

**Environmental Regulatory Oversight Assistance for Unpermitted Animal  
Feeding Operations in Texas**

**Final Report**



Funding provided through a CWA §319(h) Nonpoint Source Grant from the  
Texas State Soil and Water Conservation Board and the  
U.S. Environmental Protection Agency  
TSSWCB Project 01-16

## **BACKGROUND**

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 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.

As part of the WQMP Program, the TSSWCB receives referrals from TCEQ on complaints resulting from unregulated AFOs. As a result of dry-litter poultry operations being included in the National Pollutant Discharge Elimination System (NPDES) Permitting Program, and Senate Bill 1707 ensuring that the WQMP Program remains applicable to permitted dry-litter operations, the memorandum of agreement between TSSWCB and TCEQ will need to be amended.

As a result of these and other circumstances, the TSSWCB was seeking environmental regulatory assistance to ensure the WQMP Program and other agency initiatives were adequate in meeting the needs of AFOs.

*The “Environmental Regulatory Oversight Assistance for Unpermitted Animal Feeding Operations Project” was initiated to provide the TSSWCB additional resources by contracting with Texas A&M University System (TAMUS) and Eco-Environmental Services thereby utilizing their integral technical knowledge and expertise in regulatory requirements necessary to meet state and federal environmental regulations. The technical elements of a TSSWCB’s certified WQMP program are based 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 Texas regulations for animal feeding operations and the water quality permitting program. A certified WQMP developed for an AFO that meets the technical requirements of the FOTG generally satisfies the state regulations. Eco-Environmental Services accomplished objectives for Task 2 by providing regulatory oversight on the WQMP program through assisting in the development of BMPs for AFOs that are necessary to meet state water quality requirements.*

**TASK 2:** Provide technical assistance to the TSSWCB on the certified WQMP Program to assist in developing best management practices (BMPs) that meet state water quality requirements.

**Objectives:** (1) To assist the TSSWCB in assuring that certified WQMPs on animal feeding operations contain water quality based BMPs necessary to meet state water quality regulatory requirements.

- Eco-Environmental Services attended a meeting with the TSSWCB regional office managers on March 23, 2006 at the TSSWCB headquarters to discuss project goals and objectives and obtain ideas on assistance needed through this project.
- Eco-Environmental Services reviewed several draft WQMP’s and provided input about the BMPs necessary to meet state water quality requirements for non-point source AFOs under Chapter 321.47; Subchapter B regulations (Requirements for animal feeding operations not defined or designated as Concentrated Animal Feeding Operations). Eco-Environmental Services also participated in meetings with staff of TSSWCB, Texas Commission on Environmental Quality (TCEQ), and United States Department of Agriculture – Natural Resource Conservation Service (USDA-NRCS) to review and discuss sufficiency of BMPs in a WQMP necessary to satisfy state regulations and a TCEQ complaint.
- Eco-Environmental Services provided the TSSWCB numerous interpretations of state/federal regulatory requirements applicable to AFO’s operating under WQMP’s. Some examples of the issues are: composting requirements under Chapter 330 pertaining to multiple sources of feed stuff materials and the agricultural exemption under state regulations under Chapters 321 and 332, poultry carcasses disposal notification requirements, composting carcasses on farm for dry litter poultry operations, the air standard permit for animal feeding operation (AFOs), applicability of pollution prevention plans (PPP) requirements to dry litter poultry CAFOs operating under a WQMP and 30 TAC; Chapter 321: Subchapter B Concentrated Animal Feeding Operation (CAFO) rules, regulatory requirements and process for

closure of non-point source AFOs under Chapter 321.47; Subchapter B regulations (Requirements for animal feeding operations not defined or designated as Concentrated Animal Feeding Operations) when the operation ceases to operate as an AFO, the applicability of the EPA extension of nutrient management plan (NMP) deadline on the requirements for dry poultry operations defined as CAFOs and operating under a WQMP, the regulatory requirements for land application of litter by dry poultry CAFOs, and WQMP development for dry poultry CAFO and non-point source poultry operations authorized under Chapter 321.47 (Requirements for animal feeding operations not defined or designated as Concentrated Animal Feeding Operations).

- Eco-Environmental Services provided regulatory oversight involving an issue paper developed by the TSSWCB staff requesting clarification and discussion about several requirements contained in 30 TAC; Chapter 321: Subchapter B Concentrated Animal Feeding Operation (CAFO) regulations (i.e... soil sampling procedures, nutrient management practices, etc...) and a subsequent publication entitled the “Poultry Supplemental Guidance Document” developed by the TSSWCB containing the WQMP requirements applicable to dry poultry CAFOs operating under 30 TAC; Chapter 321: Subchapter B Concentrated Animal Feeding Operation (CAFO). Eco-Environmental Services also helped develop a TSSWCB fact sheet prepared for poultry producers to educate growers about regulatory requirements for compliance with composting requirements under state regulations found under 30 TAC Chapters 321 and 332.
- Eco-Environmental Services coordinated with TSSWCB, Texas Cooperative Extension (TCE) and TCEQ staff to develop educational program for poultry producers to explain the operational requirements contained in 30 TAC; Chapter 321: Subchapter B Concentrated Animal Feeding Operation (CAFO) regulations which support the development of WQMPs for dry poultry facilities operating under the permit-by-rule. Eco-Environmental Services presented information about the state/federal CAFO regulatory requirements and letter of agreement (LOA) with TCEQ at the TSSWCB’s educational program for dry poultry CAFO producers in Mt. Pleasant, Gonzales, Center, Nacogdoches, Caldwell and Franklin, Texas.

*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. In the administration of the WQMP program, the TSSWCB receives complaints referrals from TCEQ involving AFOs that are not required to operate under a water quality permit. Eco-Environmental Services accomplished objectives for Task 3 by providing regulatory oversight assistance in reviewing complaints to verify state laws and regulations were being followed in the investigation and resolution of these situations.*

**TASK 3:** Provide guidance and assistance in the complaint process to the TSSWCB on rule interpretations and citations from Texas Water Code, Chapter 26, and Texas Administrative Code, Title 30, Part 1, Chapter 321, Subchapter B.

**Objectives:** (1) To advise the TSSWCB on 30 TAC; Chapter 321: Subchapter B rule interpretations to assist with complaint investigations including referrals from the TCEQ regarding AFOs not meeting environmental regulatory requirements. (2) In situations where a WQMP is developed or revised to address a complaint, all practices implemented through the WQMP will be documented and submitted to the TSSWCB project manager for reporting load reductions to EPA through Grants Reporting Tracking System (GRTS).

- Eco-Environmental Services participated in two TSSWCB regional complaint investigations of citizen complaints in Seguin and Chappell Hill, Texas. Complaints were referred to TSSWCB from TCEQ under the terms of the MOU.
- Eco-Environmental Services organized and participated in numerous meetings with TSSWCB staff to discuss programmatic and policy issues concerning TCEQ complaint referrals to the regions under the TCEQ/TSSWCB MOU. Regional staff input from the meetings provided essential information necessary to revise the memorandum of understanding (MOU) with TCEQ pertaining to non-point source program management at agricultural operations. Regional offices consulted were Wharton, Dublin, Nacogdoches, Harlingen, Hale Center and Mt. Pleasant, Texas.
- Eco-Environmental Services assisted with edits to the TSSWCB policy concerning complaint investigation procedures for AFOs, as directed by the TSSWCB's Board and executive management. Eco-Environmental Services provided input to insure that necessary steps were taken and sufficient information obtained to satisfy the TCEQ/TSSWCB MOU agreement and 30 TAC; Chapter 321: Subchapter B Concentrated Animal Feeding Operation (CAFO) regulations.
- Eco-Environmental Services facilitated the development of a draft letter of agreement (LOA) between TCEQ and TSSWCB pertaining to the applicability of the CAFO rule requirements to dry poultry. The LOA, an interim step in the lengthy rule making process required for revisions to MOU, established a functioning relationship between the two agencies in the enforcement of federal/state regulations applicable to Texas dry poultry operations, both point and non-point source. The LOA agreement

was signed by the executive director's of both agencies and established oversight authority for the TSSWCB to work with dry poultry producers on the protection of water quality through the WQMP program although they are defined as CAFOs by EPA CAFO regulations.

- Eco-Environmental Services attended and participated in a USDA-NRCS environmental conference designed to inform agricultural partners about the roles and support provided by each agency to help producers meet state and federal environmental requirements for the protection of water quality. The conference was attended by EPA Region 6 staff, TCEQ headquarters/regional staff, TSSWCB headquarters/regional staff and USDA-NRCS districts staff.

*The Texas AFO regulations contain many operational requirements in addition to the technical standards contained in the WQMP. These operational requirements include items such as self inspections and recordkeeping in addition to the requirement for all AFOs, regardless of whether they are permitted or not, to obtain a nutrient management plan (NMP) prior to December 31, 2006. NMPs are required elements of WQMPs if nutrients are being applied to the operating unit. Eco-Environmental Services accomplished objectives for Task 4 by providing regulatory oversight and guidance to the TSSWCB in the planning process for AFO WQMPs to assure that key elements of the regulations were included thereby meeting state regulatory requirements. Eco-Environmental Services also provided personnel to oversee and relay information to the TSSWCB about changes in the federal CAFO regulations and state requirements in a timely manner for incorporation into the WQMP program.*

**TASK 4:** Provide guidance and assistance to the TSSWCB on environmental requirements necessary for animal feeding operations (AFOs) to satisfy state regulatory requirements and water quality standards.

**Objectives:** To advise the TSSWCB on state environmental requirements necessary to assure the WQMP Program satisfies state law and water quality requirements.

- Eco-Environmental Services provided input to the TSSWCB on other regulatory issues outside the AFO arena that they encountered in the field. Examples are: a Texas Land Application Permit (TLAP) and the management of wastewater generated by the facility that is land applied under the provisions of a nutrient management plan associated with a WQMP, the CAFO regulatory requirements for obtaining permit for dairy operations when the head count threshold for nonpoint source operations and management practices were exceeded, participated in conference call with TCEQ and TSSWCB staff to discuss EPA concerns about Texas enforcement authority and delineation of federal versus State authority, applicable to an operation under a TSSWCB non-point source management plan, and assisted in determining appropriate requirements in the development of water quality management plans regarding a small dairy AFO with a solid waste disposal issue.
- Eco-Environmental Services initiated contact with TCEQ to resolve a discrepancy in regulatory guidance document RG – 326 (How To Dispose Of Carcasses From

Commercial Chicken Or Duck Operations?) to be consistent with recent changes in state statute and to assure the requirements in WQMPs were consistent with state law.

*The EPA changed the federal CAFO regulations on December 15, 2002, when the Administrator of the United States Environmental Protection Agency (EPA) signed the final rule. This rule change affected state requirements applicable to dry-litter poultry operations by including them in the National Pollutant Discharge Elimination System (NPDES) permitting program and defining them as point sources. Eco-Environmental Services accomplished objectives for Task 5 by providing regulatory assistance to the TSSWCB by tracking changes in the federal rule during the lengthy court process while advising the WQMP program about additional requirements applicable to poultry CAFOs under federal mandates.*

**TASK 5:** Provide guidance and assistance to the TSSWCB on the Environmental Protection Agency's concentrated animal feeding operations (CAFO) regulations.

**Objectives:** To advise the TSSWCB on federal CAFO requirements and implications they may have on the State WQMP Program.

- Eco-Environmental Services contacted EPA and met with EPA Region 6 staff to discuss the plans and schedule for changes in federal CAFO regulations resulting from Second Circuit Court decision setting aside provisions of the rule. Also, attended public meeting with EPA staff's of Region 6 and Washington Headquarters to discuss the proposed changes in federal CAFO regulations. EPA staff presented information on the "duty to apply" which previously had a significant affect on the non-point source animal feeding operations throughout Texas and their ability to continue to work with the TSSWCB through their voluntary programs. The EPA extended the deadlines pertaining to proposed amendments to the federal CAFO regulations pursuant to the 2<sup>nd</sup> Circuit Court decision on February 18, 2008. EPA is now proposing February 27, 2009, as the new date for permitted CAFOs to develop and implement Nutrient Management Plans.
- Eco-Environmental Services traveled to TCEQ headquarters to participate in meeting with TCEQ and EPA to discuss state and federal regulations and jurisdiction pertaining to AFOs under a WQMP and complaint received by EPA. Discussion focused on EPA regulations and federal authority to take enforcement action against potential violations at a non-point source operation in a delegated state without state approval.
- Eco-Environmental Services traveled to Marquez, Texas on two occasions to meet with staff of the EPA, TCEQ and TSSWCB to participate in a complaint investigation involving alleged violations of the Clean Water Act (CWA) and nuisance regulations. The TSSWCB/TCEQ Letter of Agreement (LOA) requires the TSSWCB to respond and investigate complaints at all dry poultry CAFOs authorized under a WQMP. The USEPA had received correspondence from legislative officials and initiated the investigations of the complaints.

*In Texas, dry-litter poultry operations are unique in that they are included in both the National Pollutant Discharge Elimination System (NPDES) CAFO Program as point sources and Senate Bill 1707 ensured that they remained part of the non-point source WQMP program. This situation necessitated the TSSWCB and TCEQ change the memorandum of understanding between the two agencies. Eco-Environmental Services accomplished objectives for Task 6 by dedicating personnel to coordinate between the TSSWCB and the state environmental regulatory agency (TCEQ) to address non-point source pollution issues arising from operations which lack the necessary best management practices to satisfy the regulations and the implementation of a new program to assure point source poultry CAFOs were in compliance with water quality laws and regulations.*

**TASK 6:** Provide guidance and assistance to the TSSWCB as liaison with TCEQ on the TCEQ/TSSWCB Memorandum of Understanding including, if necessary, developing implementation plans for coordinated inspection and compliance assistance program for unpermitted AFOs and dry-litter poultry CAFOs.

**Objectives:** (1) To provide assistance with the TSSWCB on updating the MOU with TCEQ to reflect recent legislation and changes to the WQMP plan since the MOU was previously adopted.

- Eco-Environmental Services initiated numerous communications and meetings with TCEQ staff on policy issues that were essential to coordination of the Texas Environmental Protection programs with the WQMP goals and objectives. A few of the communications involved: 1) facilitating the processing and approval of the draft letter of agreement (LOA), 2) soliciting TCEQ's participation in the TSSWCB outreach effort planned to raise awareness of poultry producers of the environmental requirements contained in the Texas CAFO rules and LOA with TCEQ, 3) increasing understanding of the scope of the MOU agreement, goals and expectations of both agencies and agreement on next steps for initiation of the MOU process, 4) the TSSWCB/TCEQ Letter of Agreement (LOA) and the process to be followed by the TSSWCB staff in verifying that the dry poultry producers are following the requirements of the WQMP and the Texas CAFO requirements, and 5) TSSWCB and TCEQ staff clarifying the regulatory requirements under both a WQMP and 30 TAC; Chapter 321: Subchapter B: Concentrated Animal Feeding Operation permit-by-rule that are applicable to dry poultry AFOs and a discussion on jurisdiction of the two agencies as described in the MOU relating to odor complaints against dry poultry AFOs in Texas.

*Eco-Environmental Services accomplished objectives for Task 7 by attending all meetings necessary in the performance of the task required under this work plan.*

**TASK 7:** Attend TSSWCB meetings as necessary to brief staff and Board of Directors on Tasks 1-6.

**Objectives:** (1) To keep Board of Directors and the TSSWCB aware of activities and deliverables required under the workplan.

- Eco-Environmental Services attended and participated in several TSSWCB Board meetings to discuss project, provide project update and discuss issues and planned implementation of action items.
- Eco-Environmental Services met with TSSWCB Director for regional operations and all other Regional managers on numerous occasions to develop framework for revisions to MOU with TCEQ pertaining to non-point source program management at agricultural operations and receive input on areas where significant changes are necessary to facilitate improvements on complaint response at non-point source operations.
- Eco-Environmental Services participated in a meeting with TSSWCB chairman, executive management, and regional office staff to discuss the complaint procedures in the MOU with TCEQ regarding dry litter poultry operations. The discussion focused on the notification requirements contained in the LOA which established the TSSWCB's oversight authority for dry poultry CAFO's which are defined as point sources by USEPA CAFO regulations.

*Eco-Environmental Services accomplished objectives for Task 8 by submitting all quarterly reports timely to keep project manager updated on deliverable required under the work plan.*

**TASK 8:** Provide quarterly reports to TSSWCB Project Manager and TSSWCB Regional Managers; provide a final report to the TSSWCB Project Manager at the end of the project period.

**Objectives:** (1) To provide TSSWCB a summary of activities performed under the workplan the preceding quarter. (2) To provide TSSWCB a final report of all project activities.

- Eco-Environmental Services prepared ten (10) quarterly reports for submission to the TSSWCB during the contract term.