



Texas Commission on Environmental Quality

March 2011

Curriculum Guidance for the Class B MSW Facility Supervisor Licensing Course

Training For Municipal Solid Waste Facility Supervisors of Registered or Permitted:

- **Type V Storage & Processing Facilities**
- **Medical Waste Management**
- **Compost Facilities**
- **Type VI Demonstration Facilities**
- **Type IX Energy or Material Recovery Facilities**

This course is 24-28 hours of training for supervisors of storage and processing facilities including: recycling and composting facilities, medical waste management facilities, Type VI demonstration facilities, and Type IX energy or material recovery facilities. The course must include sufficient instruction using training materials, demonstrations, facility tours, or other means to ensure supervisors are knowledgeable of rules that regulate the municipal solid waste facilities they supervise. Time periods for all course topics are approximate. Renewal of a B level MSW license requires 16 hours of approved continuing education.

Individuals managing or supervising medical waste or compost facilities requiring an MSW registration or permit, shall complete a TCEQ recognized or approved specialized training course applicable to that facility before being issued a class B MSW Facility Supervisor license. Therefore, coverage of the supervision of medical waste or composting facilities in the class B MSW training need only include an overview related to regulatory compliance.

Individuals completing the class B MSW facility supervisor course, passing the examination, but not completing the specialized course will be issued a provisional class B license. In order to obtain a class B MSW license, a specialized course must be completed before the expiration date of the provisional license.

**Course topics should include:
(2 Hours)**

INTRODUCTION

- Qualifications for obtaining initial licenses and renewal of licenses. 30 TAC 30, Subchapter F.
- **Brief** history of municipal solid waste and recycling today.
- Introduction to statutes and rules pertinent to MSW facilities including how to locate and understand the rules.
- General prohibitions and unauthorized discharge.
- Waste characteristics.
- General discussion – Texas Health Safety Code, 341, 343, 361, 363, 370, 382, and Texas Water Code 7, 26, and 28.

CLASSIFICATION OF MUNICIPAL SOLID WASTE FACILITIES

- Type I and IAE Landfills
- Type IV and IVAE Landfills
- Type V Solid Waste Processing
- Type VI Demonstration Facilities
- Type IX Landfill Mining for Beneficial Use or Energy Recovery

MUNICIPAL SOLID WASTE FACILITY AUTHORIZATION – GENERAL KNOWLEDGE

MUNICIPAL SOLID WASTE COLLECTION AND TRANSPORTATION

Transporters delivering waste to the MSW facility are responsible for removal of unacceptable or unauthorized waste. Transporters are also responsible for collecting spillage on route to the MSW facility as well as maintaining collection vehicles in a manner to prevent loss of waste and fluids from the vehicle. Supervisors of municipal solid waste facilities should be knowledgeable of the responsibilities of transporters that enter the MSW facility.

- Transporters responsibilities in relation to:
 - Delivery and removal of unauthorized waste
 - Collection of spillage
- Transporters responsibilities in relation to:
 - Vehicle sanitation standards
 - Operating condition of vehicles

(16 – 20 Hours)

TYPE V PROCESSING FACILITIES

Separate solid waste processing facilities are classified as Type V. These facilities include processing plants that transfer, incinerate, shred, grind, bale, salvage, separate, dewater, reclaim, and/or provide other storage or processing of solid waste.

OPERATING STANDARDS FOR TYPE V MSW STORAGE AND PROCESSING UNITS

Owners or operators of Type V MSW Storage and Processing Units must follow the minimum design and operational requirements prescribed in 30 TAC 330, Subchapter E.

- Applicability
- Waste Acceptance and Analysis
 - Sources and characteristics of waste
 - Types and amounts
 - Parameter limitations
 - Storage limits and processing time
 - Effluent sampling
 - Analysis for waste received
 - Recordkeeping
- Facility Generated Wastes
 - Characteristics and constituent concentrations of wastes generated
 - Processing and disposal of facility generated wastes
 - Sludge management
- Contaminated Water Management
 - Liquid disposal
 - Contaminated water and leachate management
 - Leachate and gas condensate prohibitions
 - Discharge requirements
 - Effluent limitations
 - Storage prohibitions
- Storage Requirements
- Approved Containers
- Citizen's Collection Stations
- Stationary Compactors
- Pre-Operation Notice and Investigation
- Recordkeeping and Reporting
- Fire Protection
 - Water supply
 - Firefighting equipment
 - Fire protection plan
- Access Control
- Unloading of Wastes
- Spill Prevention and Control
- Operating Hours
- Facility Signage
- Control of Windblown Material and Litter
- Materials Along the Route to the Site
- Facility Access Roads
- Noise Pollution and Visual Screening
- Overload and Breakdown
 - Design capacity
 - Alternate processing or disposal plan
- Sanitation
 - Minimum requirements
 - Onsite storage limitations
 - Wash water disposal
- Ventilation and Air Pollution Control
- Health and Safety
 - Personnel training

- Facility health and safety plan
- Employee Sanitation Facilities
- Surface Water Drainage
- Closure Requirements for Municipal Solid Waste Storage and Processing Units
- Financial Assurance – Basic Information
- Groundwater Monitoring – Basic Information

MEDICAL WASTE MANAGEMENT – 30 TAC 330, Subchapter Y

The purpose of this section is to establish procedures and requirements for handling, transporting, and disposal of medical waste that the Board of Health has determined requires special handling to protect health or the environment. This section is applicable to persons who generate, collect, transport, store, process, treat or dispose of medical waste.

- Definitions
- Generators of Medical Waste
- Storage of Medical Waste
- Transporters of Untreated Medical Waste
- Transfer of Shipments of Medical Waste
- Interstate Transportation
- Medical Waste Collection Stations
- Treatment and Disposal of Medical Waste
- On-site Treatment Services on Mobile Treatment Units

TYPE V – PERMITTED OR REGISTERED COMPOSTING FACILITIES – 30 TAC 332 and 328

The purpose of compost facilities is to divert organic materials from the typical municipal solid waste stream, and promote the beneficial reuse of those materials while maintaining standards for human health and safety and environmental protection.

- General Information (332.1 – 332.8)
- Compost operations requiring a registration (332.31 – 332.38 and 328.4 – 328.5)
- Compost operations requiring a permit (332.41 – 332.46 and 328.4 – 328.5)
- End-product standards (332.71 – 332.75)
- Other state and federal rules as applicable:

TEXAS HEALTH & SAFETY CODE:

- CHAPTER 341. MINIMUM STANDARDS OF SANITATION AND HEALTH PROTECTION MEASURES
 - Sec. 341.011. Nuisance
 - Sec. 341.012. Abatement of Nuisance
 - Sec. 341.013. Garbage, Refuse, and Other Waste
- CHAPTER 343. ABATEMENT OF PUBLIC NUISANCES
 - Sec. 343.011. Public Nuisance
- CHAPTER 361. SOLID WASTE DISPOSAL ACT

- CHAPTER 365. LITTER
 - Sec. 365.012. Illegal Dumping; Criminal Penalties
- CHAPTER 370. TEXAS TOXIC CHEMICAL RELEASE REPORTING ACT
- CHAPTER 382. TEXAS CLEAN AIR ACT
- CHAPTER 401. TEXAS RADIATION CONTROL ACT

TEXAS WATER CODE

- CHAPTER 26. WATER QUALITY CONTROL

TEXAS ADMINISTRATIVE CODE

- CHAPTER 101 GENERAL AIR QUALITY RULES
 - Section 101.4. Nuisance

(2 Hours)

TYPE IX – ENERGY OR MATERIAL RECOVERY FACILITIES

A Type IX facility is a municipal solid waste facility located within or adjacent to a closed disposal facility, an inactive portion of a disposal facility, or an active disposal facility for the purpose of extracting materials for energy and material recovery for beneficial use.

- Minimum design and operational requirements (30 TAC 330, Subchapter E)
- Closure Requirements for Municipal Solid Waste Storage and Processing Units (30 TAC 330.459)
- Certification of Final Facility Closure (30 TAC 330.461)
- Closure Cost Estimates for Storage and Processing Units (30 TAC 330.505)
- Financial Assurance (30 TAC 37, Subchapter R)

(4 Hours)

GENERAL TOPICS (Include Measurable Verification of Comprehension)

REGULATIONS, REGULATORS, AND PUBLIC RELATIONS

- Brief history of municipal solid waste management—the rule making process.
- Authority and relationships with other governmental entities.
- How to effectively communicate with regulators during routine site and complaint investigations.
 - Preparing for site inspection (scheduling time, records needed, sampling)
 - Responding to notices of violation
 - Corrective action planning
- Good neighbor relations
 - Responding to complaints
 - Investigating a complaint
 - Corrective action

BASIC MATH

Supervisors of MSW facilities should have basic mathematical skills in order to measure and evaluate basic information. Instruction should be given to include:

- Calculating averages
- Conversion processes (pounds to tons, cubic feet to cubic yards, etc.)

EQUIPMENT OPERATION AND MAINTENANCE

In order to comply with an MSW facility's permit, proper equipment operation and maintenance is a critical function.

- Avoiding unnecessary breakdowns/proper equipment maintenance
- Back up equipment/emergency preparedness

SAFE OPERATING PROCEDURES AND WORKPLACE HAZARDS

Identifying workplace hazards and communicating those hazards to employees and the general public is necessary to protect human health and safety and environmental protection.

- Effective safety programs
- Workplace hazards
- Employee and public awareness

GUIDANCE DOCUMENTS FOR MUNICIPAL SOLID WASTE (330.17)

The following guidance documents and templates have been prepared to aid in complying with the revised MSW rules (30 TAC Chapter 330) that became effective March 27, 2006. As a simplified explanation of the rules, the guides below are intended to help achieve compliance with environmental regulations. Guides are just one tool to use to reach full compliance, remember that the rules are what you must follow.

- **TCEQ Web site** www.tceq.state.tx.us
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/msw.html
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/msw_ris_guid.html
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/perm_reg_mod.html
http://www.tceq.state.tx.us/permitting/waste_permits/iHW_permits/HW_Am_I_Regulated.html
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/MSW_amIregulate_dcomposting.html
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/MSW_amIregulate_drecycling.html
http://www.tceq.state.tx.us/permitting/waste_permits/msw_permits/MSW_amIregulate_drecycling.html
- **TCEQ Occupation License Online Registration and Renewal**
<http://www.tceq.texas.gov/licensing>
- **Rules and Rulemaking**
http://www.tceq.state.tx.us/nav/rules/rules_rulemaking.html
- **Small Business and Local Government Assistance**
The TCEQ's Small Business and Local Government Assistance (SBLGA) program provides confidential technical assistance without threat of enforcement.
<http://www.tceq.state.tx.us/assistance/sblga/sblga.html> or
TexasEnviroHelp.org