

TEN YEAR SOLID WASTE MANAGEMENT PLAN GUIDE

This document was developed to help local governments comply with NC General Statute 130A-309.09A(b), otherwise known as The Solid Waste Management Act of 1989. The Act, which regulates the management of solid waste in North Carolina, requires local governments to look into the future and become proactive, rather than reactive, solid waste planners. Long range planning is essential for achieving a cost-effective solid waste management system. To this end, a Solid Waste Management Plan should be a publicly endorsed working document that keeps control of solid waste issues in local government hands and provides a framework for budget preparation by anticipating future needs.

The initial 10-year Plan was due June 30, 1997. Three Year Solid Waste Management Plan Updates are mandatory revisions that must be completed, at a minimum, within three years of the last update. The revisions update background and out-dated information in the most recent Plan. This includes correcting parts of a Plan found to be in error or unrealistic. Updates of waste disposal, recycling rates and other plan elements are expected. Newly available approaches or programs should also be examined. In this guide, "Plan" and "Update" are used interchangeably and refer to the same document. Any significant changes designated below justify earlier updates:

- Changes that affect a local government's strategy toward achieving the waste reduction goal.
- Changes that affect a local government's infrastructure (e.g., transfer station, collection system).
- Changes that affect a local government's disposal capacity.
- Changes in interlocal agreements or service agreements/contracts.
- Changes in any solid waste facilities, such as new facilities or major modifications of existing facilities, requiring Solid Waste Section permits.

The Division of Waste Management's Solid Waste Section can assist local governments in their solid waste planning and reporting efforts. To learn more, contact the Section at (919) 508-8400 or visit the Web site at <http://www.wastenotnc.org>. The Division of Pollution Prevention and Environmental Assistance also provides technical assistance on waste reduction and recycling program development, recycling markets, public education, buying recycled products and related topics. Contact DPPEA at (919) 715-6500 or visit their Web site at <http://www.p2pays.org>.

THE PROCESS

Steps

These steps are recommended to facilitate a sound, comprehensive Plan for local solid waste programs:

- ❑ Establish early, viable public input through a solid waste advisory committee or alternative public committee. A committee can also be helpful implementing a Plan.
- ❑ Identify local governments to be included in the Plan. Those not wishing to be included must develop and implement individual Plans.
- ❑ Determine how the Plan relates to other local plans (hazardous waste, disaster preparedness, economic, industrial, and population growth).
- ❑ Evaluate current situation using previous Plan as a gauge of success or failure.
- ❑ Conduct formal assessment of needs (N.C.G.S. 130A-309.09A(a)).
- ❑ Draft Plan.
- ❑ Review draft Plan.
- ❑ Submit final Plan.

North Carolina General Statute 130A-309.09A states that one of the responsibilities of local governments is to evaluate the solid waste stream in the geographic area covered by their Plan. Conducting a waste characterization study or other means of determining waste components and volumes is recommended. This facilitates better decisions regarding the management of specific solid waste and helps determine how these wastes can be recycled or disposed. [A waste stream characterization guidance document for North Carolina communities](#), developed by DPPEA, provides step-by-step assistance.

Public Participation

Good Plans start with good public participation. Participation, cooperation, communication and interaction between the general public, local officials, business and environmental communities are fundamental to the success of the planning process. Local input ensures that the public has a chance to participate in the decision-making process. If a solid waste advisory committee or task group exists, include the number and composition of membership, role or function of the group, how the group was established and other pertinent details. Representatives for each jurisdiction participating in the Plan should review the draft Plan. A public comment period should follow the preliminary review. The planning jurisdiction's legislative body, usually the county commissioners, must hold an advertised public meeting. Draft Plans should be available for examination during the comment and public meeting period. Obtain resolutions of adoption, from all jurisdictions or authorities participating in the Plan before submission to the State.

THE DOCUMENT

A number of options may be used to prepare Plans. Some choose to involve local government staff, regional solid waste advisory boards, private consultants or a combination of these options. Municipalities that wish to develop a separate Plan should present it as a companion to the county or regional Plan. The objective is to encourage dialogue and foster an awareness of all goals and programs.

Table of Contents

Number pages and include a Table of Contents.

Executive Summary

Develop an Executive Summary. Clearly state the effective dates of the Plan (e.g. July 1, 2009 – June 30, 2019). List all local governments utilizing this Plan. List local contacts, such as solid waste directors and litter enforcement officers. Using the Planning Elements as a guide, summarize programs and activities that worked well (or did not). Describe the status of current projects including any problems, recommendations and implementation dates for solid waste programs.

Vision Statement

State the local government(s) vision and long-term direction.

Today's Situation

Summarize the current situation using bullet points and detailed discussion. Provide relevant historical information. Are there any old assumptions that are no longer valid? Provide a brief synopsis of the planning area's demographics, population, general land use and economic base. Include a description and assessment of the full cost of solid waste management. Include the costs of collection, disposal, waste reduction and other programs, along with the methods used to finance those costs. DPPEA has a Web page on full-cost accounting at <http://www.p2pays.org/payt/main/fullcost.htm>. Also, a map of all solid waste facilities, disposal sites, and emergency debris staging sites used by local governments in the Plan.

Waste Characterization

Chart and summarize waste broken down by waste type. Chart and summarize waste broken down by generator group (e.g. residential, commercial, industrial).

Goals / Objectives / Options / Recommendations

1. State the desired goal.
2. State the objective of the goal.
3. Given the goal and objectives, list the options available.
4. Recommend the option chosen.

Waste Reduction Goal

Using the *Waste Reduction Goal Sheet* (<http://www.wastenotnc.org/swhome/planning/wrgoalsheetv2009L.doc>), compare per capita waste reduction goals with progress made toward the goals. If necessary, adjust waste reduction goals. Set a waste reduction goal that encompasses ten years of planning, beginning with the due date year. For example, if the current update is due June 30, 2009 establish a new waste reduction goal for FY 2018-2019.

Appendices

To facilitate review of the Plans please include the following documents as Appendices:

- Resolutions from all participating entities (local governments, solid waste authorities).
- Copy of notice for public meeting.
- Planning Element Sheets determine progress toward the waste reduction goals set by your community. Compare previously set Key Actions with the current program and develop new Key Actions to include 10 years of planning. (see below for more information).
- Emergency response contracts, approved staging areas or disposal sites, contact list and a copy of your local emergency management plan, which should contain guidance for mass animal mortality if appropriate.
- Ordinances dealing with solid waste, littering, and formalized buy-recycled policy.

Planning Elements

Planning Element sheets are designed to inventory and analyze solid waste programs and facilities. The analysis should describe existing conditions and identify both impediments and future opportunities to improve and minimize impediments.

Describing a program as "on-going" is not adequate for this section. Plan goals and actions should be consistent with applications submitted to the Division of Pollution Prevention and Environmental Assistance for grants or loans or to the Solid Waste Section for grants or facility permits. *If previous goals were not met, the Plan should include an explanation detailing remedies to address the deficiencies and provide a schedule for meeting the goals. At a minimum, remedies*

Solid Waste Management Plans

include implementing new programs, changing existing programs and/or escalating the implementation of future programs or strategies.

REDUCTION ELEMENT-Include current and proposed source reduction programs, such as financial incentives, waste assessments, waste exchanges or industrial process changes, for residential, commercial and industrial sectors. Describe the various sectors or wastes to be targeted for reduction.

COLLECTION ELEMENT-Address current collection practices, capabilities and costs. Describe the geographic area served, facilities, annual tonnage, seasonal variations, service agreements or contracts and any proposed modifications.

RECYCLING AND REUSE ELEMENT-Address current and proposed reuse programs and recycling facilities or programs (drop-off and buy-back centers, material recovery facilities, curbside and in-house programs, commercial or industrial programs operated in cooperation with local government and construction and demolition debris recycling). Include program costs, operations, market conditions, program availability, logistics and recycled tonnage.

COMPOSTING AND MULCHING ELEMENT-Include current and proposed program costs, operations, logistics and estimated homes participating in backyard composting, commercial food waste diversion, municipal mulching, limb and stump grinding and storage or sale of any products. Consider both "normal" day-to-day solid waste activities and the possibility of dealing with the long-term effects of natural disasters.

INCINERATION ELEMENT (WITH AND WITHOUT ENERGY RECOVERY)-Describe the facility, location and capacity, energy customer(s), air quality controls and ash disposal for current or proposed programs. If incineration is not a waste management option, state the reason for this decision.

TRANSFER OUTSIDE GEOGRAPHIC AREA ELEMENT-Address the method of waste transfer (transportation specifics, contract/service agreements), ownership of facility (public or private), ultimate disposal facility (MSW, LCID or C&D landfill, waste-to-energy facility etc.), description of facility's location--including miles from transfer point, amount of waste transferred annually and projected quantities--for next 10 years. Discuss the need for additional facilities. If recycling opportunities at transfer facilities have not yet been considered, they should be evaluated in this section.

DISPOSAL ELEMENT- Include an inventory and description of disposal areas (public and private), capacities, costs and fees. Assess their adequacy for serving both present and future community goals based on projected populations and outline a strategy for providing uninterrupted disposal capacity for the 10 year planning period. Describe any import of solid waste for local disposal. Include amounts and types of imported waste and point of origin. Consider both "normal" day-to-day solid waste activities and the possibility of dealing with the long-term effects of natural disasters.

EDUCATION WITH THE COMMUNITY AND THROUGH THE SCHOOLS ELEMENT - Discuss current and proposed education and public involvement programs, including government sponsored volunteer programs, speakers, media campaigns, public-private initiatives, Keep America Beautiful programs and programs provided or coordinated by local governments to schools. Describe follow-up activities and timelines to measure the effectiveness of the campaign. How does the education program target population groups that live in the planning area and how are materials designed to meet their needs.

SPECIAL WASTE ELEMENT-Address items requiring special handling including, but not limited to, household hazardous waste, used motor oil, lead acid batteries, tires, white goods, manufactured homes, aluminum cans, plastic bottles, ABC bottles, televisions, computers, other banned items and any plans to capture additional items.

ILLEGAL DISPOSAL / LITTER ELEMENT-Discuss current and proposed enforcement programs and ordinances. Include costs, funding, administration, staffing and program effectiveness. It is recommended that a measurement tool be established to determine the effectiveness of current versus future enforcement programs. This could include the regular monitoring of specific roadways, intersections or other public locations.

PURCHASING RECYCLED PRODUCTS ELEMENT-Describe purchasing practices for materials and products manufactured with recycled content. Include types, amounts and annual expenditures. Describe educational efforts to encourage the purchase and use of recycled-content materials, pilot projects demonstrating the use of recycled-content products, financial incentives and cooperative purchasing agreements with other governments.

DISASTER RESPONSE ELEMENT-Address the response to natural disasters such as water, wind and snow/ice damage. Consider capacity for handling a large volume of waste, staffing changes. Identify staging areas for processing and management of the waste, "boiler plate" service contracts and a communication strategy.

DISASTER RESPONSE ELEMENT ADDENDUM (Poultry Producing Counties)-Address the response to a declaration of bird flu and the need to provide capacity for large number of mortalities. Coordinate with Local Public Health and Cooperative Extension offices.

COLLECTION OF DISCARDED COMPUTER EQUIPMENT AND TELEVISIONS ELEMENT-Describe plans or actions taken or to be taken to ensure proper handling and disposal of electronics as defined in G.S. 130A-309.91. (Effective Jan. 1, 2010 for counties and municipalities with population greater than 25,000.)

MANAGEMENT OF ABANDONED MANUFACTURED HOMES ELEMENT-Include plans for management of abandoned manufactured homes as required under G.S. 130A-309.113(a). (Effective July. 1, 2009 and expiring October 1, 2023.)

SUBMITTAL AND FINAL RECOMMENDATIONS

Submitting the Plan

- ❑ **When requested**, submit one (1) printed copy and one (1) electronic copy of the Three Year Solid Waste Management Plan to the Environmental Senior Specialist for your region. Include a cover sheet with a contact person, address, phone, e-mail and fax number. The document should be printed double-sided on post-consumer recycled paper with at least 30% post-consumer content.
- ❑ A Waste Management Specialist will review for completeness, internal inconsistencies, potential inter-jurisdictional conflict, consistency with the State Plan and regulatory compliance. Local governments will be notified if additional information is needed.

Final Recommendations

A good Solid Waste Management Plan is a tool. It should serve as a guide for future planning decisions and a reference for the public and other government agencies. Good Plans address handling of banned items, recycling, and household hazardous waste. Good Plans provide clear projections for waste disposal, population, and disposal sites' capacity and life-spans. Good Plans give an accounting of the detailed costs associated with solid waste management: collection, hauling, disposal, and environmental monitoring.