices and at least 20 random site visits will be conducted to monitor uses of compost to ensure applications, BMPs and rates are made in an environmentally appropriate manner.

The following actions have been completed during this reporting period:

- a. No progress to report at this time.

Task 3.2 Where existing guidance literature is lacking, reports of current and past field trials and result demonstration activities will be documented and published. All effective compost production and use aspects will be documented in draft case studies, cost analysis and effectiveness assessment reports.

The following actions have been completed during this reporting period:

- a. Project fact sheets and related information were developed and distributed to TCEQ for review.

PHASE II

Task 1.1 TWRI will continue to provide overall administration required to fulfill the "Technical Contractor" responsibilities under the TCEQ Composted Manure Incentive Project scope of work in FY 2004. In addition to the responsibilities detailed in the Phase I scope of work, TWRI will negotiate a subcontract with a Compost Marketing Firm to assist with marketing and educational tasks.

The following actions have been completed during this reporting period:

- a. The Project Brochure was distributed to all participating County Extension Offices, dairy manure compost facilities and Soil and Water Conservation District Offices. Cooperating agencies, including TSSWCB, BRA, TCEQ, TIAER and TxDOT also received copies of the brochure for their own distribution.
- b. TWRI attended a compost demonstration on Stormwater BMPs conducted by TCEQ at Sawyer Ranch development West of Austin. Photo documentation was collected for Web site photo gallery.
- c. TWRI met with TCEQ and TAMU accounting personnel to discuss status of project budget and reporting process. It was determined to better coordinate administrative and fiscal reports that TWRI will now include a expenditure summary with each task on a quarterly basis. Also, TCEQ communicated to TAMU personnel the proper format to report and submit quarterly billings.
- d. TWRI attended Bosque River Meeting where all related Bosque River Watershed Programs were discussed as well as status of TMDL. Project brochures were distributed to all involved. Also, TWRI participated in the review of 3 white papers compiled as a result of these meetings to address current status of Bosque Watershed and related programs.

Task 2.3 Implement the strategic CEMP. The CEMP will provide educational outreach, technical assistance, and documented materials for compost producers and users. It will also provide for the direct marketing of composted manure. The CEMP will target both public entities and private citizens throughout the region.

The following actions have been completed during this reporting period:

- a. No progress to report at this time.

Task 2.4 TWRI will maintain project web site by Incorporating new information from the project's success in year 2. Information added to the web site will include, but is not limited to the following: results of compost use in field trials and demonstration programs from year 2 of the RDDP; success stories of compost use as a result of the project; and recent technical information obtained from project activities in year 2.

The following actions have been completed during this reporting period:

- a. TCE added agency appropriate logo to photos submitted by TxDOT, TCEQ and RAA. Also, photos were organized by category and subsequently TCE

developed brief description for each photo to add to project Website as discussed in DMES/CMIP Project meeting in quarter 4.

Task 3.1 Continue to provide TCEQ assistance with quality assurance activities by conducting at least 20 random site visits to monitor the beneficial uses of compost by participating state and local government entities and assess the agencies' and users' implementation of suggested BMPs.

The following actions have been completed during this reporting period:

- a. TWRI proposed to utilize the Compost Use Assessment Tool developed for the ULSWCD Rebate Program as the Compost Use Assessment Tool for the 20 random site visits.

Task 3.2 Where existing guidance literature is lacking, reports of current and past field trials and result demonstration activities will be documented and published. All effective compost production and use aspects will be documented in draft case studies, cost analysis and effectiveness assessment reports.

The following actions have been completed during this reporting period:

- a. No progress to report at this time.

Task 3.3 Develop and submit annual and final joint reports of 'success stories' including assessment and feasibility of program strategies so that similar programs could develop from the provided outline.

The following actions have been completed during this reporting period:

- a. No progress to report at this time.

III. Related Issues/Current Problems and Favorable or Unusual Developments

TWRI is primarily concerned with the delay in approval of project related documents, which has inhibited development and completion of many project activities. Consequently, budget expenditures are less than expected which concerns TCEQ. TCE is looking forward to the next quarter to commence field data collection, which will provide specialists with at least some background information to utilize in project education tasks.

IV. Conclusion/Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

- a. The Applied Research QAPP and associated RDDP will be approved by TCEQ and field data collection on applied research studies will commence.
- b. Fact sheets developed for Organics Training will be finalized following TCEQs reviews and printed for distribution.

- c. The project Web site will be reviewed and revised to better reflect project activities. If possible, photo gallery and approved project fact sheets will be added to the Website.
- d. Efforts will continue to obtain EPA approval for the Upper Leon SWCD Rebate Program.
- e. CEA organics training and a Turf/Ornamental Field Day will be held in September
- f. RAA would like to host a more intensive marketing training for the compost facilities in mid to late December.