

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

Quarter no. 7 From 12/01/03 Through 2/29/04.

I. Introduction/Abstract

Efforts to further the education and market development tasks were made during this quarter. TWRI worked with area COGs to plan and develop compost workshops for public entities. County Extension Agents continued to contact public entities and compost demonstrations will be installed during the next quarter. RAA communicated with TxDOT regarding specification issues and suggested language for a revised specification allowing for a variance in percent organic matter and pH for manure generated compost.

The Upper Leon SWCD Rebate Program was further developed and all EPA requirements were added to the Program Policy. EPA granted approval for TWRI and TSSWCB to coordinated efforts and implement the rebate program for private producers.

Several items were added to the project Web site, including approved fact sheets and a photo gallery. The compost producer map was modified so that individuals can utilize the map directly or link to TCEQ approved facility page. The Web site will continue to be modified throughout the project as TCE and TWRI see it as a valuable resource for individuals interested in the project.

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 submitted a economic feasibility models regarding the production and use of dairy manure compost. Economics were based on collected field data from the applied research studies at Stephenville. TWRI requested economists modify models to a user friendly format so that economic tools can be added to project Web site in the future.

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. Data collection and maintenance of applied research studies continued at Dallas, Stephenville and College Station.

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. TCEQ approved 3 project fact sheets, "Incentives to Purchase Dairy Compost", "Using Organic Matter to Improve Sports Fields" and "Using Compost in the Urban Environment".
- b. TCEQ and TxDOT approved the fact sheet, "Using Compost for Erosion Control and Revegetation".
- c. TCEQ provided comments to RAAs "Compost Application Equipment" fact sheet and requested considerable revision. TCE is in process of revising fact sheet for final approval.
- d. In efforts to sustain TxDOT market, RAA, TWRI and compost producers (Jim Buck, Dwayne Wolf and Sabino Cortez) met with State Representative Sid Miller in Stephenville to discuss specification issues, specifically, percent organic matter and pH variance for composted manure. Subsequently, communication occurred between TCEQ, TWRI, RAA and TxDOT to compile a revised specification to allow a variance.
- e. TCEQ and TSSWCB received approval from EPA for the Upper Leon Soil and Water Conservation District (ULSWCD) Rebate Program.
- f. As a result, ULSWCD Rebate Program policy and related forms were revised to reflect EPAs requirements.
- g. TSSWCB and TWRI personnel met with ULSWCD and other related personnel in Comanche to discuss the ULSWCD Rebate Program and outline process and personnel requirements.

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 fall under phase II from this point forward.
- b. TCE developed a summary of each research project related to project was developed including treatments, plot design, data collected and results. A link was added to the Web site and research project information will follow when it is available.

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. TCE personnel visited potential demonstration sites at various counties within the watershed.

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. TCE personnel compiled and statistically analyzed all data from applied research studies in Stephenville and Dallas.

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. TWRI participated in discussion regarding North Central Texas COG and Central Texas COG compost workshops scheduled for late spring or early summer. TWRI agreed to provide COGs with educational materials and will present information at workshops. Further, TWRI will assist COGs in promoting workshops to dairy compost producers.

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. RAA submitted survey questions for municipal sales calls to be conducted by RAA staff to promote use of dairy compost. RAA also drafted letter to be sent to public entities as a follow-up to the sales calls. RAA staff will conduct calls within next quarter and TWRI will send follow-up letter and compost literature to interested individuals.
- b. The following was reported by RAA as direct assistance to compost facilities:
 - Contacted various TxDOT engineers on behalf of composters regarding pending compost sales to their projects
 - Discussed organic matter blending options with Producers Compost and O'Neals Compost in order to meet TxDOT specification. Reviewed blending trial with O'Neals Compost.
 - Provided marketing/technical assistance to Organic Residual Reclamation regarding a large potential project with City of Carrollton
 - Reviewed current sales/marketing strategies with Bosque River Compost

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. Photo Gallery was added to Web site. Photos include TCEQ and TxDOT compost demonstrations, documentation of compost uses in agricultural and horticultural applications, dairy manure management and compost production practices and other project related activities. Photo gallery will be continually updated as project continues.
- b. Adobe PDF versions of 3 project fact sheets, "Incentives to Purchase Dairy Compost", "Using Organic Matter to Improve Sports Fields" and "Using Compost in the Urban Environment" were added to project Web site.

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 submitted compost demonstration plans to each individual County Extension Agent in the following counties: Navarro, Comanche, Somervell, Parker, Taylor, Hamilton, Palo Pinto, Erath, Tarrant, Coryell and Stephens County. Demonstrations will be installed in the next quarter.

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

The only issue of concern is the compost product quality issue (low percent organic matter and high pH). During this quarter, TCE and RAA, per the request of the composters within the Watershed, met with State Representative Sid Miller to discuss the ability of compost produced from dairy manure within the Bosque Watershed to meet TxDOT specifications. The meeting was a result of several attempts to contact TxDOT personnel and perceived misinformation received by the compost producers. RAA attended as part of the contractual duties to assist the compost producers in their markets, while TCE attended to provide technical expertise give the background of sample analysis obtained for dairy compost generated within the Watershed. As a result of the meeting, RAA worked with TCEQ and TxDOT to develop suggested language for revised specification.

IV. Conclusion/Projected Work for Next Quarter

The following will be accomplished during the coming quarter:

- a. Implement the Upper Leon Soil and Water Conservation District Program.
- b. Participate in the area Council of Government compost workshops.
- c. Facilitate the amendment to the TCEQ contract to allow for the Organic Matter Improvement Survey and Study and the purchase of compost for application on Fort Hood.
- d. Finalize the Organic Matter Improvement Survey and Study plan and budget.
- e. Finalize budget plan to separate fund 1 and fund 2 expenditures.
- f. Install compost demonstrations on public grounds with project area counties as a result of the CEA compost demonstration plan efforts.