

## **INSTRUCTIONS**

### **Purpose of the District Solid Waste Management Plan Format**

Ohio Revised Code (ORC) Section 3734.53 requires that "...the solid waste management plan of any county or joint solid waste management district shall be prepared in a format prescribed by the Director of Environmental Protection..." Ohio EPA has issued this document, the *District Solid Waste Management Plan Format, version 4.0* (Format 4.0), as that prescribed format. Format 4.0 represents the third revision of the District Solid Waste Management Plan Format. Format 4.0 replaces version 3.0 which was issued in 1996.

Format 4.0, incorporates the goals of the *2009 State Solid Waste Management Plan* into local solid waste planning efforts.

Through Format 4.0, Ohio EPA made a number of structural and technical changes to the way solid waste management plans will be prepared. These changes are meant to do all of the following:

- Make the plan more readable;
- Simplify writing plan;
- Eliminate redundancy/combine all like information together;
- Eliminate unnecessary information;
- Improve the solid waste management plan as a planning tool; and
- Provide the policy committee with some flexibility when completing the plan.

### **Requirement to use Format 4.0**

All policy committees that begin preparing their solid waste management plans after the effective date OAC Rule 3745-27-90 are required to use the Format 4.0.

### **Goals of the 2009 State Solid Waste Management Plan**

SWMDs are required to provide programs that will achieve the goals established in the *2009 State Solid Waste Management Plan* (2009 State Plan). The SWMD's solid waste management plan must describe these programs and demonstrate that the programs are adequate to achieve the goals.

The 2009 State Plan established nine goals. A SWMD's solid waste management plan will provide demonstrations for up to eight of those goals. The eighth goal, market development, is optional. The ninth goal requires submitting annual reports to Ohio EPA, and no demonstration of achieving that goal is needed for the solid waste management plan.

SWMDs are required to demonstrate achieving either Goal 1 or Goal 2. SWMDs are encouraged to achieve both goals, but required to achieve only one or the other. The

solid waste management plan must clearly identify if the SWMD will achieve Goal 1, Goal 2, or both.

### **Overview of the Format 4.0**

The policy committee will provide technical information, such as projections, calculations, and detailed analyses, in a series of appendices. The body of the plan will consist of six chapters of easy-to-read text, summary tables, and figures. These six chapters will provide a snapshot of the appendices, and the policy committee will prepare the six chapters using information from the appendices.

### ***Body of the Plan***

The body of the plan will consist of the following six chapters:

Chapter 1 – Introduction

Chapter 2 – District Profile

Chapter 3 – Waste Generation

Chapter 4 – Waste Management

Chapter 5 – Programs

Chapter 6 – Cost and Financing of Plan Implementation

Ohio EPA prepared Chapter 1 to be standard for all solid waste management plans. The intent is for the policy committee to include Chapter 1 as written by Ohio EPA. The only exception is section C (SWMD Plan History). Each policy committee will alter this section to make it specific to the SWMD.

Chapters 2 through 6 all begin with standard purpose statements. These statements provide context for the information in the chapter to readers. Ohio EPA prepared these statements, and the statements are included in the instructions. The policy committee will keep these statements in the SWMD's plan. The policy committee may choose to alter the statements and/or add information to the standard statements. However, Ohio EPA encourages the policy committee to keep as much of the standard statement as possible so as not to change the message conveyed through the statement.

The instructions for each chapter establish the structure of the chapter and provide prompts regarding appropriate information to include. More than likely, not all plans will include information to address all of these prompts. Furthermore, the policy committee is encouraged to provide any other information it feels is needed to fully describe the SWMD.

The policy committee will fill in the information specific to its SWMD. The policy committee will have some flexibility regarding the information it will provide in each of the six chapters. The idea is that the policy committee will convey the information it believes to be the most important in those chapters. In this way, the policy committee can tailor the body of the plan to meet the needs of its local constituents.

## **Appendices**

The appendices will contain the technical data and information for the plan. The appendices will also contain the policy committee's demonstrations for achieving the goals of the 2009 State Plan, having access to adequate solid waste facilities, having adequate revenue to cover planned expenditures, etc. The policy committee will complete these appendices before writing the six chapters.

*Interrelationship of Appendices* - The policy committee will present reference year data and planning period projections in a series of appendices. The plan will present both reference year data and projections regarding specific topics in dedicated appendices. Thus, population data will be in Appendix B, residential/commercial waste recycling data will be in Appendix D, waste generation data will be in Appendix F, and diversion rates will be in Appendix G. Calculations in one appendix may use data from another appendix or appendices (e.g. generation data in Appendix F uses disposal data from Appendix C and recycling data from Appendices D and E). As a result, making changes to data in one appendix will require making changes in other appendices.

While preparing its solid waste management plan update, the policy committee will perform a strategic program evaluation designed to identify outstanding program needs and help the SWMD establish priorities for the planning period. The strategic evaluation consists of a number of "needs" assessments. Each policy committee will, among other things, assess the SWMD's existing recycling infrastructure, current diversion rate, recovery of high volume materials, service coverage for all sectors of waste generators, education and outreach efforts, programs to address hard to manage and restricted waste streams, etc. The policy committee will use the results of this evaluation to develop new programs or changes to existing programs to address identified needs and priorities.

Before performing the program evaluation, the policy committee will enter reference year data in the appropriate appendices. The policy committee will use that reference year data in many of its analyses. However, a policy committee cannot make projections for most statistics without first determining what programs the SWMD will provide during the planning period.

The policy committee will likely revisit most appendices several times before completing those appendices. For example, once a policy committee decides on the programs the SWMD will provide, the policy committee will then calculate how much diversion can be expected as a result of those programs and develop projections in the appropriate appendices. In addition to recycling statistics, the amount of diversion will influence disposal projections. Based on those projections, the SWMD will then calculate its diversion rates. Based on the results, the SWMD may need to revisit its portfolio of programs to determine ways to stimulate even more diversion.

As a result, while the finalized reference year data will remain consistent throughout the entire process, some of the appendices will evolve over the course of preparing the plan.

*Instructions for Appendices* - The instructions for the appendices are prescriptive. Ohio EPA expects the policy committee to provide the required data and information according to the structure established in the instructions. This will facilitate Ohio EPA's review of the completed plan. The instructions for an appendix:

- lay out the structure for the appendix
- provide templates for required tables
- explain how to complete the tables
- prescribe the information and data to be included
- provide formulas and explain how to do calculations
- describe methodologies for evaluating baseline information and developing projections
- establish an evaluation process for making decisions about what programs the SWMD will provide
- explain what text to include, etc.

### ***Audiences***

The intended audiences for Chapters 1 through 6 of the plan are the general public and community leaders. The chapters will function as an executive summary. As such, the chapters will provide the basic information that people reading the plan need to know to understand the SWMD and how the SWMD will operate during the upcoming planning period. These chapters should also give community leaders who have to decide whether to ratify the plan the information they need to make their decisions.

Ohio EPA is the intended audience for the appendices. The appendices will provide the data, information, and analyses Ohio EPA needs to review a plan and make a decision regarding the approvability of a plan. Thus, the appendices will be much more technical in nature and can be written with that in mind.

### ***Contents of appendices in the Format 4.0 vs. a solid waste management plan***

Ohio EPA attempted to maintain consistency with the numbering and contents of appendices between the Format 4.0 and the solid waste management plan. However, for some appendices, the solid waste management plan will contain different information than those appendices in the Format 4.0. As an example, Appendix T in the Format 4.0 provides a description of social marketing. Appendix T in the solid waste management plan will contain the SWMD's designation information.

### ***Instructions and Examples***

Format 4.0 provides two versions of several of the chapters and appendices. One version provides detailed instructions that explain how the policy committee will complete each portion of the plan. The policy committee will remove these instructions for its solid waste management plan. In place of the instructions, the policy committee will provide original text.

In addition, Format 4.0 provides examples of completed tables and sample text for several of the chapters and appendices. Ohio EPA included these examples to

illustrate the types of information that may be included. These examples are not the “gold standard” for what an individual policy committee will provide in its solid waste management plan. The examples are intended to be guidelines for potential information to include and ideas for how to present information. A policy committee’s plan may contain more or less information for certain portions depending upon the specifics of the SWMD.

Ohio EPA encourages the policy committee to contact the DMWM planner assigned to the SWMD prior to completing a chapter to discuss how to create the chapter. The planner can help the policy committee determine what and how much information to provide in the chapter and can help the policy committee adapt the chapter to best meet the needs of the SWMD’s constituents.

The policy committee is encouraged to supplement the information prescribed in Format 4.0 with whatever additional information the policy committee believes will improve its plan. Overall, Ohio EPA intends for Format 4.0 to foster a strategic approach to planning and to balance more consistency among solid waste management districts with the flexibility to allow a policy committee to tailor the SWMD’s plan.

### ***Entering Data***

Ohio EPA created a Microsoft Excel workbook that the policy committee will use to enter data and develop projections. The workbook contains a dedicated spreadsheet for each table prescribed by the Format 4.0. The tabs for the spreadsheets are color coded. Each appendix has its own color and all spreadsheets associated with a specific appendix are the same color. Ohio EPA also created detailed instructions specific to completing each table/spreadsheet. The workbook and instructions do all of the following:

- Provide basic instructions for using Excel and manipulating the spreadsheets;
- Tables are prepopulated with embedded formulas that will automatically complete MOST calculations;
- The spreadsheets are linked. After the user enters data the first time, that data is automatically carried to each spreadsheet that uses that data. This will:
  - Reduce the number of times a SWMD has to enter the same information into different tables
  - Reduce data-entry errors
  - Simplify the process of entering data;
- The workbook will generate complete tables for the appendices and summary tables for the chapters; and
- Many of the spreadsheets automatically generate charts and graphs that can assist with analysis and be used in the solid waste management plan

### ***Summary of the process for preparing the solid waste management plan:***

The policy committee will follow a few basic steps while preparing its solid waste management plan:

- Enter reference year information in all relevant appendices and spreadsheets;
- Conduct analyses in Appendix H;
- Use results from analyses to draw conclusions, make decisions about the programs the SWMD will provide during the planning period, and describe those programs (Appendix I);
- Complete the workbook. This will involve making projections for the planning period based on the policy committee’s conclusions and decisions from Appendix I;
- Complete all appendices, including copying and pasting tables and charts into the appendices; and
- Write chapters and copy and paste tables and charts into the chapters.

***Supplemental Executive Summary***

The Format 4.0 does not direct the policy committee to prepare an executive summary. The six chapters will provide the information that would otherwise appear in an executive summary. However, some policy committees may choose to prepare a condensed version of Chapters 1 – 6 as a standalone executive summary or a “fact sheet”. The policy committee could then make that document available as a supplement to the plan.

***Plan Certifications***

During the process of preparing a plan, the policy committee signs three official documents certifying the plan. Appendix Q contains templates for these three documents. These documents are as follows:

1. *Certification Statement for the Draft Solid Waste Management Plan* –The District’s policy committee signs this statement to certify that the information presented in the draft solid waste management plan submitted to Ohio EPA is accurate and complies with the Format 4.0.
2. *Resolution Adopting the Solid Waste Management Plan* (adopted prior to distributing the draft plan for ratification) – The District’s policy committee signs this resolution to accomplish two purposes:
  - Adopt the draft solid waste management plan
  - Certify that the information in the solid waste management plan is accurate and complies with the Format 4.0.

The policy committee signs this resolution after considering comments received during the public hearing/public comment period and prior to submitting the solid waste management plan to political jurisdictions for ratification. The policy committee should not make any changes to the solid waste management plan after signing the resolution.

3. *Resolution Certifying Ratification of the Solid Waste Management Plan* – The Districts policy committee signs this resolution to certify that the solid waste

management plan was ratified properly by the political jurisdictions within the solid waste management district. The policy committee signs this resolution after the solid waste management plan is ratified and before submitting the ratified plan to Ohio EPA)

The table below lists the three documents, describes when each document is executed, and indicates which version of the plan, the draft or the ratified version, the SWMD includes each document:

Document	When Executed	Include in Draft Plan	Include in Ratified Plan
Certification Statement for the Draft Solid Waste Management Plan	Signed and dated prior to submitting the draft plan to Ohio EPA for review	Yes	Yes
Resolution Adopting the Solid Waste Management Plan	adopted prior to distributing the draft plan for ratification	No	Yes
Resolution Certifying Ratification of the Solid Waste Management Plan	adopted following the ratification period and before submitting the ratified plan to Ohio EPA	No	Yes

**Use of policy committee vs. SWMD** – At times, this document uses policy committee and SWMD interchangeably when referring to preparing the solid waste management plan. It is the policy committee/board of trustees that is responsible for preparing the plan and making decisions regarding how the SWMD will operate during the planning period. The board of directors/board of county commissioners is responsible for implementing the policy committee’s solid waste management plan.

**Ohio EPA’s Review**

When Ohio EPA reviews a draft solid waste management plan, the Agency focuses on the following:

- Does the solid waste management plan demonstrate that the SWMD will achieve all of the goals of the state solid waste management plan?
- Does the solid waste management plan meet the requirements established in the Ohio Revised Code?
- Does the solid waste management plan conform to the current version of the District Solid Waste Management Plan Format?
- Does the solid waste management plan demonstrate that the SWMD will be financial solvent for the entire planning period?
- Does the solid waste management plan make sense?
  - Clearly explain what the SWMD will do
  - Provide commitments versus vagueness (i.e. is the plan well thought out or is a plan to plan?)
  - Have a clear plan of action for big ticket items (such as facilities)
- Is the solid waste management plan legal?
- Is the solid waste management plan internally consistent?

- Does the solid waste management plan contain data that conflicts with data previously reported to Ohio EPA

In its non-binding advisory opinion, Ohio EPA comments on any of the items above. Ohio EPA also provides suggestions for ways the policy committee can clarify language in the plan to make it more readable and to provide comprehensive information.

## **Glossary**

Ohio EPA encourages the policy committee to include a glossary of terms in the solid waste management plan. The policy committee can use Ohio EPA's definitions from Appendix X, create its own definitions, or use some combination of the two.

## **List of Acronyms**

Ohio EPA encourages the policy committee to define all acronyms used in the solid waste management plan by providing a list of acronyms.

## **Demonstration of Achieving Goal 2**

A new concept introduced with Format 4.0 concerns how a SWMD demonstrates achieving Goal 2 of the 2009 State Plan (the percentage goal). A SWMD that pursues Goal 2 is required to demonstrate that it either met Goal 2 in the reference year or will meet Goal 2 within the first three years of the planning period. However, Ohio EPA understands that it is difficult for a SWMD to obtain reliable, quantifiable data for all of the SWMD's programs. Thus, the Format 4.0 establishes a structure SWMDs will use to demonstrate achieving Goal 2 that takes data issues into account. Overall, the Format 4.0 will place more emphasis on the activities and programs a SWMD commits to and less emphasis on quantifying the effects of each and every activity or program. In essence, the SWMD will demonstrate that its projections for material to be recovered are justified based on a combination of the data the SWMD collects, the effort the SWMD puts into evaluating its existing situation, and the programs the SWMD commits to implementing to effect projected recovery.

Ohio EPA understands that the results of some programs are not easily quantifiable. The Format 4.0 gives the SWMD some flexibility for developing projections to allow the SWMD more time to evaluate the impact of its programs and activities. Thus, Ohio EPA will consider the totality of everything the SWMD commits to doing to recover material and collect data to quantify that recovery.

If a SWMD believes that it can achieve Goal 2 during the planning period but does not have sufficient data to make the demonstration with confidence, the SWMD may do the following:

1. Develop projections for programs where data is available;
2. Base those projections directly on the programs the SWMD will implement rather than on arbitrary increases;

3. Perform a program evaluation and analysis aligned with Appendix H;
4. Provide an outreach and marketing plan as prescribed by the 2009 State Plan;
5. Developing and implement a detailed data collection and evaluation strategy (see Appendix R); and

The activities listed above can help a SWMD overcome the lack of data (or questionable data) and justify the SWMD's demonstration of achieving Goal 2.

1. Develop projections for programs where data is available

It is easier to attribute quantities to some programs than others. Recovery projections will result from a combination of quantifiable recovery plus programs that are not easily quantifiable but that have been proven to contribute to increased recovery over time.

Recovery through programs such as curbside recycling programs, drop-off recycling sites, yard waste collection programs, household hazardous waste collection programs, electronics collection programs, etc. can be quantified. This is true whether or not the SWMD historically provided the program. A SWMD that had quantifiable programs in the reference year (or earlier) will develop projections for recovery based on those programs. If the SWMD lacks data for a program or will implement a new program during the planning period, then the SWMD will use data from equivalent programs in other SWMDs or from Ohio EPA to make projections. For example, A SWMD that is implementing a new non-subscription curbside program could project recovery using an average per capita recovery rate for similar non-subscription curbside recycling programs available in other SWMDs.

It isn't possible to project quantities to be recovered through programs such as upgraded webpages and many outreach/education programs. In the long run, those programs can result in increased recovery. As long as the SWMD is not relying solely on non-quantifiable programs to demonstrate achieving increases in its recovery rate, then the SWMD can attribute some reasonable level of increases above those projected for quantifiable programs.

2. Base projections directly on the programs the SWMD will implement rather than on arbitrary increases

Ohio EPA expects the SWMD to put forth its best effort to project the quantities that can reasonably be expected to be recovered based on the programs to be provided. In the past, some SWMDs have applied an arbitrary increase to project quantities to be recovered (e.g. one percent per year). SWMDs opting to achieve Goal 2 must correlate projections with the programs and activities the SWMD will implement during the planning period. Projections must be based on justifiable data or a reasonable rationale, such as historical increases in similar programs, program expansions, etc.

3. Perform a program evaluation and analysis aligned with Appendix H;

Appendix H contains extensive instructions for completing a strategic evaluation of existing reduction and recycling efforts. The evaluation involves assessing the SWMD's programs in the context of factors that need to be considered when developing recycling and waste reduction programs. The SWMD will use the results of the evaluation to make decisions regarding the programs the SWMD will provide during the upcoming planning period. While reviewing a solid waste management plan, Ohio EPA will look at the SWMD's overall effort to complete the recommended analyses and how the SWMD used the results to make decisions about its programs.

4. Provide an outreach and marketing plan as prescribed by the 2009 State Plan

In accordance with the 2009 State Plan and Appendix L, each SWMD will develop and implement an outreach and marketing plan. This outreach and marketing plan will use social marketing strategies to encourage more people to recycle. The outreach and marketing plan is the SWMD's strategy for increasing participation in available recycling programs and recovery through those programs. While the results of many social marketing strategies are difficult to quantify, such strategies can improve recovery if implemented properly.

As with the program analysis described above, Ohio EPA will be looking for solid waste management plans that demonstrate the SWMD made a good faith effort to develop an outreach and marketing plan in accordance with the instructions in Appendix L.

5. Develop and implement a data collection & program evaluation strategy

Each SWMD, regardless whether the SWMD has opted to achieve Goal 1 or Goal 2, must demonstrate making progress toward meeting the recycling rates established in Goal 2. In future state solid waste management plans, Goal 2 will likely become the primary goal SWMDs must achieve. Therefore, sooner or later all SWMDs are going to need to obtain good data.

If one of the reasons a SWMD is unable to demonstrate meeting Goal 2 is a lack of data, then the SWMD may be able to justify increasing its recycling rate by committing to improving its data collection and program evaluation efforts during the planning period. This will give the SWMD a full planning cycle to become more effective at collecting data to learn more about program impacts. Doing so will the SWMD develop better projections for its next solid waste management plan update.

## Summary

SWMDs and Ohio EPA need accurate data about the impact of programs on diverting material from disposal in landfills and the overall impact of SWMDs efforts. SWMDs need accurate data in order to make effective decisions about programs at the local level. Ohio EPA needs accurate data to make effective policy decisions at the state level. In some instances this data is readily available. In other instances collecting data on program results is challenging due to a variety of factors. Ohio EPA recognizes that

not all SWMDs currently have comprehensive, accurate data available. Ohio EPA further recognizes that SWMDs have to invest considerable time and effort to gather and analyze data.

Ultimately, the primary objective of all SWMD programs is to divert materials from landfills. Goal 2 of the 2009 State Plan reflects this objective. Regardless of whether a SWMD opts to pursue Goal 1 or Goal 2, the SWMD needs an accurate measurement of diversion from landfills. Ohio EPA will continue to focus on the quantifiable results of SWMD programs.

However, in an effort to balance the need for accurate data with the limited resources available to many SWMDs, Ohio EPA has developed an approach to achieving Goal 2 that takes into account more than just data. This approach recognizes a SWMD's overall efforts to implement programs, complete all the elements of the Format 4.0, provide outreach and education, and improve data collection. If a SWMD can demonstrate these comprehensive and good faith efforts, then Ohio EPA will focus on the programmatic portions of meeting the goals and reduce its scrutiny of the data. This will provide a SWMD with a full planning cycle to improve data quality and collection efforts.

### **Differences between data previously reported and data presented in the plan**

In most cases, Ohio EPA expects that data used to prepare the solid waste management plan will match data previously reported (such as in annual district reports and quarterly fee reports). However, there are legitimate reasons why data used for a solid waste management is different than previously reported data. If the data the policy committee uses for the plan differ from what was previously reported, then the policy committee will explain those differences in Appendix **XX**

### **Projections**

The statute requires that solid waste management plans provide projections for the entire planning period covered by the plan. To comply with the statute, the solid waste management plan needs to show data for the entire planning period. However, Ohio EPA understands that projections become questionable after the first few years of the planning period. Therefore, under most circumstances, Ohio EPA recommends that the policy committee develop projections for the first four years (for a ten year planning period) or first six years (for a 15 year planning period) of the planning period. Beginning in the fifth or seventh year, the policy committee would hold quantities constant.

The tables in the appendices will show data for the entire planning period. The summary tables in the chapters will show data for the first four or six years of the planning period.

Ohio EPA encourages the policy committee to look beyond the first six years to identify any significant issues that the SWMD needs to plan for. Examples include landfills closing and adequacy of funding/operating close to the financial margin. If any of those issues are likely, then the policy committee should address the issues in its solid waste management plan.

***Surveying and Survey Toolkit***