

NONPOINT SOURCE SUMMARY PAGE

FY 01 CWA 319(h)

Project 01-15

1. TITLE OF PROJECT: Water Quality Management Plan Initiative for the Nonpoint Source Pork Industry

2. PROJECT GOALS/OBJECTIVES: This objective of this project is to determine the steps needed to assist unpermitted nonpoint source pork producers in meeting the requirements of the Texas Water Code and Texas Administrative Code §321.47 through the successful development of water quality management plans (WQMPs) certified in accordance with Texas Agriculture Code §201.026. The project will consist of the development, implementation, and demonstration of WQMPs containing cost-effective alternative manure and wastewater storage facilities on two pork operations chosen by the Texas Pork Producers Association (TPPA). The project will demonstrate that alternative manure and wastewater storage facilities can be effectively managed by producers on smaller pork facilities, while also minimizing the odor and management concerns inherent in traditional large waste storage facilities. Another objective of the project is to demonstrate that a WQMP that includes alternative manure and wastewater storage facilities will meet the technical requirements of a Comprehensive Nutrient Management Plan (CNMP). The project also consists of a series of educational seminars intended to promote participation of unpermitted pork operations in the Texas State Soil and Water Conservation Board (TSSWCB) WQMP Program.

3. PROJECT TASKS: (1) Project coordination between TPPA, TSSWCB and Natural Resource Conservation Service (NRCS). (2) Development of approved cost-effective alternative manure and wastewater storage facilities. (3) Project coordination between the TPPA, TSSWCB, NRCS, and the Texas Commission on Environmental Quality (TCEQ). (4) Demonstration of approved alternative manure and wastewater storage facilities. (5) Conduct two field-day educational events at the demonstration sites on the benefits of the TSSWCB WQMP Program. (6) Project Administration and Coordination.

4. MEASURES OF SUCCESS: (1) Identification of cost-effective and alternative manure and wastewater storage facilities for unpermitted pork operations. (2) Development and implementation of two WQMPs containing alternative management practices on two unpermitted pork operations. (3) Two field-day educational events to promote the benefits of the TSSWCB WQMP Program. (4) Eventual increase in the numbers of unpermitted pork operations participating in the WQMP Program.

5. PROJECT TYPE: Statewide Watershed Demonstration Other

6. WATERBODY TYPE: River Lake Wetland Ground Water Other

7. PROJECT LOCATION: Statewide.

8. NPS MANAGEMENT PROGRAM REFERENCE: State of Texas Agricultural/Silvicultural Nonpoint Source Management Program – Approved February 15, 2000.

9. NPS ASSESSMENT REPORT STATUS: Impaired Impacted Threatened

10. KEY PROJECT ACTIVITIES: Hire Staff Monitoring Technical Assistance Education BMP Implementation Demonstration Project Other

11. NPS MANAGEMENT PROGRAM ELEMENTS: Implementing Milestones from the *1999 Texas Nonpoint Source Pollution Assessment Report and Management Program* including (1) coordinating with Federal, State, and Local Programs, (2) technology transfer, technical support, administrative support and cooperation between agencies and programs for the prevention of NPS pollution, (3) maximize the participation of affected stakeholder groups at the regional and local level by developing targeted outreach efforts, and (4) educate landowners about their potential roles in causing NPS pollution and solicit their cooperation in abatement programs.

12. PROJECT COSTS: Federal: (\$21,000) Nonfederal Match: (\$14,000) Total Project: (\$35,000)

13. PROJECT MANAGEMENT: TSSWCB.

14. PROJECT PERIOD: December 1, 2005 through March 31, 2006.

Water Quality Management Plan Initiative for the Nonpoint Source Pork Industry

FY01 CWA Section 319(h)
Project 01-15

WORKPLAN

Problem Need/Statement:

On December 15, 2002, the Administrator of the United States Environmental Protection Agency (EPA) signed the final rule regulating concentrated animal feeding operations (CAFOs). In this rule, it reinforced the need for all animal feeding operations (AFOs), regardless of whether they are defined as CAFOs and required to operate under the coverage of a National Pollutant Discharge Elimination System (NPDES) permit, to manage manures and wastewater by-products in a manner that is protective of waters of the Nation. The requirement for nutrient management plans (NMPs) and the recommendation that all AFOs obtain comprehensive nutrient management plans (CNMPs) was a key strategy for achieving maximum protection. As EPA has delegated the NPDES program to the State of Texas, the Texas Commission on Environmental Quality (TCEQ) has adopted the Texas Pollutant Discharge Elimination System (TPDES) under administrative rule, and certain management practices and technical requirements specific to unpermitted AFOs in Texas Administrative Code §321.47.

In Texas, the Texas State Soil and Water Conservation Board (TSSWCB), the agency responsible for the management, prevention, and abatement of nonpoint source (NPS) pollution from agricultural and silvicultural activities, administers a certified Water Quality Management Plan (WQMP) Program. The term NPS, as it relates to AFOs, is loosely used to differentiate between AFOs which do not require written authorization from TCEQ from point source CAFOs, which do require written authorization under a permit. Because of this understanding, the TSSWCB's WQMP Program is applicable for any AFO not defined as a CAFO. There are approximately 3000 such AFOs currently operating under the authority of a WQMP certified in accordance with Texas Agriculture Code §201.026. The technical elements of a WQMP are based entirely on the United States Department of Agriculture - Natural Resource Conservation Service's (NRCS) Field Office Technical Guide (FOTG), which is the best available technology and the basis for many of the management practices and agricultural engineering standards incorporated into the permitting program. A certified WQMP developed for an AFO that meets the technical requirements of the FOTG is a CNMP. A WQMP is effectively a conservation plan that includes a functionally equivalent level of environmental protection from a voluntary perspective. As a result, the TSSWCB encourages as many AFOs as possible to voluntarily participate in the WQMP Program, even if they are not explicitly required to obtain permit coverage.

Historically, the dairy and poultry industries have showed significant levels of interest in WQMPs and make up the bulk of the AFOs currently participating. The pork industry, largely due to logistics of how smaller pork operations are operated and managed, have not been inclined to participate. Smaller pork facilities generally operate on smaller tracts of land that do

not support traditional animal waste management systems such as waste storage ponds, treatment lagoons, and significant expanses of land application acreage. The manure and wastewater is generally kept contained in “waste pits” and other structural measures that may or may not be adequate. As a result, the goals of this project are to identify alternative management practices that are cost-effective, yet functionally equivalent to traditional animal waste management systems. These practices must also be compatible with the style of operation of small producers and function well on their own with minimum management intensity. In addition, this project will demonstrate the effectiveness of these alternatives to the regulatory community and unpermitted pork producers, and promote the inclusion of these alternatives into the WQMP Program in hopes that unpermitted pork producers will begin to participate in the program.

Record keeping has become increasingly important in demonstrating environmental stewardship and providing evidence that the operation meets the criteria for the agricultural storm water exemption in the Clean Water Act (beneficial application of nutrients). The TSSWCB’s WQMP Program offers governmental supervision to ensure the producers succeed in their environmental stewardship efforts. The focus given to this program will also encourage more producers to take further steps to enhance their stewardship efforts on the farm.

General Project Description:

This objective of this project is to determine the steps needed to assist unpermitted nonpoint source pork producers in meeting the requirements of the Texas Water Code and Texas Administrative Code §321.47 through the successful development of water quality management plans (WQMPs) certified in accordance with Texas Agriculture Code §201.026. The project will consist of the development, implementation, and demonstration of WQMPs containing cost-effective alternative manure and wastewater storage facilities on two pork operations chosen by the Texas Pork Producers Association (TPPA). The project will demonstrate that alternative manure and wastewater storage facilities can be effectively managed by producers on smaller pork facilities, while also minimizing the odor and management concerns inherent in traditional large waste storage facilities. Another objective of the project is to demonstrate that a WQMP that includes alternative manure and wastewater storage facilities will meet the technical requirements of a Comprehensive Nutrient Management Plan (CNMP). The project also consists of a series of educational seminars intended to promote participation of unpermitted pork operations in the Texas State Soil and Water Conservation Board (TSSWCB) WQMP Program.

Tasks, Objectives, Schedules, and Estimated Costs:

Task 1: Project coordination between TPPA, TSSWCB and Natural Resource Conservation Service (NRCS).

Costs: \$ 1,200 _____ (Federal), \$ 800 _____ (Non-Federal Match), \$ 2,000 _____ (Total)

Objectives: (1) Develop and execute contract between TPPA and TSSWCB relating to this scope of work. (2) Conduct introductory meetings relating to cost effective alternatives for nonpoint source pork operations between TPPA, TSSWCB, and NRCS.

Subtask 1.1: TPPA will work with TSSWCB staff to develop, finalize and execute a contract to carry out this workplan.

Subtask 1.2: TPPA will develop preliminary information on approximately four alternative manure and wastewater handling and storage facility concepts that meet state and federal water quality requirements and do not include large waste storage ponds or treatment lagoons. Information will include brief narrative descriptions and sketches adequate to convey the concepts to TSSWCB and NRCS staff.

Subtask 1.3: TPPA will coordinate and conduct meetings with TSSWCB and NRCS to present, discuss, and evaluate the alternative concepts with a view to attaining concurrence by both agencies relative to consistency with the NRCS, FOTG and TCEQ rules for animal feeding operations.

Deliverables

- A contract between TPPA and TSSWCB to carry out this workplan
- Brief descriptions of the four alternative manure and wastewater handling and storage facilities
- TSSWCB and NRCS staff briefed on project concepts

Task 2: Development of approved cost-effective alternative manure and wastewater storage facilities.

Costs: \$ 2,400 (Federal), \$ 1,600 (Non-Federal Match), \$ 4,000 (Total)

Objectives: (1) Conduct technical meetings between appropriate personnel from TPPA, TSSWCB, and NRCS relating to specific alternatives to large-scale ponds and lagoon management systems. (2) Obtain necessary approvals and verification of alternative management practices from NRCS consistent with the NRCS Field Office Technical Guide (FOTG).

Subtask 2.1: TPPA will coordinate and conduct meetings with technical staff of TSSWCB and NRCS to discuss and evaluate specific conceptual manure and wastewater handling and storage alternatives to large waste storage ponds and treatment lagoons that result from Subtask 1.3. Discussion and evaluation will be to determine the consistency of each alternative with the NRCS–Field Office Technical Guide.

Subtask 2.2: TPPA will develop descriptive information on all alternatives in which TSSWCB and NRCS concurrence on consistency with the FOTG is obtained. Information will include narrative descriptions and sketches adequate to accurately convey each concept.

Deliverables

- Descriptive information on each manure and wastewater handling and storage alternative determined to be consistent with the NRCS–FOTG.

Task 3: Project coordination between the TPPA, TSSWCB, NRCS, and the Texas Commission on Environmental Quality (TCEQ).

Costs: \$ 2,400 (Federal), \$ 1,600 (Non-Federal Match), \$ 4,000 (Total)

Objectives: (1) Conduct technical meetings between TPPA, TSSWCB, NRCS, and TCEQ to familiarize TCEQ personnel with approved alternative management practices. (2) Obtain concurrence from TCEQ that alternative management practices satisfy the technical requirements of the Texas Water Code and Texas Administrative Code §321.47 relating to water quality protection.

Subtask 3.1: TPPA will coordinate and conduct meetings with TSSWCB, NRCS and TCEQ to discuss and evaluate specific conceptual manure and wastewater handling and storage alternatives to large waste storage ponds and treatment lagoons that result from Subtask 2.2. Discussion and evaluation will be to determine the consistency of each alternative with the TCEQ rules and requirements for animal feeding operations.

Subtask 3.2: TPPA will develop descriptive information on all alternatives for which TCEQ concurrence on consistency with rules and requirements for animal feeding operations is obtained. Information will include narrative descriptions and sketches adequate to accurately convey each alternative.

Deliverables

- Descriptive information on each manure and wastewater handling and storage alternative determined to be consistent with the NRCS, FOTG and TCEQ rules and requirements for animal feeding operations.

Task 4: Demonstration of approved alternative manure and wastewater storage facilities.

Costs: \$ 11,100 (Federal), \$ 7,400 (Non-Federal Match), \$ 18,500 (Total)

Objectives: (1) Complete and file necessary forms for the demonstration sites' participation in the WQMP Program. (2) Develop WQMPs for demonstration sites. (3) TSSWCB certifies WQMPs for demonstration sites. (4) Implement WQMPs on demonstration sites.

Subtask 4.1: TPPA will contact the appropriate TSSWCB Regional Offices and soil and water conservation districts (SWCD) and work with the producer to submit a district cooperator agreement, if the producer is not already a cooperator and a request for water quality management planning assistance, as well as any other forms determined to be necessary for participation in the WQMP Program.

Subtask 4.2: TPPA will arrange for and conduct a site visit at each site to meet with the producer and determine the producer's objectives, inventory resources on the site, observe

and secure information about the production facilities and processes, and identify resource problems and concerns.

Subtask 4.3: TPPA will develop a WQMP for each site that will meet all TSSWCB requirements for a certified WQMP, and also satisfy NRCS requirements for a CNMP. This will include a record keeping process and water quality protection checklist.

Subtask 4.4: TPPA will review the WQMPs with the producers and make modifications as necessary to address producer concerns and assure the plans are consistent with producer objectives.

Subtask 4.5: TPPA will work with the producers to submit the WQMPs to the local SWCDs and TSSWCB Regional Offices for certification.

Subtask 4.6: TPPA will work with the local SWCDs and TSSWCB Regional Offices to attain certification of the WQMPs.

Subtask 4.7: TPPA, TSSWCB and NRCS will assist the producers in implementing the certified WQMPs. This will include help with obtaining cost-share assistance for as many of the practices as possible, as well as, assistance in laying out structural practices and checking practices after construction.

Deliverables

- Certified WQMP for each demonstration site
- Implemented WQMP on each demonstration site

Task 5: Conduct two field-day educational events at the demonstration sites on the benefits of the TSSWCB WQMP Program.

Costs: \$ 3,300 _____ (Federal), \$ 2,200 _____ (Non-Federal Match), \$ 5,500 _____ (Total)

Objectives: (1) Present cost effective methods for managing manure and wastewater on small swine feeding operations. (2) Demonstrate to owners and operators of small swine production facilities that cost effective methods are available to meet state and federal water quality requirements applicable to their facilities. (3) Provide for an increase in the numbers of unpermitted swine facilities applying for and securing certified water quality management plans.

Subtask 5.1: TPPA, working with TSSWCB and NRCS and with input from TCEQ will organize, promote and conduct one field day at each demonstration site. At the field day, attendees will be provided information on the WQMPs and their components including:

- 1) Design Considerations
- 2) Cost Effectiveness Information
- 3) Management Requirements
- 4) Effectiveness at Meeting State Requirements

5) Benefits of Participating in the TSSWCB WQMP Program

Deliverables

- Press releases and/or other materials used to promote the field days
- List of attendees
- Presentation materials used at each field day

Task 6: Project Administration.

Costs: \$ 600 _____ (Federal), \$ 400 _____ (Non-Federal Match), \$ 1,000 _____ (Total)

Objectives: To provide administrative oversight of the project, provide timely and accurate progress reporting, and participate in project communication and meetings.

Subtask 6.1: TPPA will provide administrative oversight of project activities, including submitting quarterly progress reports, tracking and reporting expenses for quarterly reimbursement, maintaining backup documentation to support allowable costs, and preparing and submitting the final report.

Deliverables

- Progress Reports
- Reimbursement Statements
- Final Report

Coordination, Roles and Responsibilities:

Participating Agencies and Organizations along with their roles in this project include:

- Texas State Soil and Water Conservation Board:
 - Develop contract between TPPA and TSSWCB for this workplan.
 - Participate in meetings with TCEQ, NRCS, and TPPA as necessary to carry out this workplan.
 - Review and provide approval of alternative manure and wastewater handling and storage facilities.
 - Assist in coordination between agencies.
 - Perform all duties associated with the Water Quality Management Plan Program.
 - Provide certification of WQMPs in accordance with Texas Agriculture Code §201.026.
- Texas Pork Producers Association:
 - Develop preliminary information on approximately four alternative manure and wastewater handling and storage facility concepts.
 - Develop brief narrative descriptions and sketches adequate to convey the concepts to TSSWCB and NRCS staff.

- Coordinate and conduct meetings with TSSWCB and NRCS to present, discuss, and evaluate the alternative concepts.
- Coordinate and conduct meetings with technical staff of TSSWCB and NRCS to discuss and evaluate specific conceptual manure and wastewater handling and storage alternatives.
- Develop descriptive information on all alternatives in which TSSWCB and NRCS concurrence on consistency with the FOTG is obtained.
- Coordinate and conduct meetings with TSSWCB, NRCS and TCEQ.
- Complete and file necessary forms for the demonstration sites' participation in the WQMP Program.
- Develop WQMPs for demonstration sites.
- Implement WQMPs on demonstration sites.
- Conduct two field-day educational events at the demonstration sites on the benefits of the TSSWCB WQMP Program.
- Provide administrative oversight of project activities, including submitting quarterly progress reports, tracking and reporting expenses for quarterly reimbursement, maintaining backup documentation to support allowable costs, and preparing and submitting the final report.

Measures of Success:

- Identification of cost-effective and alternative manure and wastewater storage facilities for unpermitted pork operations.
- Development and implementation of two WQMPs containing alternative management practices on two unpermitted pork operations.
- Two field-day educational events to promote the benefits of the TSSWCB WQMP Program.
- Eventual increase in the numbers of unpermitted pork operations participating in the WQMP Program.

Project Management:

TSSWCB Project Lead

Name: John Foster
Address: Texas State Soil and Water Conservation Board
 311 North 5th Street
 Temple, Texas 76502
Phone #: 254-773-2250, ext. 235
E-Mail: jfoster@tsswcb.state.tx.us

TPPA Project Lead

Name: Ken Horton
Address: Texas Pork Producers Association
 P.O. Box 10168
 Austin, Texas 78766
Phone #: 512-453-0615
E-Mail: kentppa@sbcglobal.net

Water Quality Management Plan Initiative for the Nonpoint Source Pork Industry				
Itemized Budget 12/01/2005				
Contract 01-15				
	Object Class Category	Federal	Non-Federal	Total
1	Personnel	\$0.00	\$0.00	\$0.00
2	Fringe Benefits	\$0.00	\$0.00	\$0.00
3	Travel	\$0.00	\$0.00	\$0.00
4	Equipment	\$0.00	\$0.00	\$0.00
5	Supplies	\$0.00	\$0.00	\$0.00
6	Contractual	\$21,000	\$14,000	\$35,000
7	Construction	\$0.00	\$0.00	\$0.00
8	Other	\$0.00	\$0.00	\$0.00
9	Total Direct Costs	\$21,000	\$14,000	\$35,000
10	Total Indirect Costs	\$0.00	\$0.00	\$0.00
11	Total Costs	\$21,000	\$14,000	\$35,000

Budget Justification

The total project budget of \$35,000 consists of the following:

- \$21,000 in Federal Clean Water Act, Section 319(h) (CWA, 319) funding through the TSSWCB Fiscal Year 2001 grant
- \$10,000 in non-federal match provided by the Texas Pork Producers Association (TPPA)
- \$4,000 in non-federal match provided by the Texas State Soil and Water Conservation Board (TSSWCB).

TPPA intends to subcontract this scope of work to a yet to be determined entity. All project funds are itemized under “contractual” in the project budget. Through normal reimbursement procedures, the \$21,000 in CWA, 319 funds and the \$4,000 in TSSWCB funds will be provided to TPPA upon delivery of the following:

- Two TSSWCB-Certified Water Quality Management Plans (WQMPs) containing alternative manure and wastewater storage facilities
- Two field-day educational events to promote the benefits of the TSSWCB WQMP Program
- All other deliverables itemized within this scope of work.