



TEXAS COMMISSION ON ENVIRONMENTAL QUALITY

VOLUME I: REGIONAL SOLID WASTE MANAGEMENT PLAN
adopted under provisions of Texas
Health & Safety Code Ann.
Chapter 363 (Vernon)

Name of Council of Governments: Houston–Galveston Area Council
P. O. Box 22777
Houston, TX 77227-2777

The contents of regional solid waste management plans are specified in and shall conform to the requirements of the Texas Health & Safety Code §363.064; the plans provide the general structure to implement a regional or local program.

This plan is adopted subject to the rules and orders of the Commission and laws of the State of Texas and it replaces any previously approved plan. Nothing in this plan exempts the Council of Governments from compliance with other applicable rules and regulations of the Texas Commission on Environmental Quality. This plan is valid until canceled, amended, or revoked by the Commission.

Pursuant to Title 30 Texas Administrative Code §330.647(a), this plan is adopted by reference into Chapter 330, Subchapter O.

ADOPTED in accordance with Title 30 Texas Administrative Code Chapter 330.

ADOPTION DATE:

For the Commission

VOLUME I: REGIONAL SOLID WASTE MANAGEMENT PLAN

SECTION I – NAME AND DESCRIPTION OF COUNCIL OF GOVERNMENTS

- A. This Regional Plan pertains to Houston-Galveston Area Council (hereafter called H-GAC). The counties covered under this plan include Austin, Brazoria, Chambers, Colorado, Fort Bend, Galveston, Harris, Liberty, Matagorda, Montgomery, Walker, Waller, and Wharton.
- B. This Regional Plan is based on the materials dated April 16, 2006, as revised on September 25, 2006. These materials are incorporated into this Regional Plan as if fully set out herein.

SECTION II – REGIONAL PLAN

A. Regional Goals

Goal #1: Promote services and technical assistance support of local and regional solid waste management planning.

- Objective 1A: Develop regional cooperative service contracts such as regional household hazardous waste collection contract.
- Objective 1B: Coordinate region-wide membership in environmental professional organizations and trade associations with a solid waste emphasis.
- Objective 1C: Assess disposal capacity needs to identify the best approach to meet local capacity needs.
- Objective 1D: Support regional and local efforts to identify areas with litter and illegal dumping problems.
- Objective 1E: Continue to develop and maintain an inventory of solid waste management facilities located in the H-GAC region.
- Objective 1F: Maintain a regional clearinghouse on solid waste management practices of H-GAC local governments.
- Objective 1G: Serve as central point of contact for solid waste management outreach, education and training programs.
- Objective 1H: Continue development of a regional geographic information system (GIS) for the H-GAC region.

Goal #2: Promote the planning for adequate municipal solid waste disposal, handling and management facilities.

- Objective 2A: Continue to review permit applications for municipal solid waste management facilities.
 - i. Review compliance history and operational record of permit applicant consistent with state and local practices.
 - ii. Encourage landscaping and visual screening of sites.
 - iii. Advocate aerial buildup with consideration of surrounding topography and screening.
 - iv. Encourage applicant use of the “land use” hearing option to provide opportunities for community participation early in the permitting process.
 - v. Require consideration of surrounding land use when establishing buffers and setbacks; encourage long-range land use planning at the county level.

- vi. Encourage long-range planning at the county level including adoption of landfill siting ordinances.
- vii. Encourage consistency with local comprehensive plans and zoning ordinances.
- viii. Require consideration of community growth patterns and trends.
- ix. Require consideration of possible impacts of a proposed facility on residents and the local community.

Objective 2B: Encourage the development of facilities that reduce, reuse or recycle waste materials.

Objective 2C: Encourage appropriate distribution of facilities to minimize transportation costs.

Objective 2D: Encourage the development of larger regional facilities to the extent practical and where such facilities would be the best alternative.

Objective 2E: Encourage expansion and redevelopment of existing municipal solid waste facilities, where feasible, over siting of new facilities.

Objective 2F: Encourage development of transfer stations and citizen collection stations, where appropriate.

Objective 2G: Continue to endorse the consideration of integrated waste management.

Goal #3: Promote the options for reduction and recycling of waste disposal in municipal solid waste management facilities.

Objective 3A: Develop and implement on-going public awareness programs to encourage waste minimization, reduction and recycling.

Objective 3B: Target waste reduction activities to the major components of waste disposal.

Objective 3C: Target waste reduction activities to certain components of the waste stream that may pose a special risk or problem.

B. Waste Minimization, Waste Reuse, Recycling & Education

- (1) Both public and private recycling programs are found in the H-GAC region. Municipal recycling programs typically collect newspaper, aluminum and steel cans and plastics containers. Glass containers are also collected but not as frequently. Both private and public facilities collect some automotive waste. Used oil and oil filters are accepted at many local retailers as well as at many municipal barns. There are over 400 used oil collection sites in the region. There are liquid waste and sludge transporters in the region. The liquid waste and sludge is managed in several different ways including landfill disposal, land application and composting. All management methods are in accordance with TCEQ requirements. Many of local governments offer organic materials chipping or composting services. There is also strong competition amongst private composting operations in the region. On a regionally basis, the methods to manage and minimize municipal solid waste including liquid waste and sludge are adequate; however there is a distribution problem as not all counties have facilities located within a close proximity.

In 1992, thirty-four (34) local communities, including cities, counties, and census designated places had some types of recycling and/or waste reduction in place. In 2001, 49 communities offered curbside recycling and 74 municipal recycling drop-off centers were located in the region. In 2000, 25% of the population of Texas had curbside recycling available. Curbside

recycling was available to 23% of the general population or 37% of the homeowners in the H-GAC region. In the H-GAC region, 39% of the population lives in multi-family dwellings and rely on drop-off sites for recycling.

Recycling activities within the H-GAC region are primarily influenced by the availability of markets. Houston and nearby communities have relatively easy access to end-markets. Many large end-markets are drawn to the Houston-Galveston region because of Houston's large population base, which can supply a sufficient amount of recyclables materials to serve as material input. Within the region, the increased collection of recyclables has spurred an expansion of several sorting/processing centers. There are five private material recovery facilities in operation. Additionally, there are two processing centers focusing on workplace recycling. The cities that are in more populated counties within the H-GAC region have moderately adequate recycling options (either curbside or drop-off). However, in unincorporated areas of all the 13 counties and smaller cities, there is a need to increase recycling and waste reduction opportunities in these unserved areas of the region. The reuse and recycling programs in the region can be located by zip code using the website www.cleanup.org or the phone number 1-800-CLEANUP.

(2) Recommendations for encouraging and achieving a greater degree of waste minimization and waste reuse or recycling in the geographic area covered by the plan stem directly from the goals and objectives (listed above) of the H-GAC Regional Solid Waste Management Plan. More specific recommendations include:

- fully identify the populations served by curbside recycling; including municipal utility districts (MUD's) and community associations;
- provide curbside recycling to a larger percentage of the region's population;
- identify areas where drop-off sites are needed;
- create pilot programs for curbside recycling programs in multi-family dwellings;
- develop regional educational programs to include publicly available database of locations, public service announcements (PSAs), and sample brochures;
- establish joint agreements to study and initiate the development of transfer stations for recyclables;
- increase capacity of organic materials composting and mulching operations; and
- conduct market development strategies for organic material composting.

(3) Availability of HHW and electronics collection services varies greatly in the region. There are both one-day collection events and permanent collection centers. H-GAC also offers regional contracts for collection and management of these types of materials.

A. Household Hazardous Waste (HHW) Services

There are five permanent collection centers located within the H-GAC region. City of Houston operates two centers. The other centers are operated by Fort Bend County, Montgomery County, and City of Pearland. In addition to the permanent centers, the City of Houston operates a limited HHW collection center (BOPA) for batteries, oil, oil filters, latex paint, and antifreeze. The City's BOPA serves as a regional facility as any resident from the H-GAC region may drop-off materials. The permanent collection centers also offer vouchers to other local government entities that don't offer collection services or only offer them on a limited basis. Local governments may purchase vouchers for their citizens' usage. Citizens may take their HHW to one of the permanent centers as long as

they have a voucher. Currently, four other entities are considering permanent collection centers. Montgomery County and Harris County offer HHW collection through mobile HHW collection service. Additionally, yearly collection events are held by other entities in the region. However, periodic additional collection events are needed in the unserved areas of the region. Also, there is a need to increase public education on proper disposal of HHW and more “earth friendly” substitutions for HHW products.

H-GAC has contracted with a private company for the collection, transportation and disposal of HHW within the H-GAC region. The contract covers both one-day collection events and permanent HHW facilities. Pricing includes labor, equipment, supplies, transportation and disposal. The pricing is based on all-inclusive per container prices. The mobilization costs for one-day collection is based on the number of participants and for the permanent facility it is based on the county in which the facility is located.

B. Electronic Waste (e-waste) Services

Electronic waste, commonly referred to as e-scrap or e-waste, consists of electronics such as computers, televisions, and cell phones. E-waste typically contains metals, such as mercury and lead, which should not be landfilled. There are six permanent collection centers located within the H-GAC region. City of Houston operates three centers. The other centers are operated by Fort Bend County, Montgomery County, and City of Pearland. The permanent collection centers also offer vouchers to other local government entities that don't offer collection services or only offer them on a limited basis. Local governments may purchase vouchers for their citizens' usage. Citizens may take their e-waste to one of the permanent centers as long as they have a voucher. Additionally, yearly collection events are held by other entities in the region. Additionally, there are private companies that recycle e-waste within the region. However, periodic additional collection events are needed in the unserved areas of the region. Also, there is a need to increase public education on proper management of e-waste.

H-GAC has contracted with a private company for the collection, transportation and recycling of e-waste within the H-GAC region. The contract covers both one-day collection events and permanent facilities. The contract is similar to the regional HHW contract.

- (4) H-GAC will establish a recycling rate goal appropriate to the region.
- (5) H-GAC recommends composting programs for yard waste and related organic wastes that may include:
 - (A) Creation and use of community composting centers;
 - (B) Adoption of the "Don't Bag It" program for lawn clippings developed by the Texas Agricultural Extension Service; and
 - (C) Development and promotion of education programs on home composting, community composting, and the separation of yard waste for use as mulch;
- (6) H-GAC's solid waste program includes a public education/outreach component.

C. Municipal Solid Waste Facilities – H-GAC will:

- (1) encourage cooperative efforts between local governments in the siting of landfills for the disposal of solid waste;
- (2) assess the need for new waste disposal capacity;
- (3) consider the need to transport waste between municipalities, from a municipality to an area in the jurisdiction of a county, or between counties, particularly if a technically suitable site for a landfill does not exist in a particular area;
- (4) allow a local government to justify the need for a landfill in its jurisdiction to dispose of the solid waste generated in the jurisdiction of another local government that does not have a technically suitable site for a landfill in its jurisdiction;
- (5) complete and maintain an inventory of closed municipal solid waste landfill units and update it as needed; provide one copy to the TCEQ and to the chief planning official of each municipality and county in which a unit is located; and
- (6) develop a guidance document to review municipal solid waste registration and permit applications to determine conformance as outlined in *Volume II: Regional Solid Waste Management Plan Implementation Guidelines*.